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By Alameda County Environmental Health 1:57 pm, Nov 03, 2015

Mr. Keith Nowell
Hazardous Materials Specialist, PG, CHG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

ARCADIS U.S., Inc.
7051 Fain Park Drive
Suite 119
Montgomery, AL 36117
Tel 334.215.4461
Fax 334.215.4462
www.arcadis-us.com

Subject:
Third Quarter 2015 Semi-Annual 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

Dear Mr. Nowell:

ARCADIS U.S., Inc. (ARCADIS) has prepared this letter on behalf of the Atlantic Richfield Company, a BP affiliated company (ARCO), for the former ARCO service station listed below.

Date:
October 16, 2015

Contact:
Megan Smoley

Phone:
334.215.4461 ext. 2

Email:
Megan.Smoley@arcadis.com

<u>BP Facility No.</u>	<u>ACEH Site No.</u>	<u>Location</u>
11132	RO0000014	3201 35 th Avenue Oakland, California

Our ref:
GP09BPNA.C112.N0000

I declare, to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct. If you have any questions or comments regarding the content of this report, please contact Megan Smoley by telephone at 334.215.4461 ext. 2 or by e-mail at Megan.Smoley@arcadis.com. Note new email address.

Submitted by:

ARCADIS U.S., Inc.



Megan Smoley, P.G. No. 8614
Senior Geologist/Certified Project Manager



Mr. Keith Nowell
Alameda County LOP
1131 Harbor Bay Parkway
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Subject:

Third Quarter 2015 Semi-Annual 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

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).

1. Summary

1.1 Work Performed During Second Quarter 2015 and Third Quarter 2015:

- Conducted groundwater monitoring and sampling for the third quarter 2015 on August 27, 2015.
- Submitted *Results of Skimming Test* on October 2, 2015, documenting the light non-aqueous phase liquid (LNAPL) skimming test conducted on well OW-1 on May 7, 2015.

1.2 Work Proposed for Fourth Quarter 2015 and First Quarter 2016:

- Prepare and submit the *Third Quarter 2015 Semi-Annual Groundwater Monitoring Report*, contained herein.
- Complete activities recommended in the Work Plan with revisions to the scope discussed during the September 18, 2014 meeting and documented in the September 18, 2014 correspondence from Keith Nowell of Alameda County LOP upon completion of applicable permitting with the City of Oakland.
- Conduct groundwater monitoring and sampling for First Quarter 2016.
- Prepare and submit the *First Quarter 2016 Semi-Annual Groundwater Monitoring Report*.

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ENVIRONMENT

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Contact:
Megan Smoley

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Megan.Smoley@
arcadis.com

Our ref:
GP09BPNA.C112.N0000



SITE INFORMATION

Current Phase of Project:	Groundwater Monitoring and Sampling
Frequency of Monitoring and Sampling	Semi-Annual Gauging (1/3Q): MW-1 through MW-10 and RW-1 Semi-Annual Sampling (1/3Q): MW-1, MW-2, MW-5, MW-8, MW-9, MW-10, RW-1 Annual Sampling (1Q): MW-4 and MW-7
Have Liquid Phase Hydrocarbons (LPH) Been Measured Onsite, Historically?	Yes
Historical Range in Depth to Water (DTW; feet below top of casing [btoc]):	32.20 (RW-1 2Q/1994) to 9.11 (MW-8 3Q/2007)

CURRENT QUARTER MONITORING DATA

Wells Gauged:	MW-1 through MW-10, RW-1
Wells Sampled:	MW-2, MW-5, MW-8, MW-9, RW-1
Monitoring and Sampling Date:	August 27, 2015
LPH Measured This Quarter:	Yes; MW-1 (0.10 feet), MW-10 (0.02 feet)
LPH Recovered This Quarter:	None
Cumulative LPH Recovered to Date:	0.16 gallons
DTW Range (feet btoc):	17.92 (MW-6) to 21.87 (MW-4)
Groundwater Flow Direction and Gradient (feet/foot):	West-northwest at 0.010 feet/foot

CURRENT QUARTER ANALYTICAL DATA

Constituents	Number of Detections Above LRL : Total Samples Collected	Minimum Detected Concentration, in µg/L (Sample ID)	Maximum Detected Concentration, in µg/L (Sample ID)
GRO	5 : 5	2,550 (RW-1)	22,400 (MW-2)
Benzene	5 : 5	4.57 (RW-1)	8,550 (MW-2)
Toluene	4 : 5	1.14 (RW-1)	80.3 (MW-2)
Ethylbenzene	5 : 5	4.54 (RW-1)	1,110 (MW-2)
Total Xylenes	5 : 5	2.86 (MW-9)	444 (MW-2)
MTBE	2 : 5	8.63 (MW-5)	41.1 (MW-2)
TBA	3 : 5	6.22 (RW-1)	416 (MW-2)
DIPE	0 : 5	--	--
ETBE	0 : 5	--	--
TAME	0 : 5	--	--
Ethanol	0 : 5	--	--
EDB	0 : 5	--	--
1,2-DCA	0 : 5	--	--

Table Notes:

µg/L = Micrograms per liter
GRO = Gasoline range organics
TBA = Tert-butyl alcohol
ETBE = Ethyl tert-butyl ether
EDB = 1,2-dibromoethane

LRL = Laboratory reporting limit
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
TAME = Tert-amyl methyl ether
1,2-DCA = 1,2-dichloroethane

2. Groundwater Monitoring and Sampling

2.1 Monitoring and Sampling Procedures

During the third quarter 2015 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 wells MW-1 through MW-10 and RW-1 using an oil/water interface probe. Samples were collected from wells MW-2, MW-5, MW-8, MW-9, and RW-1. Monitoring wells MW-1 and MW-10 were not sampled due to the presence of LPH. Field methods used during groundwater monitoring are provided in Attachment A.

All monitoring and sampling activities for the Site during the Third Quarter 2015 were performed by Broadbent and Associates, Inc. (Broadbent) and reviewed and certified by a Broadbent California Professional Geologist. The groundwater sampling data package is included as Attachment B.

2.2 Groundwater Sample Analysis

Groundwater samples collected from wells MW-2, MW-5, MW-8, MW-9, and RW-1 were submitted under chain-of-custody protocol to ESC Lab Sciences (ESC), a California state-certified laboratory. Samples were analyzed for GRO by EPA Method 8015M, and for benzene, toluene, ethylbenzene, and total xylenes (collectively BTEX), MTBE, TBA, DIPE, ETBE, TAME, ethanol, 1,2-DCA, and EDB by EPA Method 8260B. The certified laboratory analytical report, including chain-of-custody documentation, is included as Attachment C.

2.3 Quality Assurance/Quality Control

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.

3. Results and Discussion

The depth to water measurements and analytical data presented this quarter are consistent with historical measurements.

Depth to water at the Site ranged from 17.92 feet btoc at MW-6 to 21.87 feet btoc at MW-4, consistent with historical measurements. Resulting groundwater surface elevations ranged from 147.18 feet at MW-5 to 148.49 feet at MW-7. Water level elevations yielded a potentiometric groundwater gradient to the west-northwest at approximately 0.010 feet per foot. Groundwater elevation contours are presented on Figure 2.

GRO, benzene, ethylbenzene, and total xylenes were detected above LRLs in wells MW-2, MW-5, MW-8,



MW-9, and RW-1. Toluene was detected above LRLs in wells MW-2, MW-5, MW-8, and RW-1. MTBE was detected above LRLs in wells MW-2 and MW-5. TBA was detected above LRLs in wells MW-2, MW-5, and RW-1. DIPE, ETBE, 1,2-DCA, EDB, TAME, and ethanol were not detected above LRLs in any of the five wells sampled. Current groundwater monitoring and sampling data are summarized in Table 1, and presented on Figure 3. Historical groundwater monitoring and sampling results are summarized in Table 2. Groundwater flow direction and gradient information are presented in Table 3.

Starting in the third quarter 2012, ARCADIS began preparing the semi-annual groundwater monitoring reports for the Site. Historical tables provided by Broadbent, including analytical results for fuel oxygenates (analyzed from third quarter 1993 to first quarter 2012), are provided in Attachment D.

4. Recommendations

ARCADIS recommends continuation of groundwater monitoring and sampling on a semi-annual basis in accordance with the approved schedule. ARCADIS plans to implement the activities presented in the June 25, 2014 Work Plan as amended during the September 18, 2014 meeting in the fourth quarter 2015. Field work will be conducted as soon as the appropriate permits are secured for the off-site work.

5. 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 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.

If you have any questions or comments regarding the contents of this report, please contact Megan Smoley at 334.215.4461 ext. 2 or by e-mail at Megan.Smoley@arcadis.com.

Licensed approver:

A handwritten signature in blue ink that reads "Megan Smoley".

Megan Smoley, P.G. No. 8614
Senior Geologist/Certified Project Manager





Tables

Table 1	Current Groundwater Monitoring and Analytical Data
Table 2	Historical Groundwater Monitoring and Analytical Data
Table 3	Historical Groundwater Flow Direction and Gradient

Figures

Figure 1	Site Location Map
Figure 2	Groundwater Elevation Contour Map – August 27, 2015
Figure 3	Groundwater Analytical Summary Map – August 27, 2015

Attachments

Attachment A	Field Methods
Attachment B	Groundwater Sampling Data Package
Attachment C	Certified Laboratory Analytical Report and Chain of Custody Documentation
Attachment D	Historical Tables Provided by Broadbent

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

ARCADIS

Tables

Table 1
Current Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland, CA 94619

Well ID	Date	Type	TOC (ft msl)	DTW (ft btoc)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	NAPH (µg/L)	Notes	
MW-1	8/27/2015		169.75	21.64	0.10	148.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LNAPL present)
MW-2	8/27/2015		168.14	20.40	--	147.74	22,400	--	8,550	80.3	1,110	444	41.1(J)	416(J)	<1.00	<1.00	<1.00	<1.00	<1.00	<100	6.2	--	--	(1 liter purged; moderate HC.)
MW-3	8/27/2015		167.17	19.40	--	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(Gauge only)
MW-4	8/27/2015		170.36	21.87	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(Gauge only)
MW-5	8/27/2015		165.14	17.96	--	147.18	7,370	--	803	8.60(J)	62.2	75.8	8.63(J)	126	<10.0	<10.0	<10.0	<10.0	<10.0	<1,000	3.37	--	--	(1 liter purged)
MW-6	8/27/2015		165.40	17.92	--	147.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(Gauge only)
MW-7	8/27/2015		168.08	19.59	--	148.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(Gauge only)
MW-8	8/27/2015		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	<1.00	<100	8.61	--	--	(1 liter purged.)
MW-9	8/27/2015		166.20	18.69	--	147.51	10,000	--	10.7	<5.00	21.7	2.86(J)	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<100	2.59	--	--	(1 liter purged.)
MW-10	8/27/2015		167.01	19.26	0.02	147.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	(LNAPL present on probe)
RW-1	8/27/2015		168.01	19.90	--	148.11	2,550	--	4.57	1.14(J)	4.54	3.66	<1.00	6.22	<1.00	<1.00	<1.00	<1.00	<1.00	<100	8.36	--	--	(1 liter purged. Moderate HC.)

Notes:

TOC = Top of casing (surveyed)
DTW = Depth to water
LNAPL = Light non-aqueous phase liquid (LPH)
GW Elev = Groundwater elevation
ft btoc = Feet below top of casing
ft msl = Feet relative to mean sea level
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tert-butyl ether
TBA = tert-butyl alcohol
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
EDB = 1,2-dibromoethane
TAME = tert-Amyl methyl ether
DO = Dissolved oxygen
DUP = Duplicate sample
LPH = Liquid Petroleum Hydrocarbons
-- = 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
HC odor = Hydrocarbon odor detected during sampling
b = Groundwater elevation 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
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 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 1
Historical Groundwater Monitoring and Analytical Data
CA-11132
3201 35th Ave, Oakland, CA 94619

Well ID	Date	Type	TOC (ft msl)	DTW (ft btoc)	Measured LNAPL Thickness (ft)	GW Elev (ft msl)	GRO (µg/L)	DRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	TAME (µg/L)	Ethanol (µg/L)	DO (mg/L)	NAPH (µg/L)	Notes
RW-1	8/17/2011		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	2/6/2012		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	8/21/2012		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	1.0	<250	--	--	(P)
RW-1	2/4/2013		168.01	16.36	--	151.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	8/1/2013		168.01	20.50	0.01	147.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
RW-1	2/27/2014		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	8/27/2014		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	(HC odor, sheen)
RW-1	3/27/2015		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	--	(HC odor)
RW-1	8/27/2015		168.01	19.90	--	148.11	2,550	--	4.57	1.14(J)	4.54	3.66	<1.00	6.22	<1.00	<1.00	<1.00	<1.00	<1.00	<100	8.36	--	(1 liter purged. Moderate HC.)

Notes:

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DIPE = Di-isopropyl ether

ETBE = Ethyl tert-butyl ether

EDB = 1,2-dibromoethane

TAME = tert-Amyl methyl ether

DO = Dissolved oxygen

DUP = Duplicate sample

LPH = Liquid Petroleum Hydrocarbons

-- = 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

HC odor = Hydrocarbon odor detected during sampling

b = Groundwater elevation 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

t = Sheen in well

y = Sample dilution was done with headspace in the sample vial; the samples were originally analyzed from VOAs without headspace

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method 8260B (C6-C12) from March 4, 2010 to the present.

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Table 3
Historical Groundwater Flow Direction and Gradient
CA-11132
3201 35th Ave, Oakland, CA 94619

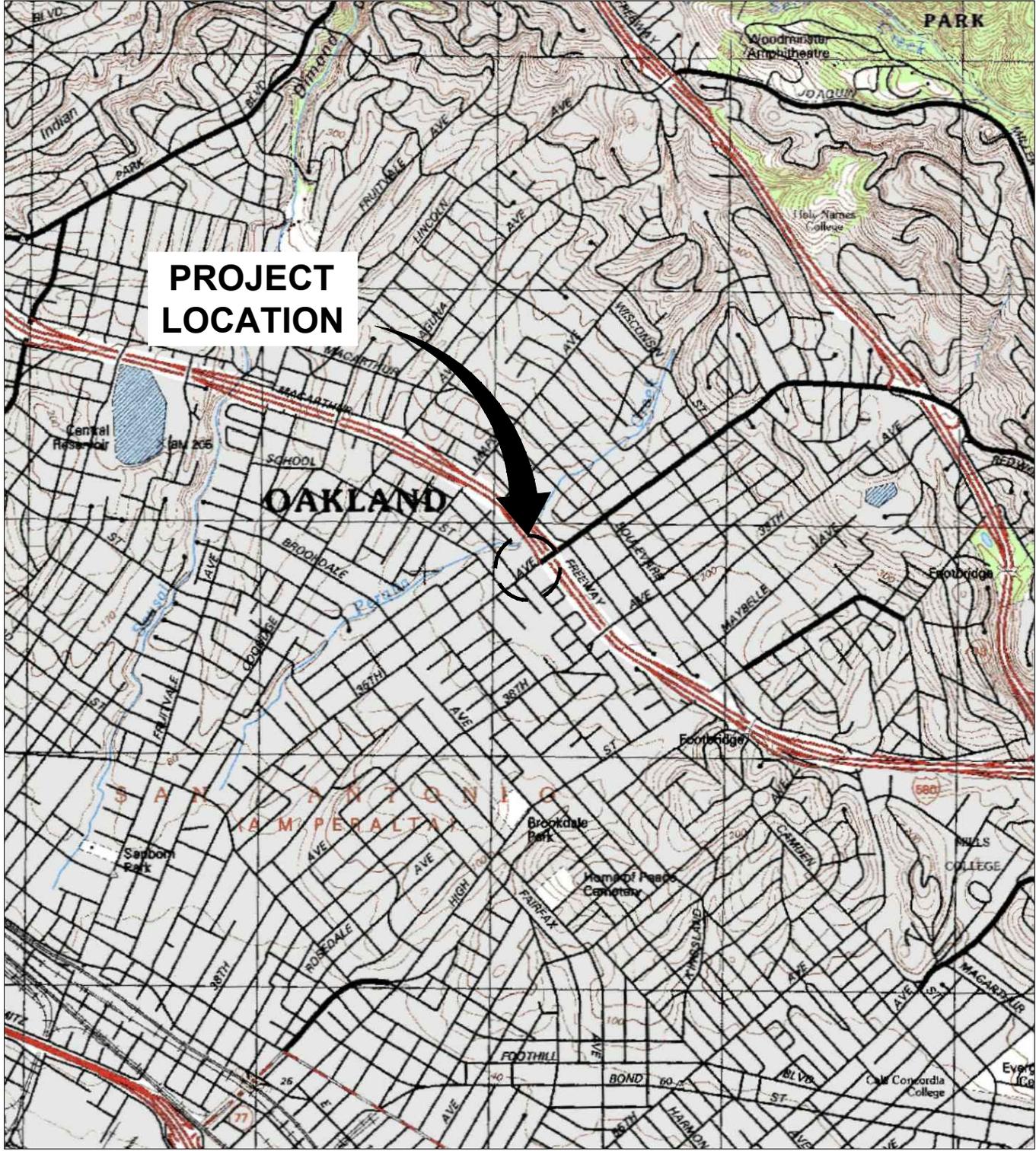
Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
5/19/2006	South	0.003 to 0.005
8/23/2006	Southwest	0.01
11/15/2006	South	0.004
2/14/2007	Southeast	0.01
5/22/2007	South	0.005
8/15/2007	South-Southwest	0.008
11/8/2007	Southwest	0.006
2/20/2008	Southeast	0.008
5/7/2008	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

Notes:

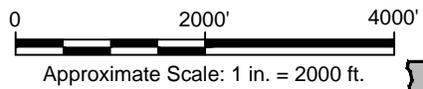
The data within this table collected prior to April 2006 were provided to Broadbent & Associated, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

ARCADIS

Figures



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

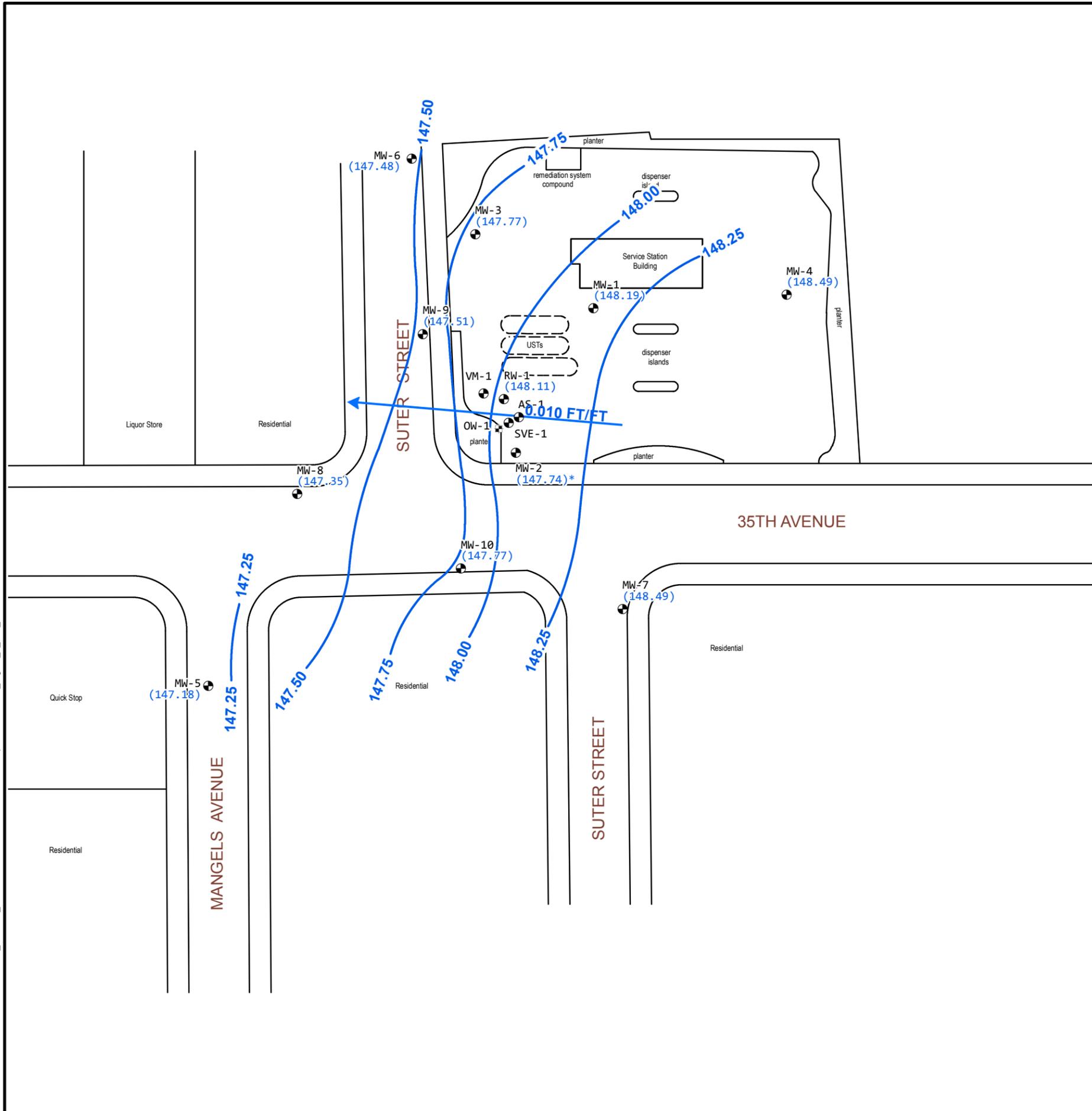


FORMER BP STATION No. 11132
 3201 35TH AVENUE
 OAKLAND, CALIFORNIA

SITE LOCATION MAP



CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: msmiller LD: PIC: PM: TM: PROJECT: PATH: Z:\GIS\PROJECTS\ENWBP_FOXGLOVE\CA\CA11132\GIS\MXD\3q2015\CA11132_Figure_2_GW_Elev.mxd DATE: 10/12/2015 12:52:36 PM

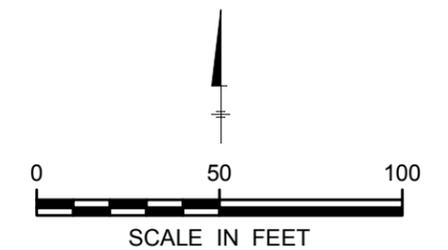


LEGEND:

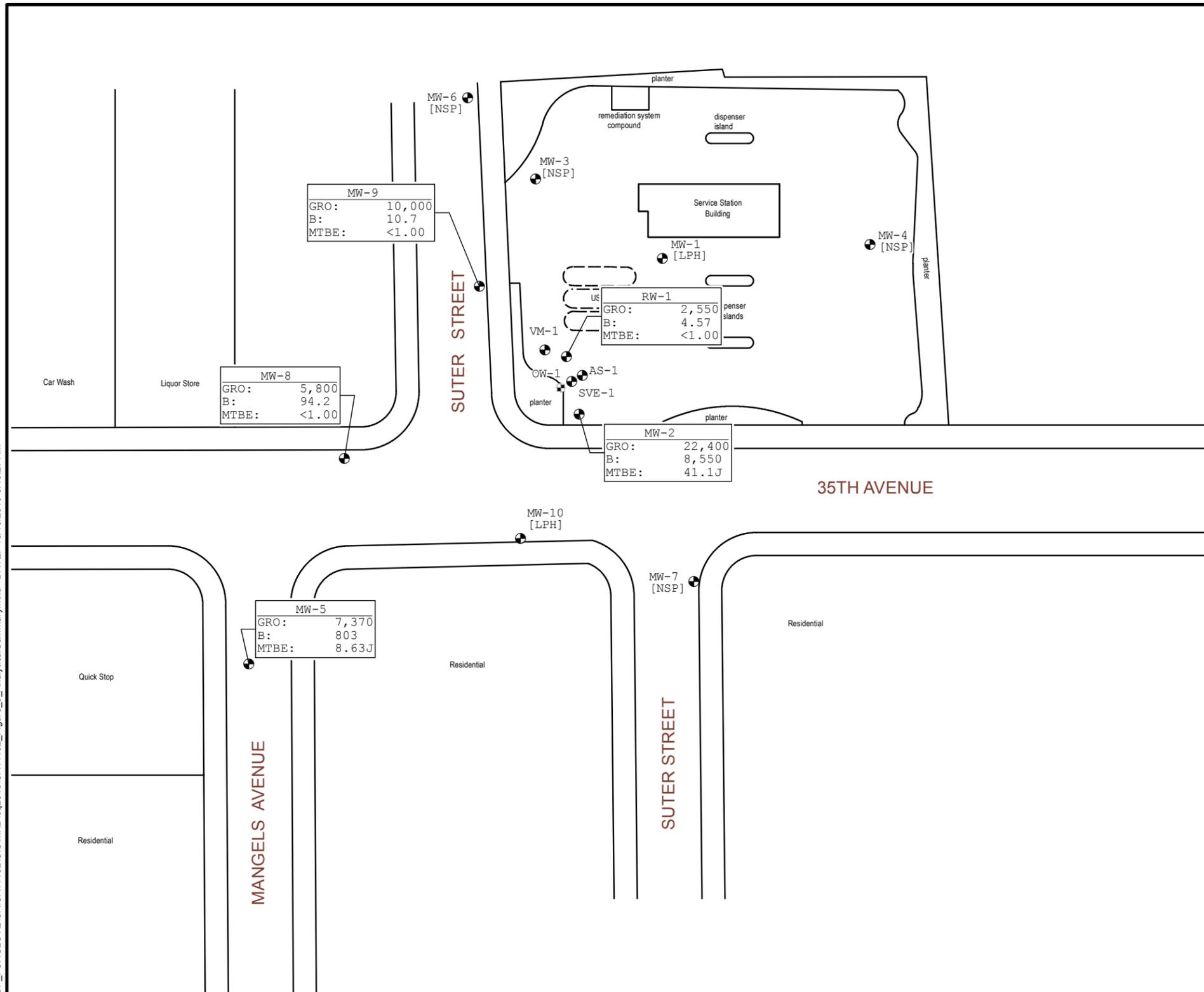
- EXISTING MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL
- (148.49) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- * NOT USED IN CONTOURING
- 147.75 — GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED)
- 0.010 FT/FT → GROUNDWATER FLOW DIRECTION (FEET PER FOOT)

NOTES:

1. SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.
2. WELL MW-7 AND SUTER STREET LOCATIONS HAVE BEEN CORRECTED FROM PREVIOUS MAPS.



FORMER BP SERVICE STATION #11132 3201 35TH AVENUE OAKLAND, CALIFORNIA	
GROUNDWATER ELEVATION CONTOUR MAP AUGUST 27, 2015	
	FIGURE 2



LEGEND:

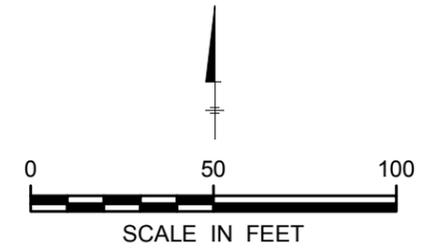
- EXISTING MONITORING WELL
- ⊕ GROUNDWATER RECOVERY WELL

RW-1		SAMPLE LOCATION ID
GRO:	2,550	CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
B:	4.57	
MTBE:	<1.00	
		ANALYTE

- GRO GASOLINE RANGE ORGANICS
- B BENZENE
- MTBE METHYL TERT-BUTYL ETHER
- < NOT DETECTED AT OR ABOVE STATED LABORATORY REPORTING LIMIT
- LPH LIQUID PHASE HYDROCARBONS
- NSP WELL NOT SAMPLED IN ACCORDANCE WITH GROUNDWATER SAMPLING SCHEDULE
- J THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE IS AN ESTIMATE

NOTES:

1. SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.
2. WELL MW-7 AND SUTER STREET LOCATIONS HAVE BEEN CORRECTED FROM PREVIOUS MAPS.



FORMER BP SERVICE STATION #11132 3201 35TH AVENUE OAKLAND, CALIFORNIA	
GROUNDWATER ANALYTICAL SUMMARY MAP AUGUST 27, 2015	
	FIGURE 3

Attachment A
Field Methods

QUALITY ASSURANCE/QUALITY CONTROL FIELD METHODS

Field methods discussed herein were implemented to provide for accuracy and reliability of field activities, data collection, sample collection, and handling. Discussion of these methods is provided below.

1.0 Equipment Calibration

Equipment calibration was performed per equipment manufacturer specifications before use.

2.0 Depth to Groundwater and Light Non-Aqueous Phase Liquid Measurement

Depth to groundwater was measured in wells identified for gauging in the scope of work using a decontaminated water level indicator. The depth to water measurement was taken from a cut notch or permanent mark at the top of the well casing to which the well head elevation was originally surveyed.

Once depth to water was measured, an oil/water interface meter or a new disposable bailer was utilized to evaluate the presence and, if present, to measure the “apparent” thickness of light non-aqueous phase liquid (LNAPL) in the well. If LNAPL was present in the well, groundwater purging and sampling were not performed, unless sampling procedures in the scope of work specified collection of samples in the presence of LNAPL. Otherwise, time allowing, LNAPL was bailed from the well using either a new disposable bailer, or the disposal bailer previously used for initial LNAPL assessment. Bailing of LNAPL continued until the thickness of LNAPL (or volume) stabilized in each bailer pulled from the well, or LNAPL was no longer present. After LNAPL thickness either stabilized or was eliminated, periodic depth to water and depth to LNAPL measurements were collected as product came back into the well to evaluate product recovery rate and to aid in further assessment of LNAPL in the subsurface. LNAPL thickness measurements were recorded as “apparent.” If a bailer was used for LNAPL thickness measurement, the field sampler noted the bailer entry diameter and chamber diameter to enable correction of thickness measurements. Recovered LNAPL was stored on-site in a labeled steel drum(s) or other appropriate container(s) prior to disposal.

3.0 Well Purging and Groundwater Sample Collection

Well purging and groundwater sampling were performed in wells specified in the scope of work after measuring depth to groundwater and evaluating the presence of LNAPL. Purging and sampling were performed using one of the methods detailed below. The method used was noted in the field records. Purge water was stored on-site in labeled steel drum(s) or other appropriate container(s) prior to disposal or on-site treatment (in cases where treatment using an on-site system is authorized).

3.1 Purging a Predetermined Well Volume

Purging a predetermined well volume is performed per ASTM International (ASTM) D4448-01. This purging method has the objective of removing a predetermined volume of stagnant water from the well prior to sampling. The volume of stagnant water

is defined as either the volume of water contained within the well casing, or the volume within the well casing and sand/gravel in the annulus if natural flow through these is deemed insufficient to keep them flushed out.

This purging method involves removal of a minimum of three stagnant water volumes from the well using a decontaminated pump with new disposable plastic discharge or suction tubing, dedicated well tubing, or using a new disposable or decontaminated reusable bailer. If a new disposable bailer was used for assessment of LNAPL, that bailer may be used for purging. The withdrawal rate used is one that minimizes drawdown while satisfying time constraints.

To evaluate when purging is complete, one or more groundwater stabilization parameters are monitored and recorded during purging activities until stabilization is achieved. Most commonly, stabilization parameters include temperature, conductivity, and pH, but field procedures detailed in the scope of work may also include monitoring of dissolved oxygen concentrations, oxidation reduction potential, and/or turbidity¹. Parameters are considered stable when two (2) consecutive readings recorded three (3) minutes apart fall within ranges provided below in Table 1. In the event that the parameters have not stabilized and five (5) well casing volumes have been removed, purging activities will cease and be considered complete. Once the well is purged, a groundwater sample(s) is collected from the well using a new disposable bailer. If a new disposable bailer was used for purging, that bailer may be used to collect the sample(s). A sample is not collected if the well is inadvertently purged dry.

Table 1. Criteria for Defining Stabilization of Water-Quality Indicator Parameters

Parameter	Stabilization Criterion
Temperature	± 0.2°C (± 0.36°F)
pH	± 0.1 standard units
Conductivity	± 3%
Dissolved oxygen	± 10%
Oxidation reduction potential	± 10 mV
Turbidity ¹	± 10% or 1.0 NTU (whichever is greater)

3.2 Low-Flow Purging and Sampling

“Low-Flow”, “Minimal Drawdown”, or “Low-Stress” purging is performed per ASTM D6771-02. It is a method of groundwater removal from within a well’s screened interval that is intended to minimize drawdown and mixing of the water column in the well casing. This is accomplished by pumping the well using a decontaminated pump with new disposable plastic discharge or suction tubing or dedicated well tubing at a low flow rate while evaluating the groundwater elevation during pumping.

¹ As stated in ASTM D6771-02, turbidity is not a chemical parameter and not indicative of when formation-quality water is being purged; however, turbidity may be helpful in evaluating stress on the formation during purging. Turbidity measurements are taken at the same time that stabilization parameter measurements are made, or, at a minimum, once when purging is initiated and again just prior to sample collection, after stabilization parameters have stabilized. To avoid artifacts in sample analysis, turbidity should be as low as possible when samples are collected. If turbidity values are persistently high, the withdrawal rate is lowered until turbidity decreases. If high turbidity persists even after lowering the withdrawal rate, the purging is stopped for a period of time until turbidity settles, and the purging process is then restarted. If this fails to solve the problem, the purging/sampling process for the well is ceased, and well maintenance or redevelopment is considered.

The low flow pumping rate is well specific and is generally established at a volume that is less than or equal to the natural recovery rate of the well. A pump with adjustable flow rate control is positioned with the intake at or near the mid-point of the submerged well screen. The pumping rate used during low-flow purging is low enough to minimize mobilization of particulate matter and drawdown (stress) of the water column. Low-flow purging rates will vary based on the individual well characteristics; however, the purge rate should not exceed 1.0 Liter per minute (L/min) or 0.25 gallon per minute (gal/min). Low-flow purging should begin at a rate of approximately 0.1 L/min (0.03 gal/min)², or the lowest rate possible, and be adjusted based on an evaluation of drawdown. Water level measurements should be recorded at approximate one (1) to two (2) minute intervals until the low-flow rate has been established, and drawdown is minimized. As a general rule, drawdown should not exceed 25% of the distance between the top of the water column and the pump in-take.

To evaluate when purging is complete, one or more groundwater stabilization parameters are monitored and recorded during purging activities until stabilization is achieved. Most commonly, stabilization parameters include temperature, conductivity, and pH, but field procedures detailed in the scope of work may also include monitoring of dissolved oxygen concentrations, oxidation reduction potential, and/or turbidity¹. The frequency between measurements will be at an interval of one (1) to three (3) minutes; however, if a flow cell is used, the frequency will be determined based on the time required to evacuate one cell volume. Stabilization is defined as three (3) consecutive readings recorded several minutes apart falling within ranges provided in Table 1. Samples will be collected by filling appropriate containers from the pump discharge tubing at a rate not to exceed the established pumping rate.

3.3 Minimal Purge, Discrete Depth, and Passive Sampling

Per ASTM D4448-01, sampling techniques that do not rely on purging, or require only minimal purging, may be used if a particular zone within a screened interval is to be sampled or if a well is not capable of yielding sufficient groundwater for purging. To properly use these sampling techniques, a water sample is collected within the screened interval with little or no mixing of the water column within the casing. These techniques include minimal purge sampling which uses a dedicated sampling pump capable of pumping rates of less than 0.1 L/min (0.03 gal/min)², discrete depth sampling using a bailer that allows groundwater entry at a controlled depth (e.g. differential pressure bailer), or passive (diffusion) sampling. These techniques are based on certain studies referenced in ASTM D4448-01 that indicate that under certain conditions, natural groundwater flow is laminar and horizontal with little or no mixing within the well screen.

² According to ASTM D4448-01, studies have indicated that at flow rates of 0.1 L/min, low-density polyethylene (LDPE) and plasticized polypropylene tubing materials are prone to sorption. Therefore, TFE-fluorocarbon or other appropriate tubing material is used, particularly when tubing lengths of 50 feet or longer are used.

4.0 Decontamination

Reusable groundwater sampling equipment were cleaned using a solution of Alconox or other acceptable detergent, rinsed with tap water, and finally rinsed with distilled water prior to use in each well. Decontamination water was stored on-site in labeled steel drum(s) or other appropriate container(s) prior to disposal.

5.0 Sample Containers, Labeling, and Storage

Samples were collected in laboratory prepared containers with appropriate preservative (if preservative was required). Samples were properly labeled (site name, sample I.D., sampler initials, date, and time of collection) and stored chilled (refrigerator or ice chest with ice) until delivery to a certified laboratory, under chain of custody procedures.

6.0 Chain of Custody Record and Procedure

The field sampler was personally responsible for care and custody of the samples collected until they were properly transferred to another party. To document custody and transfer of samples, a Chain of Custody Record was prepared. The Chain of Custody Record provided identification of the samples corresponding to sample labels and specified analyses to be performed by the laboratory. The original Chain of Custody Record accompanied the shipment, and a copy of the record was stored in the project file. When the samples were transferred, the individuals relinquishing and receiving them signed, dated, and noted the time of transfer on the record.

7.0 Field Records

Daily Report and data forms were completed by staff personnel to provide daily record of significant events, observations, and measurements. Field records were signed, dated, and stored in the project file.

Attachment B
Groundwater Sampling Data
Package



Groundwater Monitoring Field Data For
ARCADIS-11132

MW-1

Date 08/27/2015 Well Head Integrity Okay Pump Inlet Depth (ft) - _____
Project Number 09-88-655 Well Head _____ Well Diameter (in) 2
Location 3201 35th Avenue, Comments _____ Initial DTW (ft) _____
Oakland, CA Well Depth (ft) _____
Weather Conditions _____
Waste Container _____
Waste Location _____
Sampler Alex Martinez

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
08:20	-								LNAPL present, no sample collection.

Sampling Summary

Sample ID _____ Purge Rate (LPM) - _____
Sample Date _____ VOA Preserved # _____
Sample Time _____ VOA Un-preserved # _____
DTW at Sampling (ft) - _____ Liter Amber # _____
Sampled using _____ Plastic Bottles # _____
Other _____
Remarks _____

Sampler's Signature

Alex Martinez



Groundwater Monitoring Field Data For ARCADIS-11132

MW-10

Date 08/27/2015 Well Head Integrity Okay Pump Inlet Depth (ft) -
Project Number 09-88-655 Well Head _____ Well Diameter (in) 2
Location 3201 35th Avenue, Comments _____ Initial DTW (ft) _____
Oakland, CA Well Depth (ft) _____
Weather Conditions _____
Waste Container _____
Waste Location _____
Sampler Alex Martinez

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
08:04	-								LNAPL present, no sample collection

Sampling Summary

Sample ID _____ Purge Rate (LPM) -
Sample Date _____ VOA Preserved # _____
Sample Time _____ VOA Un-preserved # _____
DTW at Sampling (ft) - Liter Amber # _____
Sampled using _____ Plastic Bottles # _____
Other _____
Remarks _____

Sampler's Signature

Alex Martinez



**Groundwater Monitoring Field Data For
ARCADIS-11132**

MW-2

Date	<u>08/27/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>-</u>
Project Number	<u>09-88-655</u>	Well Head	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>3201 35th Avenue, Oakland, CA</u>	Comments	<u></u>	Initial DTW (ft)	<u></u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u></u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>Alex Martinez</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
10:24	-	-	6.20	22.84	6.59	1940	-126	0.0	1 liter purged and moderate hydrocarbon odor

Sampling Summary

Sample ID	<u>MW-2</u>	Purge Rate (LPM)	<u>-</u>
Sample Date	<u>08/27/2015</u>	VOA Preserved #	<u>4</u>
Sample Time	<u>10:20</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>-</u>	Liter Amber #	<u></u>
Sampled using	<u></u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature

Alex Martinez



Groundwater Monitoring Field Data For
ARCADIS-11132

MW-3

Date 08/27/2015 Well Head Integrity Okay Pump Inlet Depth (ft) - _____
Project Number 09-88-655 Well Head _____ Well Diameter (in) 2
Location 3201 35th Avenue, Comments _____ Initial DTW (ft) _____
Oakland, CA Well Depth (ft) _____
Weather Conditions _____
Waste Container _____
Waste Location _____
Sampler Alex Martinez

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
07:32	-								Gauge only

Sampling Summary

Sample ID _____ Purge Rate (LPM) - _____
Sample Date _____ VOA Preserved # _____
Sample Time _____ VOA Un-preserved # _____
DTW at Sampling (ft) - _____ Liter Amber # _____
Sampled using _____ Plastic Bottles # _____
Other _____
Remarks _____

Sampler's Signature

Alex
Martinez



**Groundwater Monitoring Field Data For
ARCADIS-11132**

MW-4

Date	<u>08/27/2015</u>	Well Head Integrity	<u>Need repair</u>	Pump Inlet Depth (ft)	<u> </u>
Project Number	<u>09-88-655</u>	Well Head	<u>Bolts weathered.</u>	Well Diameter (in)	<u>2</u>
Location	<u>3201 35th Avenue, Oakland, CA</u>	Comments		Initial DTW (ft)	<u> </u>
Weather Conditions	<u> </u>			Well Depth (ft)	<u> </u>
Waste Container	<u> </u>				
Waste Location	<u> </u>				
Sampler	<u>Alex Martinez</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
07:28	-								Gauge only, no sample collection.

Sampling Summary

Sample ID	<u> </u>	Purge Rate (LPM)	<u>-</u>
Sample Date	<u> </u>	VOA Preserved #	<u> </u>
Sample Time	<u> </u>	VOA Un-preserved #	<u> </u>
DTW at Sampling (ft)	<u>-</u>	Liter Amber #	<u> </u>
Sampled using	<u> </u>	Plastic Bottles #	<u> </u>
		Other	<u> </u>
		Remarks	<u> </u>

Sampler's Signature

Alex Martinez



Groundwater Monitoring Field Data For ARCADIS-11132

MW-5

Date	<u>08/27/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>-</u>
Project Number	<u>09-88-655</u>	Well Head	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>3201 35th Avenue, Oakland, CA</u>	Comments	<u></u>	Initial DTW (ft)	<u></u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u></u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>Alex Martinez</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
08:54	-		3.37	20.15	6.62	1440	-127	1.5	1 liter purged

Sampling Summary

Sample ID	<u>MW-5</u>	Purge Rate (LPM)	<u>-</u>
Sample Date	<u>08/27/2015</u>	VOA Preserved #	<u>4</u>
Sample Time	<u>08:50</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>-</u>	Liter Amber #	<u></u>
Sampled using	<u></u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature



Groundwater Monitoring Field Data For
ARCADIS-11132

MW-6

Date 08/27/2015 Well Head Integrity Okay Pump Inlet Depth (ft) -
Project Number 09-88-655 Well Head _____ Well Diameter (in) 2
Location 3201 35th Avenue, Comments _____ Initial DTW (ft) _____
Oakland, CA Well Depth (ft) _____
Weather Conditions _____
Waste Container _____
Waste Location _____
Sampler Alex Martinez

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
07:36	-								Gauge only

Sampling Summary

Sample ID _____ Purge Rate (LPM) -
Sample Date _____ VOA Preserved # _____
Sample Time _____ VOA Un-preserved # _____
DTW at Sampling (ft) - Liter Amber # _____
Sampled using _____ Plastic Bottles # _____
Other _____
Remarks _____

Sampler's Signature



**Groundwater Monitoring Field Data For
ARCADIS-11132**

MW-7

Date	<u>08/27/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>-</u>
Project Number	<u>09-88-655</u>	Well Head	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>3201 35th Avenue, Oakland, CA</u>	Comments	<u></u>	Initial DTW (ft)	<u></u>
Weather Conditions	<u></u>			Well Depth (ft)	<u></u>
Waste Container	<u></u>				
Waste Location	<u></u>				
Sampler	<u>Alex Martinez</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
07:55	-								Gauge only, no sample collection

Sampling Summary

Sample ID	<u></u>	Purge Rate (LPM)	<u>-</u>
Sample Date	<u></u>	VOA Preserved #	<u></u>
Sample Time	<u></u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>-</u>	Liter Amber #	<u></u>
Sampled using	<u></u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature

Alex Martinez



Groundwater Monitoring Field Data For ARCADIS-11132

MW-8

Date	08/27/2015	Well Head Integrity	Okay	Pump Inlet Depth (ft)	-
Project Number	09-88-655	Well Head		Well Diameter (in)	2
Location	3201 35th Avenue, Oakland, CA	Comments		Initial DTW (ft)	
Weather Conditions	Sunny			Well Depth (ft)	
Waste Container	Tank				
Waste Location	Off site				
Sampler	Alex Martinez				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
10:05	-	-	8.61	22.16	6.69	1070	-116	0.3	1 liter purged

Sampling Summary

Sample ID	MW-8	Purge Rate (LPM)	-
Sample Date	08/27/2015	VOA Preserved #	4
Sample Time	10:00	VOA Un-preserved #	
DTW at Sampling (ft)	-	Liter Amber #	
Sampled using		Plastic Bottles #	
		Other	
		Remarks	

Sampler's Signature

Alex



**Groundwater Monitoring Field Data For
ARCADIS-11132**

MW-9

Date	<u>08/27/2015</u>	Well Head Integrity	<u>Okay</u>	Pump Inlet Depth (ft)	<u>-</u>
Project Number	<u>09-88-655</u>	Well Head	<u></u>	Well Diameter (in)	<u>2</u>
Location	<u>3201 35th Avenue, Oakland, CA</u>	Comments	<u></u>	Initial DTW (ft)	<u></u>
Weather Conditions	<u>Sunny</u>			Well Depth (ft)	<u></u>
Waste Container	<u>Tank</u>				
Waste Location	<u>Off site</u>				
Sampler	<u>Alex Martinez</u>				

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:45	-	-	2.59	21.35	6.65	795	-155	12.5	1 liter purged

Sampling Summary

Sample ID	<u>MW-9</u>	Purge Rate (LPM)	<u>-</u>
Sample Date	<u>08/27/2015</u>	VOA Preserved #	<u>4</u>
Sample Time	<u>09:40</u>	VOA Un-preserved #	<u></u>
DTW at Sampling (ft)	<u>-</u>	Liter Amber #	<u></u>
Sampled using	<u></u>	Plastic Bottles #	<u></u>
		Other	<u></u>
		Remarks	<u></u>

Sampler's Signature

Alex Martinez



Groundwater Monitoring Field Data For
ARCADIS-11132

RW-1

Date 08/27/2015 Well Head Integrity Okay Pump Inlet Depth (ft) - _____
Project Number 09-88-655 Well Head _____ Well Diameter (in) 6
Location 3201 35th Avenue, Comments _____ Initial DTW (ft) _____
Oakland, CA Well Depth (ft) _____
Weather Conditions Sunny
Waste Container Tank
Waste Location Off site
Sampler Alex Martinez

Field Parameters

Time	Purge Volume (L)	DTW (ft)	DO (mg/L)	Temp (C)	pH	Conductivity (uS/cm)	ORP (mV)	Turbidity (NTU)	Remarks
09:14	-	-	8.36	20.96	6.52	279	-144	0.0	1 liter purged. Moderate hydrocarbon odor.

Sampling Summary

Sample ID RW-1 Purge Rate (LPM) -
Sample Date 08/27/2015 VOA Preserved # 4
Sample Time 09:10 VOA Un-preserved # _____
DTW at Sampling (ft) - Liter Amber # _____
Sampled using _____ Plastic Bottles # _____
Other _____
Remarks _____

Sampler's Signature

Gauging Data

Date	08/27/2015
Project_Number	09-88-655
Location	3201 35th Avenue, Oakland, CA
Sampler	Alex Martinez

Well	Date/Time	Well Depth (ft)	Depth To Water (ft)	Depth to LNAPL (ft)	Remarks
MW-1	08/27/2015 08:19	41.45	21.64	21.54	LNAPL present
MW-10	08/27/2015 08:03	34.27	19.26	19.24	LNAPL present on probe
MW-2	08/27/2015 08:12	31.70	20.40		
MW-3	08/27/2015 07:32	33.14	19.40		
MW-4	08/27/2015 07:27	39.86	21.87		
MW-5	08/27/2015 07:49	31.61	17.96		
MW-6	08/27/2015 07:35	34.55	17.92		
MW-7	08/27/2015 07:55	34.86	19.59		
MW-8	08/27/2015 07:45	38.85	18.39		
MW-9	08/27/2015 07:38	27.85	18.69		
RW-1	08/27/2015 08:15	38.73	19.90		

ARCADIS

Attachment C

Certified Laboratory Analytical Report
and Chain of Custody
Documentation

October 13, 2015

ARCADIS US - San Francisco, CA

Sample Delivery Group: L785755
Samples Received: 08/28/2015
Project Number: GP09BPNA
Description: CA-11132
Site: 3201 35TH AVENUE
Report To: Catie Gallagher
630 Plaza Drive, Suite 100
Highlands Ranch, CO 80129

Entire Report Reviewed By:



Jarred Willis
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.



¹Cp: Cover Page	1
²Tc: Table of Contents	2
³Ss: Sample Summary	3
⁴Cn: Case Narrative	4
⁵Sr: Sample Results	5
MW-2 L785755-01	5
MW-5 L785755-02	6
MW-8 L785755-03	7
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⁶Qc: Quality Control Summary	10
Volatile Organic Compounds (GC) by Method 8015	10
Volatile Organic Compounds (GC/MS) by Method 8260B	11
⁷Gl: Glossary of Terms	14
⁸Al: Accreditations & Locations	15
⁹Sc: Chain of Custody	16

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

SAMPLE SUMMARY



MW-2 L785755-01 GW

Collected by
Alex Martinez Collected date/time
08/27/15 10:20 Received date/time
08/28/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015	WG812380	10	09/01/15 22:19	09/01/15 22:19	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG812260	1	09/03/15 11:50	09/03/15 11:50	KLO
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813418	100	09/04/15 11:49	09/04/15 11:49	KLO

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

MW-5 L785755-02 GW

Collected by
Alex Martinez Collected date/time
08/27/15 08:50 Received date/time
08/28/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015	WG812380	5	09/01/15 22:42	09/01/15 22:42	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813418	10	09/04/15 12:07	09/04/15 12:07	KLO

MW-8 L785755-03 GW

Collected by
Alex Martinez Collected date/time
08/27/15 10:00 Received date/time
08/28/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015	WG812380	1	09/01/15 23:05	09/01/15 23:05	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG812260	1	09/03/15 12:29	09/03/15 12:29	KLO

MW-9 L785755-04 GW

Collected by
Alex Martinez Collected date/time
08/27/15 09:40 Received date/time
08/28/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015	WG812380	1	09/01/15 23:28	09/01/15 23:28	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG812260	1	09/03/15 12:48	09/03/15 12:48	KLO

RW-1 L785755-05 GW

Collected by
Alex Martinez Collected date/time
08/27/15 09:10 Received date/time
08/28/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC) by Method 8015	WG812380	1	09/01/15 23:51	09/01/15 23:51	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG812260	1	09/03/15 13:07	09/03/15 13:07	KLO



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.

Jarred Willis
 Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



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	22400		304	1000	10	09/01/2015 22:19	WG812380
(S) a,a,a-Trifluorotoluene(FID)	88.8			62.0-128		09/01/2015 22:19	WG812380

1 Cp

2 Tc

3 Ss

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	8550		33.1	100	100	09/04/2015 11:49	WG813418
Toluene	80.3		0.780	5.00	1	09/03/2015 11:50	WG812260
Ethylbenzene	1110		38.4	100	100	09/04/2015 11:49	WG813418
Total Xylenes	444		106	300	100	09/04/2015 11:49	WG813418
1,2-Dichloroethane	U		0.361	1.00	1	09/03/2015 11:50	WG812260
1,2-Dibromoethane	U		0.381	1.00	1	09/03/2015 11:50	WG812260
Di-isopropyl ether	U		0.320	1.00	1	09/03/2015 11:50	WG812260
Ethanol	U		42.0	100	1	09/03/2015 11:50	WG812260
Ethyl tert-butyl ether	U		0.270	1.00	1	09/03/2015 11:50	WG812260
Methyl tert-butyl ether	41.1	J	36.7	100	100	09/04/2015 11:49	WG813418
tert-Butyl alcohol	416	J	240	500	100	09/04/2015 11:49	WG813418
tert-Amyl Methyl Ether	U		0.260	1.00	1	09/03/2015 11:50	WG812260
(S) Toluene-d8	99.0			90.0-115		09/03/2015 11:50	WG812260
(S) Dibromofluoromethane	217	J1		79.0-121		09/03/2015 11:50	WG812260
(S) a,a,a-Trifluorotoluene	106			90.4-116		09/03/2015 11:50	WG812260
(S) 4-Bromofluorobenzene	98.5			80.1-120		09/03/2015 11:50	WG812260

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

8260B L785755-01 WG812260: IS/SURR failed due to matrix interference.



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	7370		152	500	5	09/01/2015 22:42	WG812380
(S) a,a,a-Trifluorotoluene(FID) 76.7				62.0-128		09/01/2015 22:42	WG812380

1 Cp

2 Tc

3 Ss

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	803		3.31	10.0	10	09/04/2015 12:07	WG813418
Toluene	8.60	J	7.80	50.0	10	09/04/2015 12:07	WG813418
Ethylbenzene	62.2		3.84	10.0	10	09/04/2015 12:07	WG813418
Total Xylenes	75.8		10.6	30.0	10	09/04/2015 12:07	WG813418
1,2-Dichloroethane	U		3.61	10.0	10	09/04/2015 12:07	WG813418
1,2-Dibromoethane	U		3.81	10.0	10	09/04/2015 12:07	WG813418
Di-isopropyl ether	U		3.20	10.0	10	09/04/2015 12:07	WG813418
Ethanol	U		420	1000	10	09/04/2015 12:07	WG813418
Ethyl tert-butyl ether	U		2.70	10.0	10	09/04/2015 12:07	WG813418
Methyl tert-butyl ether	8.63	J	3.67	10.0	10	09/04/2015 12:07	WG813418
tert-Butyl alcohol	126		24.0	50.0	10	09/04/2015 12:07	WG813418
tert-Amyl Methyl Ether	U		2.60	10.0	10	09/04/2015 12:07	WG813418
(S) Toluene-d8	99.0			90.0-115		09/04/2015 12:07	WG813418
(S) Dibromofluoromethane	96.8			79.0-121		09/04/2015 12:07	WG813418
(S) a,a,a-Trifluorotoluene	101			90.4-116		09/04/2015 12:07	WG813418
(S) 4-Bromofluorobenzene	104			80.1-120		09/04/2015 12:07	WG813418

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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	5800		30.4	100	1	09/01/2015 23:05	WG812380
(S) a,a,a-Trifluorotoluene(FID)	93.2			62.0-128		09/01/2015 23:05	WG812380

1 Cp

2 Tc

3 Ss

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	94.2		0.331	1.00	1	09/03/2015 12:29	WG812260
Toluene	14.7		0.780	5.00	1	09/03/2015 12:29	WG812260
Ethylbenzene	112		0.384	1.00	1	09/03/2015 12:29	WG812260
Total Xylenes	62.9		1.06	3.00	1	09/03/2015 12:29	WG812260
1,2-Dichloroethane	U		0.361	1.00	1	09/03/2015 12:29	WG812260
1,2-Dibromoethane	U		0.381	1.00	1	09/03/2015 12:29	WG812260
Di-isopropyl ether	U		0.320	1.00	1	09/03/2015 12:29	WG812260
Ethanol	U		42.0	100	1	09/03/2015 12:29	WG812260
Ethyl tert-butyl ether	U		0.270	1.00	1	09/03/2015 12:29	WG812260
Methyl tert-butyl ether	U		0.367	1.00	1	09/03/2015 12:29	WG812260
tert-Butyl alcohol	U		2.40	5.00	1	09/03/2015 12:29	WG812260
tert-Amyl Methyl Ether	U		0.260	1.00	1	09/03/2015 12:29	WG812260
(S) Toluene-d8	99.2			90.0-115		09/03/2015 12:29	WG812260
(S) Dibromofluoromethane	102			79.0-121		09/03/2015 12:29	WG812260
(S) a,a,a-Trifluorotoluene	106			90.4-116		09/03/2015 12:29	WG812260
(S) 4-Bromofluorobenzene	101			80.1-120		09/03/2015 12:29	WG812260

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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	10000		30.4	100	1	09/01/2015 23:28	WG812380
(S) a,a,a-Trifluorotoluene(FID)	93.7			62.0-128		09/01/2015 23:28	WG812380

1 Cp

2 Tc

3 Ss

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	10.7		0.331	1.00	1	09/03/2015 12:48	WG812260
Toluene	U		0.780	5.00	1	09/03/2015 12:48	WG812260
Ethylbenzene	21.7		0.384	1.00	1	09/03/2015 12:48	WG812260
Total Xylenes	2.86	J	1.06	3.00	1	09/03/2015 12:48	WG812260
1,2-Dichloroethane	U		0.361	1.00	1	09/03/2015 12:48	WG812260
1,2-Dibromoethane	U		0.381	1.00	1	09/03/2015 12:48	WG812260
Di-isopropyl ether	U		0.320	1.00	1	09/03/2015 12:48	WG812260
Ethanol	U		42.0	100	1	09/03/2015 12:48	WG812260
Ethyl tert-butyl ether	U		0.270	1.00	1	09/03/2015 12:48	WG812260
Methyl tert-butyl ether	U		0.367	1.00	1	09/03/2015 12:48	WG812260
tert-Butyl alcohol	U		2.40	5.00	1	09/03/2015 12:48	WG812260
tert-Amyl Methyl Ether	U		0.260	1.00	1	09/03/2015 12:48	WG812260
(S) Toluene-d8	109			90.0-115		09/03/2015 12:48	WG812260
(S) Dibromofluoromethane	101			79.0-121		09/03/2015 12:48	WG812260
(S) a,a,a-Trifluorotoluene	104			90.4-116		09/03/2015 12:48	WG812260
(S) 4-Bromofluorobenzene	96.8			80.1-120		09/03/2015 12:48	WG812260

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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	2550		30.4	100	1	09/01/2015 23:51	WG812380
(S) a,a,a-Trifluorotoluene(FID)	90.6			62.0-128		09/01/2015 23:51	WG812380

1 Cp

2 Tc

3 Ss

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	4.57		0.331	1.00	1	09/03/2015 13:07	WG812260
Toluene	1.14	J	0.780	5.00	1	09/03/2015 13:07	WG812260
Ethylbenzene	4.54		0.384	1.00	1	09/03/2015 13:07	WG812260
Total Xylenes	3.66		1.06	3.00	1	09/03/2015 13:07	WG812260
1,2-Dichloroethane	U		0.361	1.00	1	09/03/2015 13:07	WG812260
1,2-Dibromoethane	U		0.381	1.00	1	09/03/2015 13:07	WG812260
Di-isopropyl ether	U		0.320	1.00	1	09/03/2015 13:07	WG812260
Ethanol	U		42.0	100	1	09/03/2015 13:07	WG812260
Ethyl tert-butyl ether	U		0.270	1.00	1	09/03/2015 13:07	WG812260
Methyl tert-butyl ether	U		0.367	1.00	1	09/03/2015 13:07	WG812260
tert-Butyl alcohol	6.22		2.40	5.00	1	09/03/2015 13:07	WG812260
tert-Amyl Methyl Ether	U		0.260	1.00	1	09/03/2015 13:07	WG812260
(S) Toluene-d8	106			90.0-115		09/03/2015 13:07	WG812260
(S) Dibromofluoromethane	93.9			79.0-121		09/03/2015 13:07	WG812260
(S) a,a,a-Trifluorotoluene	109			90.4-116		09/03/2015 13:07	WG812260
(S) 4-Bromofluorobenzene	104			80.1-120		09/03/2015 13:07	WG812260

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) 09/01/15 13:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPHG C5 - C12	U		0.0304	0.100
<i>(S) a,a,a-Trifluorotoluene(FID)</i>	102			62.0-128

1 Cp

2 Tc

3 Ss

4 Cn

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

(LCS) 09/01/15 12:16 • (LCSD) 09/01/15 12:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
TPHG C5 - C12	5.50	5.15	5.49	93.7	99.7	64.0-125			6.30	20
<i>(S) a,a,a-Trifluorotoluene(FID)</i>				98.8	99.7	62.0-128				

5 Sr

6 Qc

L785752-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/01/15 14:52 • (MS) 09/01/15 18:43 • (MSD) 09/01/15 19:06

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
TPHG C5 - C12	5.50	ND	5.31	5.94	96.5	108	1	45.1-139			11.2	20
<i>(S) a,a,a-Trifluorotoluene(FID)</i>					98.3	97.7		62.0-128				

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) 09/03/15 05:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000331	0.00100
1,2-Dibromoethane	U		0.000381	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Ethanol	U		0.0420	0.100
Methyl tert-butyl ether	U		0.000367	0.00100
Toluene	U		0.000780	0.00500
Xylenes, Total	U		0.00106	0.00300
tert-Amyl Methyl Ether	U		0.000260	0.00100
Ethyl tert-butyl ether	U		0.000270	0.00100
tert-Butyl alcohol	U		0.00240	0.00500
<i>(S) Toluene-d8</i>	103			90.0-115
<i>(S) Dibromofluoromethane</i>	97.8			79.0-121
<i>(S) a,a,a-Trifluorotoluene</i>	108			90.4-116
<i>(S) 4-Bromofluorobenzene</i>	106			80.1-120

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 09/03/15 01:57 • (LCSD) 09/03/15 02:17

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Benzene	0.0250	0.0264	0.0235	106	93.8	73.0-122			11.8	20
1,2-Dibromoethane	0.0250	0.0249	0.0261	99.6	105	79.8-122			4.81	20
1,2-Dichloroethane	0.0250	0.0309	0.0256	124	102	65.3-126			18.7	20
Di-isopropyl ether	0.0250	0.0296	0.0257	118	103	65.1-135			14.0	20
Ethylbenzene	0.0250	0.0236	0.0246	94.2	98.3	80.9-121			4.27	20
Methyl tert-butyl ether	0.0250	0.0300	0.0260	120	104	70.1-125			14.4	20
Toluene	0.0250	0.0252	0.0245	101	98.1	77.9-116			2.87	20
Xylenes, Total	0.0750	0.0680	0.0728	90.7	97.0	79.2-122			6.77	20
<i>(S) Toluene-d8</i>				108	105	90.0-115				
<i>(S) Dibromofluoromethane</i>				108	98.3	79.0-121				
<i>(S) a,a,a-Trifluorotoluene</i>				103	108	90.4-116				
<i>(S) 4-Bromofluorobenzene</i>				98.0	109	80.1-120				



Method Blank (MB)

(MB) 09/04/15 06:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000331	0.00100
1,2-Dibromoethane	U		0.000381	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Ethanol	U		0.0420	0.100
Methyl tert-butyl ether	U		0.000367	0.00100
Toluene	U		0.000780	0.00500
Xylenes, Total	U		0.00106	0.00300
tert-Amyl Methyl Ether	U		0.000260	0.00100
Ethyl tert-butyl ether	U		0.000270	0.00100
tert-Butyl alcohol	U		0.00240	0.00500
<i>(S) Toluene-d8</i>	100			90.0-115
<i>(S) Dibromofluoromethane</i>	95.6			79.0-121
<i>(S) a,a,a-Trifluorotoluene</i>	104			90.4-116
<i>(S) 4-Bromofluorobenzene</i>	106			80.1-120

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

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

(LCS) 09/04/15 02:52 • (LCSD) 09/04/15 03:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Benzene	0.0250	0.0234	0.0239	93.5	95.7	73.0-122			2.29	20
1,2-Dibromoethane	0.0250	0.0232	0.0240	92.8	95.9	79.8-122			3.26	20
1,2-Dichloroethane	0.0250	0.0227	0.0242	90.7	96.7	65.3-126			6.40	20
Di-isopropyl ether	0.0250	0.0226	0.0240	90.3	96.0	65.1-135			6.14	20
Ethylbenzene	0.0250	0.0243	0.0237	97.2	94.8	80.9-121			2.50	20
Methyl tert-butyl ether	0.0250	0.0244	0.0265	97.4	106	70.1-125			8.62	20
Toluene	0.0250	0.0241	0.0239	96.4	95.8	77.9-116			0.660	20
Xylenes, Total	0.0750	0.0750	0.0737	100	98.3	79.2-122			1.72	20
<i>(S) Toluene-d8</i>				101	102	90.0-115				
<i>(S) Dibromofluoromethane</i>				95.1	99.6	79.0-121				
<i>(S) 4-Bromofluorobenzene</i>				101	96.8	80.1-120				
<i>(S) a,a,a-Trifluorotoluene</i>				103	104	90.4-116				



L785692-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/04/15 07:59 • (MS) 09/04/15 07:07 • (MSD) 09/04/15 07:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	ND	0.0251	0.0249	100	99.8	1	58.6-133			0.470	20
1,2-Dibromoethane	0.0250	ND	0.0253	0.0244	101	97.8	1	73.8-131			3.62	20
1,2-Dichloroethane	0.0250	0.000366	0.0240	0.0250	94.6	98.5	1	60.7-132			3.96	20
Di-isopropyl ether	0.0250	ND	0.0236	0.0249	94.3	99.6	1	59.9-140			5.44	20
Ethylbenzene	0.0250	ND	0.0255	0.0251	102	101	1	62.7-136			1.60	20
Methyl tert-butyl ether	0.0250	ND	0.0252	0.0276	101	110	1	61.4-136			8.99	20
Toluene	0.0250	ND	0.0252	0.0242	101	96.9	1	67.8-124			3.99	20
Xylenes, Total	0.0750	ND	0.0782	0.0765	104	102	1	65.6-133			2.26	20
<i>(S) Toluene-d8</i>					101	98.7		90.0-115				
<i>(S) Dibromofluoromethane</i>					99.6	101		79.0-121				
<i>(S) 4-Bromofluorobenzene</i>					99.7	98.5		80.1-120				
<i>(S) a,a,a-Trifluorotoluene</i>					101	103		90.4-116				

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



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**.

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
Connecticut	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 ¹⁴	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		

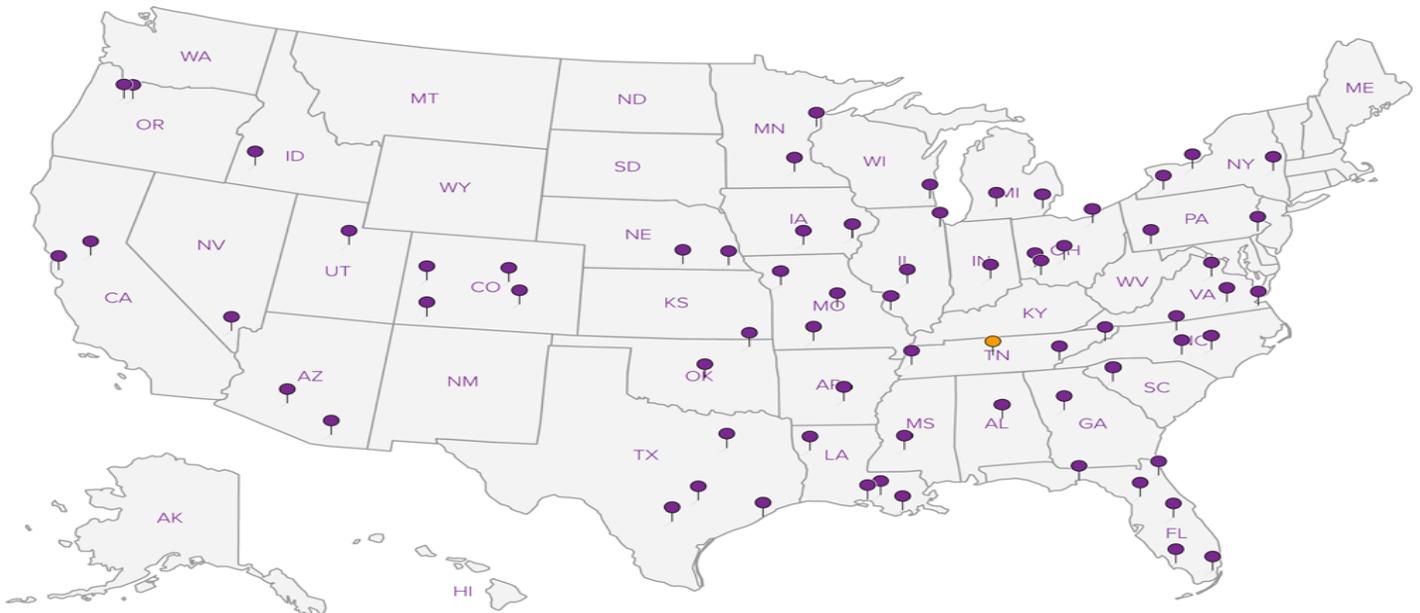
¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Third Party & Federal Accreditations

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

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.**



¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address: Arcadis US - San Francisco, CA 630 Plaza Dr., Ste. 100 Highlands Ranch, CO 80129			Billing Information: Attn: Accounts Payable 630 Plaza Dr, Ste. 600 Highlands Ranch, CO 80129			Analysis / Container / Preservative						Chain of Custody Page 1 of 3			
Report to: Catie Gallagher			Email To: catherine.gallagher@arcadis-us.com			G-RO by 8015 M BTEX, 5 Fuel Oxy's & EDB by 8260 1,2-DCA & Ethanol by 8260						 L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 			
Project Description: CA-11132			City/State Collected: Oakland, CA									L# 178575		A023	
Phone: 303-231-9115 Fax: 720-344-0486		Client Project #		Lab Project # ArcadisBP-CA11132								Acctnum: ARCADISBP		Template:	
Collected by (print): Alex Martinez		Site/Facility ID # 3201 35 th Avenue		P.O. #								Prelogin: TSR: 358 - Jarred Willis		PB:	
Collected by (signature): 		Rush? (Lab MUST Be Notified)		Date Results Needed								Shipped Via:			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		<input type="checkbox"/> Same Day200% <input type="checkbox"/> Next Day100% <input type="checkbox"/> Two Day50% <input type="checkbox"/> Three Day25%		Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes								No. of Cntrs			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time				Rem./Contaminant	Sample # (lab only)					
MW-2	G-RAB	GW	-	8/27/15	1020	4	X	X	X		-01				
MW-5			-		0850	4	X	X	X		02				
MW-8			-		1000	4	X	X	X		03				
MW-9			-		0940	4	X	X	X		04				
RW-1			-		0910	4	X	X	X		05				
TB-11132-09272015	-	-	-	-	-	1					06				

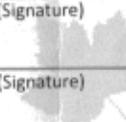
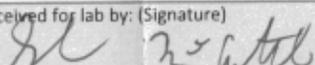
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks: Please provide Standard Turnaround Time

Flow _____ Other _____

Hold #

Relinquished by: (Signature) 	Date: 8/27/15	Time: 1700	Received by: (Signature) 	Sampler returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: (lab use only) 75 
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.1 °C Bottles Received: 21	COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) 	Date: 8/28/15 Time: 0900	pH Checked: _____ NCF: _____

Attachment D
Historical Tables Provided by
Broadbent

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1														
7/9/1990	--	169.75	--	0.22	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	0.58	--	--	--	--	--	--	--	--	--	
3/7/1991	--		20.59	0.00	149.16	--	--	--	--	--	--	--	--	
4/1/1991	--		16.51	0.15	153.09	--	--	--	--	--	--	--	--	
6/27/1991	--		--	0.18	--	--	--	--	--	--	--	--	--	
9/27/1991	--		--	0.27	--	--	--	--	--	--	--	--	--	
12/18/1991	--		--	0.28	--	--	--	--	--	--	--	--	--	
7/3/1992	--		22.30	0.27	147.18	--	--	--	--	--	--	--	--	
10/5/1992	--		23.98	0.24	145.53	--	--	--	--	--	--	--	--	
1/13/1993	--		17.03	0.24	152.48	--	--	--	--	--	--	--	--	
4/23/1993	--		18.10	0.42	151.23	--	--	--	--	--	--	--	--	
7/12/1993	--		22.02	0.49	147.24	--	--	--	--	--	--	--	--	
10/21/1993	--		25.12	1.09	143.54	--	--	--	--	--	--	--	--	
1/21/1994	--		23.02	0.76	145.97	--	--	--	--	--	--	--	--	
4/20/1994	--		24.54	1.80	143.41	--	--	--	--	--	--	--	--	
8/1/1994	--		24.11	0.35	145.29	--	--	--	--	--	--	--	--	
12/23/1994	--		18.19	0.00	151.56	--	--	--	--	--	--	--	--	
1/26/1995	--		16.25	1.10	152.40	--	--	--	--	--	--	--	--	
2/16/1995	--		--	1.40	--	--	--	--	--	--	--	--	--	
6/8/1995	--		22.92	1.25	145.63	--	--	--	--	--	--	--	--	
6/8/1995	--		22.92	1.25	145.63	--	--	--	--	--	--	--	--	
8/22/1995	--		24.45	0.85	144.45	--	--	--	--	--	--	--	--	
10/27/1995	--		25.41	0.00	143.65	--	--	--	--	--	--	--	--	
10/30/95-12/23/95	--		--	--	--	--	--	--	--	--	--	--	--	
12/23/1995	--		--	0.69	--	--	--	--	--	--	--	--	--	
1/25/1996	--		18.20	1.40	150.15	--	--	--	--	--	--	--	--	
1/25/1996	--		18.20	1.40	150.15	--	--	--	--	--	--	--	--	
4/19/1996	--		19.06	1.22	149.47	--	--	--	--	--	--	--	--	
7/23/1996	--		22.98	0.89	145.88	--	--	--	--	--	--	--	--	
11/11/1996	--		23.99	0.89	144.78	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.														
1/21/1997	--	169.75	16.80	0.90	152.05	--	--	--	--	--	--	--	--	
4/29/1997	--		21.90	0.85	147.00	--	--	--	--	--	--	--	--	
4/30/1997	--		--	--	--	92,000	3,500	8,100	4,400	23,800	6,900	--	--	c
4/30/1997	--		--	--	--	100,000	3,600	8,000	4,000	21,300	7,700	5.2	--	
8/21/1997	--		23.40	0.00	146.35	120,000	3,200	8,100	3,800	19,600	5,200	--	--	c
8/21/1997	--		23.40	0.00	146.35	140,000	3,000	8,500	3,900	22,100	5,700	5.3	--	
11/2/97-12/9/97	--		--	0.87	--	--	--	--	--	--	--	--	--	
11/5/1997	--		23.70	0.00	145.51	68,000	6,200	4,400	3,300	14,300	8,000	4.7	--	
11/5/1997	--		23.70	0.00	145.51	88,000	7,300	4,800	3,600	16,900	8,200	--	--	c
2/3/1998	--		13.63	0.32	155.80	--	--	--	--	--	--	--	--	
2/4/1998	--		--	--	--	190,000	2,200	10,000	5,600	32,000	<10000	5.3	--	
2/4/1998	--		--	--	--	160,000	2,300	8,400	5,000	29,400	<10000	--	--	c
5/28/1998	--		18.03	0.17	151.55	87,000	980	3,900	3,600	19,000	2,900	3.8	--	
12/30/1998	--		19.50	0.08	150.17	70,000	530	3,200	2,900	16,000	3,600	--	--	
2/2/1999	--		18.93	0.03	150.79	79,000	480	3,100	3,500	21,000	3,500	--	--	
5/10/1999	--		18.28	0.03	151.44	110,000	160	1,900	3,700	24,000	3,000	--	--	
8/24/1999	--		20.13	0.06	149.56	110,000	850	1,300	1,900	19,000	<50	--	--	
11/3/1999	--		22.27	0.36	147.12	65,000	6,300	1,100	3,300	9,500	8,900	--	--	
3/1/2000	--		14.79	0.23	154.73	--	--	--	--	--	--	--	--	h
4/21/2000	--		18.10	0.33	151.32	61,000	330	780	2,700	17,000	1,300	--	--	
7/31/2000	--		21.60	0.53	147.62	1,500,000	340	2,100	24,000	120,000	2,700	--	--	
11/20/2000	--		21.69	0.37	147.69	1,700,000	1,800	2,300	19,000	93,000	3,900	--	--	
2/18/2001	--		16.70	0.13	152.92	--	--	--	--	--	--	--	--	
2/26/2001	--		14.38	0.15	155.22	100,000	658	466	4,210	15,000	1,890	--	--	
6/7/2001	--		20.78	0.00	148.97	70,000	705	440	3,870	12,200	2,720	--	--	
9/5/2001	--		23.36	0.35	146.04	--	--	--	--	--	--	--	--	j
11/30/2001	--		20.85	0.41	148.49	--	--	--	--	--	--	--	--	k
12/6/2001	--		18.72	0.27	150.76	39,000	3,500	237	2,150	4,500	5,400	--	--	
2/20/2002	--		17.43	0.15	152.17	52,000	465	271	1,600	11,400	106	--	--	
6/20/2002	--		21.18	0.34	148.23	--	--	--	--	--	--	--	--	j

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.														
9/11/2002	--	169.75	22.86	0.40	146.49	--	--	--	--	--	--	--	--	j
11/12/2002	--		22.65	0.37	146.73	--	--	--	--	--	--	--	--	j
1/29/2003	--		18.15	0.30	151.30	--	--	--	--	--	--	--	--	j,n
5/22/2003	--		18.49	0.20	151.06	--	--	--	--	--	--	--	--	j
6/24/2003	--		21.44	0.35	147.96	--	--	--	--	--	--	--	--	o
7/28/2003	--		22.72	0.35	146.68	--	--	--	--	--	--	--	--	j
8/12/2003	--		22.64	0.23	146.88	--	--	--	--	--	--	--	--	o
9/12/2003	--		20.70	0.24	148.81	--	--	--	--	--	--	--	--	o
10/3/2003	--		--	0.23	--	--	--	--	--	--	--	--	--	
11/18/2003	NP		21.70	0.25	148.25	--	--	--	--	--	--	--	--	
12/31/2003	--		--	0.15	--	--	--	--	--	--	--	--	--	
2/2/2004	--		--	0.15	--	--	--	--	--	--	--	--	--	
02/23/2004	NP		16.34	0.09	153.48	--	--	--	--	--	--	--	--	
3/18/2004	--		--	0.09	--	--	--	--	--	--	--	--	--	
4/13/2004	--		--	0.24	--	--	--	--	--	--	--	--	--	
05/04/2004	NP		21.28	0.16	148.60	--	--	--	--	--	--	--	--	
6/2/2004	--		--	0.08	--	--	--	--	--	--	--	--	--	
7/2/2004	--		--	0.28	--	--	--	--	--	--	--	--	--	
08/04/2004	--		22.54	0.10	147.29	--	--	--	--	--	--	--	--	
09/22/2004	NP		22.76	0.20	147.15	--	--	--	--	--	--	--	--	
10/26/2004	--		--	0.12	--	--	--	--	--	--	--	--	--	
11/10/2004	--		20.19	0.14	149.67	--	--	--	--	--	--	--	--	
12/27/2004	--		--	0.08	--	--	--	--	--	--	--	--	--	
01/13/2005	--		14.58	0.03	155.19	--	--	--	--	--	--	--	--	
02/15/2005	--		16.13	0.04	153.65	--	--	--	--	--	--	--	--	
03/07/2005	--		13.31	0.01	156.45	--	--	--	--	--	--	--	--	
4/29/2005	--		--	0.01	--	--	--	--	--	--	--	--	--	
05/16/2005	--		15.74	0.02	154.03	--	--	--	--	--	--	--	--	j
6/21/2005	--		--	0.01	--	--	--	--	--	--	--	--	--	
7/7/2005	--		--	0.18	--	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.														
08/17/2005	--	169.75	21.15	0.08	148.66	--	--	--	--	--	--	--	--	j
9/6/2005	--		--	0.02	--	--	--	--	--	--	--	--	--	
10/4/2005	--		--	0.12	--	--	--	--	--	--	--	--	--	
11/18/2005	--		20.15	0.00	149.60	--	--	--	--	--	--	--	--	j
12/30/2005	--		--	0.03	--	--	--	--	--	--	--	--	--	
1/24/2006	--		--	--	--	--	--	--	--	--	--	--	--	
02/07/2006	--		15.19	0.01	154.57	--	--	--	--	--	--	--	--	j
3/30/2006	--		--	--	--	--	--	--	--	--	--	--	--	
5/19/2006	P		17.42	0.00	152.33	44,000	73	510	3,300	5,300	86	--	6.9	u, t
8/23/2006	--		22.01	0.14	147.74	--	--	--	--	--	--	--	--	b, j
11/15/2006	--		21.98	0.18	147.91	--	--	--	--	--	--	--	--	b, j
2/14/2007	--		17.12	0.17	152.76	--	--	--	--	--	--	--	--	b, j
5/22/2007	--		19.49	0.01	150.26	--	--	--	--	--	--	--	--	b, j
8/15/2007	--		22.24	0.01	147.52	--	--	--	--	--	--	--	--	b, j
11/8/2007	--		21.84	0.01	147.92	--	--	--	--	--	--	--	--	b, j
2/20/2008	--		16.52	0.02	153.25	--	--	--	--	--	--	--	--	b, j
5/7/2008	--		20.91	0.02	148.86	--	--	--	--	--	--	--	--	b, j
8/20/2008	--		22.77	0.02	147.00	--	--	--	--	--	--	--	--	b
11/17/2008	P		22.05	0.00	147.70	27,000	780	30	1,800	1,400	590	--	6.60	w
2/25/2009	--		15.28	0.02	154.49	--	--	--	--	--	--	--	--	b
4/8/2009	--		18.18	0.00	151.57	--	--	--	--	--	--	--	--	
5/28/2009	--		19.62	0.01	150.14	--	--	--	--	--	--	--	--	b
6/16/2009	--		20.94	0.01	148.82	--	--	--	--	--	--	--	--	
8/6/2009	--		22.31	0.01	147.45	--	--	--	--	--	--	--	--	b, j
3/4/2010	P		14.27	Sheen	155.48	14,000	45	<10	610	390	<10	0.54	6.96	
9/2/2010	NP		22.32	0.00	147.43	8,200	10	<5.0	230	140	<5.0	0.52	7.01	
3/15/2011	P		14.99	Sheen	154.76	4,500	<5.0	<5.0	56	30	16	0.85	7.0	t
8/17/2011	P		20.41	0.00	149.34	1,200	<1.0	<1.0	24	15	8.3	0.71	7.39	
2/6/2012	P		18.69	0.00	151.06	710	<1.0	<1.0	2.9	2.2	10	0.78	7.34	
MW-2														

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-2 Cont.														
7/9/1990	--	168.14	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--		19.18	0.00	148.96	--	--	--	--	--	--	--	--	
4/1/1991	--		15.21	0.00	152.93	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--		--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--		20.93	0.00	147.21	--	--	--	--	--	--	--	--	
10/5/1992	--		22.74	0.00	145.40	--	--	--	--	--	--	--	--	
1/13/1993	--		15.55	0.00	152.59	--	--	--	--	--	--	--	--	
4/23/1993	--		16.54	0.00	151.60	--	--	--	--	--	--	--	--	
7/12/1993	--		20.46	0.00	147.68	--	--	--	--	--	--	--	--	
10/21/1993	--		24.91	0.00	143.23	--	--	--	--	--	--	--	--	
1/21/1994	--		21.20	0.00	146.94	--	--	--	--	--	--	--	--	
4/20/1994	--		22.44	0.00	145.70	1,800	140	370	54	290	24	1.7	--	i
8/1/1994	--		22.24	0.00	145.90	--	--	--	--	--	--	--	--	
12/23/1994	--		16.25	0.00	151.89	--	--	--	--	--	--	--	--	
1/26/1995	--		14.55	0.00	153.59	--	--	--	--	--	--	--	--	
6/8/1995	--		21.18	0.00	146.96	--	--	--	--	--	--	--	--	
8/22/1995	--		22.76	0.00	145.38	--	--	--	--	--	--	--	--	
10/27/1995	--		23.61	0.00	144.53	--	--	--	--	--	--	--	--	
1/25/1996	--		15.95	0.00	152.19	--	--	--	--	--	--	--	--	
4/19/1996	--		17.33	0.00	150.81	--	--	--	--	--	--	--	--	
7/23/1996	--		21.25	0.00	146.89	--	--	--	--	--	--	--	--	
11/11/1996	--		22.27	0.00	145.87	--	--	--	--	--	--	--	--	
1/21/1997	--		15.19	0.00	152.95	--	--	--	--	--	--	--	--	
4/29/1997	--		20.22	0.00	147.92	--	--	--	--	--	--	--	--	
4/30/1997	--		--	--	--	130,000	4,600	15,000	6,000	37,000	<5000	5	--	
8/21/1997	--		21.74	0.00	146.40	110,000	6,000	16,000	4,700	28,000	<500	4.6	--	
11/5/1997	--		21.61	0.00	146.53	120,000	7,800	18,000	4,900	28,100	<2500	4.6	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-2 Cont.														
2/3/1998	--	168.14	11.51	0.00	156.63	75,000	590	1,500	1,800	12,800	<2500	4.5	--	
5/28/1998	--		16.51	0.00	151.63	79,000	3,900	3,100	3,100	18,000	900	4.3	--	
12/30/1998	--		17.70	0.00	150.44	95,000	4,700	3,500	3,700	21,000	<250	--	--	
2/2/1999	--		15.46	0.00	152.68	170,000	3,500	1,500	5,200	34,000	<500	--	--	
5/10/1999	--		16.52	0.00	151.62	84,000	3,200	3,200	3,700	20,000	75	--	--	
8/24/1999	--		20.73	0.00	147.41	130,000	9,100	9,200	4,700	27,000	<250	--	--	
11/3/1999	--		20.93	0.00	147.21	120,000	10,000	21,000	4,700	30,200	2,200	--	--	
3/1/2000	--		13.37	0.00	154.77	39,000	1,400	1,500	1,700	8,100	44	--	--	
4/21/2000	--		16.59	0.00	151.55	68,000	3,300	2,500	3,100	20,000	260	--	--	
7/31/2000	--		16.37	0.00	151.77	99,000	5,600	1,400	4,300	22,000	490	--	--	
11/20/2000	--		19.71	0.00	148.43	37,000	5,100	1,500	1,300	4,800	2,800	--	--	
2/18/2001	--		15.29	0.00	152.85	54,000	5,020	3,880	2,850	15,400	1,010	--	--	
6/7/2001	--		19.43	0.00	148.71	110,000	7,240	4,380	4,160	22,100	567	--	--	
9/5/2001	--		22.44	0.00	145.70	69,000	5,750	5,790	2,770	14,200	1,510	--	--	
11/30/2001	--		19.58	0.00	148.56	120,000	7,270	6,540	4,590	23,000	794	--	--	
2/20/2002	--		16.39	0.00	151.75	56,000	2,410	2,270	2,910	14,300	160	--	--	
6/20/2002	--		19.77	0.00	148.37	86,000	7,310	6,490	3,080	14,600	659	--	--	
9/11/2002	--		21.60	0.00	146.54	130,000	7,600	13,000	5,400	30,000	<5000	--	--	
11/12/2002	--		21.34	0.00	146.80	46,000	4,100	4,300	1,900	10,000	1,900	--	--	t
1/29/2003	--		16.80	0.00	151.34	77,000	4,700	2,600	2,800	13,000	820	--	--	n,t
5/22/2003	--		17.15	0.00	150.99	52,000	6,400	2,600	1,800	7,400	1,000	--	--	t
7/28/2003	--		21.47	0.00	146.67	31,000	6,900	5,500	2,200	12,000	1,700	--	--	p
11/18/2003	P		20.50	0.00	147.64	23,000	3,300	800	500	2,000	500	--	6.6	
02/23/2004	P		14.77	0.00	153.37	84,000	14,000	6,200	3,100	14,000	790	--	6.6	t
05/04/2004	P		20.09	0.00	148.05	120,000	15,000	17,000	4,900	24,000	780	--	6.6	t
08/04/2004	P		21.39	0.00	146.75	38,000	9,100	3,300	1,900	5,800	430	--	6.69	t
11/10/2004	P		18.98	0.00	149.16	22,000	4,400	2,000	940	3,600	310	--	7.5	
02/15/2005	P		15.62	0.00	152.52	67,000	11,000	4,200	3,000	11,000	690	--	7.1	t
05/16/2005	P		14.71	0.00	153.43	94,000	11,000	7,600	4,100	17,000	560	--	6.5	
08/17/2005	P		20.00	0.00	148.14	110,000	13,000	8,000	4,300	18,000	480	--	6.6	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-2 Cont.														
11/18/2005	P	168.14	20.89	0.00	147.25	37,000	11,000	2,400	1,500	4,600	340	--	6.6	
02/07/2006	P		13.31	0.00	154.83	74,000	8,900	5,800	3,600	14,000	440	--	6.7	
5/19/2006	P		16.30	0.00	151.84	78,000	11,000	3,700	4,500	14,000	430	--	6.6	t
8/23/2006	P		20.83	0.00	147.31	100,000	12,000	9,100	5,800	25,000	480	--	6.6	
11/15/2006	--		20.80	0.00	147.34	46,000	8,800	3,600	2,300	8,500	400	0.70	6.73	
2/14/2007	P		15.96	Sheen	152.18	100,000	13,000	3,600	6,200	26,000	810	1.43	6.97	t
5/22/2007	P		18.20	0.00	149.94	91,000	15,000	8,700	4,700	20,000	1,000	0.08	6.90	
8/15/2007	P		21.23	Sheen	146.91	14,000	7,300	130	280	600	260	4.24	6.78	
11/8/2007	P		20.32	0.00	147.82	22,000	7,400	420	640	1,700	240	1.21	7.03	
2/20/2008	--		15.20	0.06	152.99	--	--	--	--	--	--	--	--	b, j
5/7/2008	--		19.80	0.04	148.37	--	--	--	--	--	--	--	--	b, j
8/20/2008	--		21.70	0.01	146.45	--	--	--	--	--	--	--	--	b
11/17/2008	P		20.73	0.00	147.41	45,000	8,400	700	1,500	5,600	320	--	6.46	t, w
2/25/2009	P		14.15	0.00	153.99	18,000	5,200	<250	380	1,400	<250	2.11	6.50	
4/8/2009	--		17.00	0.00	151.14	--	--	--	--	--	--	--	--	
5/28/2009	P		18.43	Sheen	149.71	37,000	5,300	1,600	1,400	5,600	510	0.16	6.59	t, x
6/16/2009	--		19.80	0.01	148.35	--	--	--	--	--	--	--	--	
8/6/2009	--		21.17	0.01	146.98	--	--	--	--	--	--	--	--	b, j
3/4/2010	P		13.03	Sheen	155.11	18,000	9,500	270	510	1,400	350	1.28	6.80	
9/2/2010	NP		20.62	0.00	147.52	58,000	11,000	3,600	3,900	16,000	470	0.70	6.90	y
3/15/2011	P		13.70	Sheen	154.44	63,000	12,000	2,900	4,100	15,000	500	0.69	6.8	
8/17/2011	P		19.31	0.00	148.83	23,000	4,900	620	1,500	4,400	150	0.50	7.07	
2/6/2012	P		17.49	0.00	150.65	26,000	6,400	200	1,700	3,400	360	0.91	7.08	
MW-3														
7/9/1990	--	167.17	--	--	--	140	5.3	4.6	2	3.8	--	--	--	
12/21/1990	--		--	--	--	0.19	100	6	0.9	27	--	--	--	
3/7/1991	--		17.40	0.00	149.77	0.4	69	22	6.1	57	--	--	--	
4/1/1991	--		13.69	0.00	153.48	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	380	28	26	13	46	--	--	--	
9/27/1991	--		--	--	--	0.07	7.9	--	0.4	1.1	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-3 Cont.														
12/18/1991	--	167.17	--	--	--	0.26	34	24	0.8	28	--	--	--	
7/3/1992	--		19.59	0.00	147.58	71	9.4	0.9	5	13	--	--	--	
10/5/1992	--		21.22	0.00	145.95	<50	2.2	<0.5	1.5	2.8	--	--	--	c
10/5/1992	--		21.22	0.00	145.95	67	5.1	1.1	6.1	8.1	--	--	--	
1/13/1993	--		13.63	0.00	153.54	830	50	34	42	89	--	--	--	i
4/23/1993	--		15.02	0.00	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	c,i
4/23/1993	--		15.02	0.00	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
7/12/1993	--		19.16	0.00	148.01	250	12	4.2	12	16	<5.0	--	--	i
10/21/1993	--		21.81	0.00	145.36	65	7.4	1	6.9	4.2	--	--	--	c
10/21/1993	--		21.81	0.00	145.36	52	4.4	1.4	4.7	3.3	<5.0	--	--	i
1/21/1994	--		19.94	0.00	147.23	57	3	3.4	3.6	9	<5.0	--	--	i
4/20/1994	--		20.24	0.00	146.93	600	26	23	33	88	28.7	1.8	--	i
8/1/1994	--		20.74	0.00	146.43	120	7.7	1.6	5.9	6.7	5.43	--	--	c,i
8/1/1994	--		20.74	0.00	146.43	99	6.2	1.1	4.5	5.2	<5.0	1.4	--	i
12/23/1994	--		14.70	0.00	152.47	<50	<0.5	0.78	<0.5	<0.5	9.8	1.7	--	i
12/23/1994	--		14.70	0.00	152.47	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	c
1/26/1995	--		12.89	0.00	154.28	190	16	0.5	35	24	--	6.6	--	d
6/8/1995	--		19.95	0.00	147.22	330	21	4	34	32	--	7	--	
8/22/1995	--		21.41	0.00	145.76	150	14	<0.50	<0.50	1.6	<5.0	6.6	--	d
10/27/1995	--		22.43	0.00	144.74	--	--	--	--	--	--	--	--	
10/30/1995	--		--	--	--	51	2.4	<0.50	<0.50	<1.0	<5.0	6.9	--	
1/25/1996	--		14.03	0.00	153.14	<50	<0.50	<0.50	<0.50	<1.0	5.1	--	--	
4/19/1996	--		15.26	0.00	151.91	460	55	4	33	63	<10	9.4	--	
7/23/1996	--		19.19	0.00	147.98	<50	<0.5	<0.5	<0.5	<0.5	<10	9.2	--	
11/11/1996	--		20.24	0.00	146.93	<250	<2.5	<5.0	<5.0	<5.0	<50	8.4	--	
1/21/1997	--		13.09	0.00	154.08	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	
4/29/1997	--		18.14	0.00	149.03	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	--	
8/21/1997	--		19.64	0.00	147.53	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	
11/5/1997	--		19.95	0.00	147.22	<250	<2.5	<5.0	<5.0	<5.0	<50	4.5	--	
2/3/1998	--		10.57	0.00	156.60	<50	<0.50	<1.0	<1.0	<1.0	<10	4.7	--	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-3 Cont.														
5/28/1998	--	167.17	14.65	0.00	152.52	330	<2.5	<5.0	<5.0	<5.0	<50	4.2	--	
12/30/1998	--		16.63	0.00	150.54	--	--	--	--	--	--	--	--	
2/2/1999	--		13.12	0.00	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	
5/10/1999	--		14.21	0.00	152.96	--	--	--	--	--	--	--	--	
8/24/1999	--		14.36	0.00	152.81	--	--	--	--	--	--	--	--	
11/3/1999	--		19.21	0.00	147.96	--	--	--	--	--	--	--	--	
3/1/2000	--		15.17	0.00	152.00	<50	<0.5	0.57	<0.5	0.62	<0.5	--	--	
4/21/2000	--		14.88	0.00	152.29	--	--	--	--	--	--	--	--	
7/31/2000	--		15.29	0.00	151.88	--	--	--	--	--	--	--	--	
11/20/2000	--		17.31	0.00	149.86	--	--	--	--	--	--	--	--	
2/18/2001	--		12.85	0.00	154.32	160	1.95	1.31	10.2	9.09	1	--	--	
6/7/2001	--		18.00	0.00	149.17	--	--	--	--	--	--	--	--	
9/5/2001	--		20.32	0.00	146.85	--	--	--	--	--	--	--	--	
11/30/2001	--		16.94	0.00	150.23	--	--	--	--	--	--	--	--	
2/20/2002	--		14.84	0.00	152.33	86	<0.5	0.845	6.58	5.75	<0.5	--	--	
6/20/2002	--		18.40	0.00	148.77	--	--	--	--	--	--	--	--	
9/11/2002	--		20.06	0.00	147.11	--	--	--	--	--	--	--	--	
11/12/2002	--		19.84	0.00	147.33	--	--	--	--	--	--	--	--	
1/27/2003	--		14.83	0.00	152.34	850	20	9.7	24	45	0.76	--	--	n
5/22/2003	--		15.60	0.00	151.57	--	--	--	--	--	--	--	--	
7/28/2003	--		20.12	0.00	147.05	--	--	--	--	--	--	--	--	p
11/18/2003	--		19.15	0.00	148.02	--	--	--	--	--	--	--	--	
02/23/2004	--		13.53	0.00	153.64	160	<0.50	1.1	9.6	12	<0.50	--	6.7	
05/04/2004	--		18.61	0.00	148.56	--	--	--	--	--	--	--	--	
08/04/2004	--		19.21	0.00	147.96	--	--	--	--	--	--	--	--	
11/10/2004	--		17.48	0.00	149.69	--	--	--	--	--	--	--	--	
02/15/2005	P		14.31	0.00	152.86	500	7.8	1.8	9.2	9.6	1.7	--	7.5	
05/16/2005	--		13.11	0.00	154.06	--	--	--	--	--	--	--	--	
08/17/2005	--		18.53	0.00	148.64	--	--	--	--	--	--	--	--	
11/18/2005	--		19.34	0.00	147.83	--	--	--	--	--	--	--	--	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-3 Cont.														
02/07/2006	P	167.17	11.64	0.00	155.53	65	<0.50	<0.50	1.4	2.3	<0.50	--	7.1	
5/19/2006	--		14.88	0.00	152.29	--	--	--	--	--	--	--	--	
8/23/2006	--		19.43	0.00	147.74	--	--	--	--	--	--	--	--	
11/15/2006	--		19.22	0.00	147.95	--	--	--	--	--	--	--	--	
2/14/2007	P		13.80	0.00	153.37	200	1.1	<0.50	5.9	3.2	3.8	0.68	7.52	
5/22/2007	--		16.80	0.00	150.37	--	--	--	--	--	--	--	--	
8/15/2007	--		19.87	0.00	147.30	--	--	--	--	--	--	--	--	
11/8/2007	--		19.27	0.00	147.90	--	--	--	--	--	--	--	--	
2/20/2008	P		13.58	0.00	153.59	240	1.1	<0.50	0.99	0.79	2.3	2.58	7.06	
5/7/2008	--		18.32	0.00	148.85	--	--	--	--	--	--	--	--	
8/20/2008	--		20.29	0.00	146.88	--	--	--	--	--	--	--	--	
11/17/2008	--		19.35	0.00	147.82	--	--	--	--	--	--	--	--	
2/25/2009	P		11.77	0.00	155.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.45	7.09	
5/28/2009	--		17.02	0.00	150.15	--	--	--	--	--	--	--	--	
8/6/2009	--		19.87	0.00	147.30	--	--	--	--	--	--	--	--	
3/4/2010	P		10.79	0.00	156.38	<50	<0.50	<0.50	<0.50	<1.0	<0.50	3.16	7.06	
9/2/2010	--		19.32	0.00	147.85	--	--	--	--	--	--	--	--	
3/15/2011	P		11.77	0.00	155.40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	3.14	7.2	
8/17/2011	--		17.98	0.00	149.19	--	--	--	--	--	--	--	--	
2/6/2012	--		15.92	0.00	151.25	--	--	--	--	--	--	--	--	
MW-4														
7/9/1990	--	170.36	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	--	--	--	--	--	--	0.8	--	--	--	
3/7/1991	--		20.72	0.00	149.64	--	2.2	3.8	1.5	2.8	--	--	--	
4/1/1991	--		17.49	0.00	152.87	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	--	6.3	1.8	0.4	1	--	--	--	
9/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--		--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--		22.16	0.00	148.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/5/1992	--		23.38	0.00	146.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-4 Cont.														
1/13/1993	--	170.36	17.58	0.00	152.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
4/23/1993	--		15.72	0.00	154.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
7/12/1993	--		21.74	0.00	148.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
10/21/1993	--		23.84	0.00	146.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
1/21/1994	--		22.42	0.00	147.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
4/20/1994	--		22.66	0.00	147.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.2	--	i
8/1/1994	--		23.01	0.00	147.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.9	--	i
12/23/1994	--		17.03	0.00	153.33	--	--	--	--	--	--	--	--	
1/26/1995	--		17.42	0.00	152.94	<50	<0.5	<0.5	<0.5	<1	--	7.5	--	
6/8/1995	--		21.55	0.00	148.81	--	--	--	--	--	--	--	--	
8/22/1995	--		23.47	0.00	146.89	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	d
10/27/1995	--		24.50	0.00	145.86	--	--	--	--	--	--	--	--	
1/25/1996	--		18.74	0.00	151.62	<50	<0.50	<0.50	<0.50	<1.0	58	--	--	
4/19/1996	--		18.63	0.00	151.73	--	--	--	--	--	--	--	--	
7/23/1996	--		22.56	0.00	147.80	--	--	--	--	--	--	--	--	
11/11/1996	--		23.63	0.00	146.73	<50	<1.0	<1.0	<1.0	<1.0	34	8.2	--	
1/21/1997	--		16.59	0.00	153.77	--	--	--	--	--	--	--	--	
4/29/1997	--		21.43	0.00	148.93	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	--	
8/21/1997	--		22.91	0.00	147.45	--	--	--	--	--	--	--	--	
11/5/1997	--		22.34	0.00	148.02	60	<0.5	<1.0	<1.0	<1.0	76	4.9	--	
2/3/1998	--		12.26	0.00	158.10	--	--	--	--	--	--	--	--	
5/28/1998	--		18.50	0.00	151.86	70	<0.5	<1.0	<1.0	<1.0	160	4.2	--	
12/30/1998	--		19.69	0.00	150.67	--	--	--	--	--	--	--	--	
2/2/1999	--		18.26	0.00	152.10	70	<1.0	<1.0	<1.0	<1.0	130	--	--	
5/10/1999	--		17.86	0.00	152.50	--	--	--	--	--	--	--	--	
8/24/1999	--		17.93	0.00	152.43	--	--	--	--	--	--	--	--	
11/3/1999	--		22.78	0.00	147.58	--	--	--	--	--	--	--	--	
3/1/2000	--		18.04	0.00	152.32	<50	<0.5	0.67	<0.5	0.7	110	--	--	
4/21/2000	--		17.36	0.00	153.00	--	--	--	--	--	--	--	--	
7/31/2000	--		17.83	0.00	152.53	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-4 Cont.														
11/20/2000	--	170.36	18.91	0.00	151.45	--	--	--	--	--	--	--	--	
2/18/2001	--		17.72	0.00	152.64	88	<0.5	<0.5	<0.5	<0.5	97.3	--	--	
6/7/2001	--		20.23	0.00	150.13	--	--	--	--	--	--	--	--	
9/5/2001	--		22.76	0.00	147.60	--	--	--	--	--	--	--	--	
11/30/2001	--		21.30	0.00	149.06	--	--	--	--	--	--	--	--	
2/20/2002	--		19.32	0.00	151.04	76	<0.5	<0.5	<0.5	<1.0	81	--	--	
6/20/2002	--		20.71	0.00	149.65	--	--	--	--	--	--	--	--	
9/11/2002	--		22.22	0.00	148.14	--	--	--	--	--	--	--	--	
11/12/2002	--		22.22	0.00	148.14	--	--	--	--	--	--	--	--	
1/29/2003	--		19.80	0.00	150.56	100	<0.5	<0.5	<0.5	<0.5	66	--	--	n
5/22/2003	--		19.35	0.00	151.01	--	--	--	--	--	--	--	--	
7/28/2003	--		22.18	0.00	148.18	--	--	--	--	--	--	--	--	p
11/18/2003	--		21.65	0.00	148.71	--	--	--	--	--	--	--	--	
02/23/2004	P		17.53	0.00	152.83	75	<0.50	<0.50	<0.50	<0.50	65	--	6.8	
05/04/2004	--		20.62	0.00	149.74	--	--	--	--	--	--	--	--	
08/04/2004	--		21.30	0.00	149.06	--	--	--	--	--	--	--	--	
11/10/2004	--		20.65	0.00	149.71	--	--	--	--	--	--	--	--	
02/15/2005	P		18.91	0.00	151.45	<50	<0.50	<0.50	<0.50	<0.50	62	--	7.6	
05/16/2005	--		17.34	0.00	153.02	--	--	--	--	--	--	--	--	
08/17/2005	--		21.31	0.00	149.05	--	--	--	--	--	--	--	--	
11/18/2005	--		21.67	0.00	148.69	--	--	--	--	--	--	--	--	
02/07/2006	P		16.74	0.00	153.62	100	<0.50	<0.50	1.0	3.0	29	--	6.8	
5/19/2006	--		18.22	0.00	152.14	--	--	--	--	--	--	--	--	
8/23/2006	--		20.95	0.00	149.41	--	--	--	--	--	--	--	--	
11/15/2006	--		22.21	0.00	148.15	--	--	--	--	--	--	--	--	
2/14/2007	P		18.25	0.00	152.11	<50	<0.50	<0.50	<0.50	<0.50	61	0.95	7.34	
5/22/2007	--		20.16	0.00	150.20	--	--	--	--	--	--	--	--	
8/15/2007	--		22.34	0.00	148.02	--	--	--	--	--	--	--	--	
11/8/2007	--		21.86	0.00	148.50	--	--	--	--	--	--	--	--	
2/20/2008	P		17.74	0.00	152.62	<50	<0.50	<0.50	<0.50	<0.50	36	2.13	6.93	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-4 Cont.														
5/7/2008	--	170.36	21.38	0.00	148.98	--	--	--	--	--	--	--	--	
8/20/2008	--		22.44	0.00	147.92	--	--	--	--	--	--	--	--	
11/17/2008	--		22.20	0.00	148.16	--	--	--	--	--	--	--	--	
2/25/2009	P		16.81	0.00	153.55	<50	<0.50	<0.50	<0.50	<0.50	26	2.80	6.83	
5/28/2009	--		20.37	0.00	149.99	--	--	--	--	--	--	--	--	
8/6/2009	--		22.46	0.00	147.90	--	--	--	--	--	--	--	--	
3/4/2010	P		17.11	Sheen	153.25	<50	<0.50	<0.50	<0.50	<1.0	34	0.63	6.80	
9/2/2010	--		20.63	0.00	149.73	--	--	--	--	--	--	--	--	
3/15/2011	P		16.47	0.00	153.89	<50	<0.50	<0.50	<0.50	<1.0	26	1.05	6.9	
8/17/2011	--		20.94	0.00	149.42	--	--	--	--	--	--	--	--	
2/6/2012	P		19.65	0.00	150.71	<50	<0.50	<0.50	<0.50	<1.0	32	1.06	7.28	
MW-5														
7/9/1990	--	165.14	--	--	--	280	200	210	46	290	--	--	--	
12/21/1990	--		--	--	--	0.69	300	34	8.4	39	--	--	--	
3/7/1991	--		16.60	0.00	148.54	--	17	0.9	0.7	1.6	--	--	--	
4/1/1991	--		11.99	0.00	153.15	800	250	54	11	60	--	--	--	
6/27/1991	--		--	--	--	330	120	10	12	8	--	--	--	
9/27/1991	--		--	--	--	0.73	230	16	20	22	--	--	--	
12/18/1991	--		--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--		18.65	0.00	146.49	150	36	<0.5	<0.5	1.1	--	--	--	
10/5/1992	--		20.32	0.00	144.82	270	79	4	1.7	2.9	--	--	--	
1/13/1993	--		13.03	0.00	152.11	180	59	6	1.8	7.6	--	--	--	i
4/23/1993	--		13.51	0.00	151.63	8,700	440	96	35	136	--	--	--	i
7/12/1993	--		18.06	0.00	147.08	250	57	2.9	2.1	6	<5.0	--	--	i
10/21/1993	--		20.41	0.00	144.73	210	82	1.5	<0.5	1.4	--	--	--	i
1/21/1994	--		18.86	0.00	146.28	110	36	1.2	<0.5	0.7	<5.0	--	--	i
4/20/1994	--		17.30	0.00	147.84	690	230	4.5	1.6	11	21.2	1.3	--	i
8/1/1994	--		17.53	0.00	147.61	170	44	1.6	0.9	2.7	<5.0	0.9	--	i
12/23/1994	--		11.63	0.00	153.51	630	180	1.9	0.66	1.9	7.81	1.4	--	i
1/26/1995	--		11.25	0.00	153.89	160	68	<0.5	<0.5	22	--	5.9	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-5 Cont.														
6/8/1995	--	165.14	16.80	0.00	148.34	1,700	560	51	55	170	--	--	--	c
6/8/1995	--		16.80	0.00	148.34	2,000	630	58	61	180	--	6.5	--	
8/22/1995	--		19.02	0.00	146.12	3,700	1,100	18	27	59	<130	7.3	--	d
10/27/1995	--		20.94	0.00	144.20	--	--	--	--	--	--	--	--	
10/30/1995	--		--	--	--	6,500	2,200	55	180	270	<250	7.5	--	
1/25/1996	--		13.30	0.00	151.84	540	37	0.66	<0.50	<1.0	<5.0	--	--	c
1/25/1996	--		13.30	0.00	151.84	590	37	0.7	<0.50	<1.0	<5.0	--	--	
4/19/1996	--		13.63	0.00	151.51	1,500	470	38	49	210	<50	8.1	--	
7/23/1996	--		17.61	0.00	147.53	140	4.6	<0.5	<0.5	<0.5	<10	8	--	
11/11/1996	--		18.70	0.00	146.44	140	40	<1.0	<1.0	<1.0	<10	7.9	--	
1/21/1997	--		11.63	0.00	153.51	730	300	<5.0	7.8	26	<50	5	--	
4/29/1997	--		16.74	0.00	148.40	340	530	<5.0	<5.0	<5.0	<50	4.8	--	
8/21/1997	--		18.26	0.00	146.88	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	
11/5/1997	--		18.84	0.00	146.30	120	13	<1.0	<1.0	<1.0	<10	4.4	--	
2/3/1998	--		9.49	0.00	155.65	<50	<0.50	<1.0	<1.0	<1.0	<10	4.3	--	
5/28/1998	--		13.57	0.00	151.57	4,900	1,500	34	180	311	<10	4.1	--	
12/30/1998	--		14.65	0.00	150.49	--	--	--	--	--	--	--	--	
2/2/1999	--		12.56	0.00	152.58	100	<1.0	<1.0	<1.0	<1.0	9.1	--	--	
5/10/1999	--		13.36	0.00	151.78	--	--	--	--	--	--	--	--	
8/24/1999	--		13.50	0.00	151.64	--	--	--	--	--	--	--	--	
11/3/1999	--		18.48	0.00	146.66	--	--	--	--	--	--	--	--	
3/1/2000	--		9.59	0.00	155.55	<50	<0.5	0.58	<0.5	0.54	2.9	--	--	
4/21/2000	--		13.52	0.00	151.62	--	--	--	--	--	--	--	--	
7/31/2000	--		14.04	0.00	151.10	--	--	--	--	--	--	--	--	
11/20/2000	--		15.89	0.00	149.25	--	--	--	--	--	--	--	--	
2/18/2001	--		11.88	0.00	153.26	560	161	2.38	6.11	13	5.67	--	--	
6/7/2001	--		15.30	0.00	149.84	--	--	--	--	--	--	--	--	
9/5/2001	--		19.32	0.00	145.82	--	--	--	--	--	--	--	--	
11/30/2001	--		17.44	0.00	147.70	--	--	--	--	--	--	--	--	
2/20/2002	--		13.88	0.00	151.26	4,200	940	18.7	98.2	176	55.6	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-5 Cont.														
6/20/2002	--	165.14	16.20	0.00	148.94	--	--	--	--	--	--	--	--	
9/11/2002	--		19.15	0.00	145.99	--	--	--	--	--	--	--	--	
11/12/2002	--		19.01	0.00	146.13	390	55	0.89	3.4	3.5	210	--	--	
1/29/2003	--		16.33	0.00	148.81	7,900	1,400	34	220	350	82	--	--	n
5/22/2003	--		14.35	0.00	150.79	9,900	2,300	91	400	690	<50	--	--	
7/28/2003	--		18.90	0.00	146.24	3,200	690	14	81	100	120	--	--	p
11/18/2003	--		--	--	--	--	--	--	--	--	--	--	--	Well inaccessible e, q
02/23/2004	P		12.21	0.00	152.93	7,500	1,500	100	190	350	100	--	6.7	
05/04/2004	P		17.12	0.00	148.02	5,900	1,500	57	200	280	42	--	6.6	
08/04/2004	P		19.05	0.00	146.09	<2,500	<25	<25	<25	<25	390	--	6.69	
11/10/2004	P		16.95	0.00	148.19	870	80	<5.0	<5.0	<5.0	530	--	7.5	
02/15/2005	P		12.75	0.00	152.39	1,600	330	8.0	37	67	260	--	7.2	
05/16/2005	P		15.46	0.00	149.68	<500	<5.0	<5.0	<5.0	<5.0	370	--	6.7	
08/17/2005	P		17.00	0.00	148.14	7,000	1,000	17	110	130	51	--	6.6	
11/18/2005	P		18.33	0.00	146.81	1,900	91	<5.0	33	29	340	--	7.3	
02/07/2006	P		10.27	0.00	154.87	2,100	590	9.6	86	110	200	--	6.7	
5/19/2006	P		13.08	0.00	152.06	3,200	720	9.7	150	170	44	--	6.8	
8/23/2006	P		17.02	0.00	148.12	1,400	69	<5.0	20	24	230	--	7.11	
11/15/2006	P		18.30	0.00	146.84	1,100	24	<2.5	10	8.6	490	0.85	6.82	
2/14/2007	P		13.16	0.00	151.98	680	110	<2.5	16	11	420	2.54	7.24	
5/22/2007	P		15.42	0.00	149.72	2,800	660	8.8	74	100	26	1.41	7.03	
8/15/2007	P		18.80	0.00	146.34	2,800	50	<10	26	29	280	3.81	7.14	
11/8/2007	P		18.55	Sheen	146.59	3,800	77	<2.5	46	35	270	1.08	7.23	t
2/20/2008	P		12.21	0.00	152.93	2,500	530	<5.0	75	62	43	2.01	6.84	
5/7/2008	P		16.91	0.00	148.23	6,700	1,800	29	270	360	30	2.45	6.87	t
8/20/2008	P		19.45	0.00	145.69	300	22	<2.0	8.5	5.3	260	5.57	6.86	
11/17/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P		11.12	0.00	154.02	140	6.4	<0.50	2.4	3.1	68	4.38	6.65	
5/28/2009	P		15.70	0.00	149.44	3,800	790	9.5	140	110	11	0.04	6.82	x
8/6/2009	P		18.84	Sheen	146.30	78	<5.0	<5.0	<5.0	<5.0	190	0.06	7.27	x

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-5 Cont.														
3/4/2010	P	165.14	10.02	0.00	155.12	1,200	420	5.5	69	58	15	0.66	6.87	
9/2/2010	NP		16.24	0.00	148.90	200	69	1.3	3.2	7.3	13	0.75	6.75	y
3/15/2011	P		11.36	0.00	153.78	1,700	410	7.9	88	80	5.9	0.85	6.8	
8/17/2011	P		16.62	0.00	148.52	1,900	460	7.6	44	51	<5.0	0.61	7.11	
2/6/2012	P		14.36	0.00	150.78	580	140	<5.0	9.2	<10	9.8	1.31	7.21	
MW-6														
7/9/1990	--	165.40	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	--	--	0.17	2.6	7	4.9	26	--	--	--	
3/7/1991	--		--	--	--	--	--	--	--	--	--	--	--	e
4/1/1991	--		11.79	0.00	153.61	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	e
9/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	e
12/18/1991	--		--	--	--	--	1.3	22	--	2.7	--	--	--	
7/3/1992	--		17.77	0.00	147.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/5/1992	--		19.46	0.00	145.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
1/13/1993	--		11.34	0.00	154.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
4/23/1993	--		12.92	0.00	152.48	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
7/12/1993	--		17.36	0.00	148.04	<50	<0.5	<0.5	<0.5	0.7	<5.0	--	--	i
10/21/1993	--		19.98	0.00	145.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
1/21/1994	--		18.10	0.00	147.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
4/20/1994	--		18.68	0.00	146.72	<50	<0.5	<0.5	<0.5	<0.5	17.4	2	--	i
8/1/1994	--		18.90	0.00	146.50	<50	<0.5	<0.5	<0.5	<0.5	8.66	1.5	--	i
12/23/1994	--		12.94	0.00	152.46	--	--	--	--	--	--	--	--	
1/26/1995	--		10.46	0.00	154.94	<50	<0.5	<0.5	<0.5	<1	--	7.3	--	
6/8/1995	--		16.84	0.00	148.56	--	--	--	--	--	--	--	--	
8/22/1995	--		19.48	0.00	145.92	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.7	--	d
10/27/1995	--		20.39	0.00	145.01	--	--	--	--	--	--	--	--	
1/25/1996	--		12.24	0.00	153.16	<50	<0.50	<0.50	<0.50	<1.0	9.9	--	--	
4/19/1996	--		13.90	0.00	151.50	--	--	--	--	--	--	--	--	
7/23/1996	--		17.83	0.00	147.57	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-6 Cont.														
11/11/1996	--	165.40	18.90	0.00	146.50	<50	<0.5	<1.0	<1.0	<1.0	<10	7.7	--	
1/21/1997	--		11.97	0.00	153.43	--	--	--	--	--	--	--	--	
4/29/1997	--		17.04	0.00	148.36	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	--	
8/21/1997	--		18.58	0.00	146.82	--	--	--	--	--	--	--	--	
11/5/1997	--		19.17	0.00	146.23	70	<0.5	<1.0	<1.0	<1.0	85	4.3	--	
2/3/1998	--		9.87	0.00	155.53	--	--	--	--	--	--	--	--	
5/28/1998	--		13.38	0.00	152.02	<50	<0.5	<1.0	<1.0	<1.0	<10	3.7	--	
12/30/1998	--		14.45	0.00	150.95	--	--	--	--	--	--	--	--	
2/2/1999	--		18.29	0.00	147.11	--	--	--	--	--	--	--	--	
5/10/1999	--		17.49	0.00	147.91	--	--	--	--	--	--	--	--	
8/24/1999	--		17.61	0.00	147.79	--	--	--	--	--	--	--	--	
11/3/1999	--		16.26	0.00	149.14	--	--	--	--	--	--	--	--	
3/1/2000	--		17.43	0.00	147.97	--	--	--	--	--	--	--	--	
4/21/2000	--		13.32	0.00	152.08	--	--	--	--	--	--	--	--	
7/31/2000	--		13.46	0.00	151.94	--	--	--	--	--	--	--	--	
11/20/2000	--		14.78	0.00	150.62	--	--	--	--	--	--	--	--	
2/18/2001	--		11.33	0.00	154.07	--	--	--	--	--	--	--	--	
6/7/2001	--		16.36	0.00	149.04	--	--	--	--	--	--	--	--	
9/5/2001	--		18.61	0.00	146.79	--	--	--	--	--	--	--	--	
11/30/2001	--		15.20	0.00	150.20	--	--	--	--	--	--	--	--	
2/20/2002	--		12.74	0.00	152.66	--	--	--	--	--	--	--	--	
6/20/2002	--		16.68	0.00	148.72	--	--	--	--	--	--	--	--	
9/11/2002	--		18.38	0.00	147.02	--	--	--	--	--	--	--	--	
11/12/2002	--		18.78	0.00	146.62	--	--	--	--	--	--	--	--	
1/29/2003	--		14.45	0.00	150.95	--	--	--	--	--	--	--	--	n
5/22/2003	--		14.36	0.00	151.04	--	--	--	--	--	--	--	--	
7/28/2003	--		18.43	0.00	146.97	--	--	--	--	--	--	--	--	p
11/18/2003	--		17.48	0.00	147.92	--	--	--	--	--	--	--	--	
02/23/2004	--		11.54	0.00	153.86	--	--	--	--	--	--	--	--	
05/04/2004	--		16.58	0.00	148.82	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-6 Cont.														
08/04/2004	--	165.40	18.12	0.00	147.28	--	--	--	--	--	--	--	--	
11/10/2004	--		15.75	0.00	149.65	--	--	--	--	--	--	--	--	
02/15/2005	--		12.50	0.00	152.90	--	--	--	--	--	--	--	--	
05/16/2005	P		11.51	0.00	153.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.0	
08/17/2005	--		16.85	0.00	148.55	--	--	--	--	--	--	--	--	
11/18/2005	--		--	--	--	--	--	--	--	--	--	--	--	e
02/07/2006	P		9.93	0.00	155.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.1	
5/19/2006	--		--	--	--	--	--	--	--	--	--	--	--	e
8/23/2006	--		16.35	0.00	149.05	--	--	--	--	--	--	--	--	
11/15/2006	--		17.42	0.00	147.98	--	--	--	--	--	--	--	--	
2/14/2007	P		12.03	0.00	153.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.07	7.73	
5/22/2007	--		15.11	0.00	150.29	--	--	--	--	--	--	--	--	
8/15/2007	--		18.08	0.00	147.32	--	--	--	--	--	--	--	--	
11/8/2007	--		17.79	0.00	147.61	--	--	--	--	--	--	--	--	
2/20/2008	P		11.81	0.00	153.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.29	7.10	
5/7/2008	--		16.75	0.00	148.65	--	--	--	--	--	--	--	--	
8/20/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
11/17/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P		9.99	0.00	155.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.39	7.09	
5/28/2009	--		--	--	--	--	--	--	--	--	--	--	--	e
8/6/2009	--		18.33	0.00	147.07	--	--	--	--	--	--	--	--	
3/4/2010	P		9.11	0.00	156.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.88	7.01	
9/2/2010	--		17.80	0.00	147.60	--	--	--	--	--	--	--	--	
3/15/2011	P		10.08	0.00	155.32	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.43	7.1	
8/17/2011	--		16.50	0.00	148.90	--	--	--	--	--	--	--	--	
2/6/2012	--		14.44	0.00	150.96	--	--	--	--	--	--	--	--	
MW-7														
7/9/1990	--	167.61	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--		19.04	0.00	148.57	--	--	0.4	0.3	2.4	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-7 Cont.														
4/1/1991	--	167.61	15.18	0.00	152.43	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	70	17	4	0.8	2.2	--	--	--	
9/27/1991	--		--	--	--	--	0.4	--	--	0.4	--	--	--	
12/18/1991	--		--	--	--	--	0.7	2.9	0.8	3.3	--	--	--	
7/3/1992	--		20.28	0.00	147.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/5/1992	--		21.56	0.00	146.05	<50	<0.5	<0.5	<0.5	1.5	--	--	--	
1/13/1993	--		15.41	0.00	152.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
4/23/1993	--		15.84	0.00	151.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
7/12/1993	--		19.84	0.00	147.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
10/21/1993	--		21.61	0.00	146.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
1/21/1994	--		20.49	0.00	147.12	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	c
1/21/1994	--		20.49	0.00	147.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i
4/20/1994	--		20.54	0.00	147.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.5	--	i
8/1/1994	--		20.99	0.00	146.62	<50	0.7	<0.5	<0.5	<0.5	<5.0	1.9	--	i
12/23/1994	--		15.00	0.00	152.61	--	--	--	--	--	--	--	--	
1/26/1995	--		14.69	0.00	152.92	<50	<0.5	<0.5	<0.5	<1	--	7	--	
6/8/1995	--		19.87	0.00	147.74	--	--	--	--	--	--	--	--	
8/22/1995	--		21.49	0.00	146.12	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	d
10/27/1995	--		22.53	0.00	145.08	--	--	--	--	--	--	--	--	
1/25/1996	--		17.21	0.00	150.40	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	
4/19/1996	--		17.09	0.00	150.52	--	--	--	--	--	--	--	--	
7/23/1996	--		21.02	0.00	146.59	--	--	--	--	--	--	--	--	
11/11/1996	--		22.03	0.00	145.58	<50	<0.5	<1.0	<1.0	<1.0	<10	7.8	--	
1/21/1997	--		15.06	0.00	152.55	--	--	--	--	--	--	--	--	
4/29/1997	--		20.11	0.00	147.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	
8/21/1997	--		21.59	0.00	146.02	--	--	--	--	--	--	--	--	
11/5/1997	--		20.05	0.00	147.56	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	
2/3/1998	--		9.97	0.00	157.64	--	--	--	--	--	--	--	--	
5/28/1998	--		13.52	0.00	154.09	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	--	
12/30/1998	--		18.33	0.00	149.28	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-7 Cont.														
2/2/1999	--	167.61	12.33	0.00	155.28	--	--	--	--	--	--	--	--	
5/10/1999	--		13.52	0.00	154.09	--	--	--	--	--	--	--	--	
8/24/1999	--		14.01	0.00	153.60	--	--	--	--	--	--	--	--	
11/3/1999	--		19.91	0.00	147.70	--	--	--	--	--	--	--	--	
3/1/2000	--		19.89	0.00	147.72	--	--	--	--	--	--	--	--	
4/21/2000	--		17.94	0.00	149.67	--	--	--	--	--	--	--	--	
7/31/2000	--		17.33	0.00	150.28	--	--	--	--	--	--	--	--	
11/20/2000	--		18.41	0.00	149.20	--	--	--	--	--	--	--	--	
2/18/2001	--		15.13	0.00	152.48	--	--	--	--	--	--	--	--	
6/7/2001	--		18.75	0.00	148.86	--	--	--	--	--	--	--	--	
9/5/2001	--		20.48	0.00	147.13	--	--	--	--	--	--	--	--	
11/30/2001	--		20.11	0.00	147.50	--	--	--	--	--	--	--	--	
2/20/2002	--		18.40	0.00	149.21	--	--	--	--	--	--	--	--	
6/20/2002	--		18.62	0.00	148.99	--	--	--	--	--	--	--	--	
9/11/2002	--		20.05	0.00	147.56	--	--	--	--	--	--	--	--	
11/12/2002	--		21.13	0.00	146.48	--	--	--	--	--	--	--	--	n
1/29/2003	--		19.10	0.00	148.51	--	--	--	--	--	--	--	--	
5/22/2003	--		18.83	0.00	148.78	--	--	--	--	--	--	--	--	
7/28/2003	--		19.88	0.00	147.73	--	--	--	--	--	--	--	--	p
11/18/2003	--	168.08	20.50	0.00	147.58	--	--	--	--	--	--	--	--	s
11/18/2003	--		20.50	0.00	147.58	--	--	--	--	--	--	--	--	
02/23/2004	--		15.92	0.00	152.16	--	--	--	--	--	--	--	--	
05/04/2004	--		18.86	0.00	149.22	--	--	--	--	--	--	--	--	
08/04/2004	--		19.10	0.00	148.98	--	--	--	--	--	--	--	--	
11/10/2004	--		20.25	0.00	147.83	--	--	--	--	--	--	--	--	
02/15/2005	--		16.37	0.00	151.71	--	--	--	--	--	--	--	--	
05/16/2005	--		--	--	--	--	--	--	--	--	--	--	--	e
08/17/2005	--		19.74	0.00	148.34	--	--	--	--	--	--	--	--	
11/18/2005	--		20.82	0.00	147.26	--	--	--	--	--	--	--	--	
02/07/2006	P		14.26	0.00	153.82	<500	<5.0	<5.0	<5.0	<5.0	270	--	7.3	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-7 Cont.														
5/19/2006	--	168.08	16.51	0.00	151.57	--	--	--	--	--	--	--	--	
8/23/2006	--		20.30	0.00	147.78	--	--	--	--	--	--	--	--	
11/15/2006	--		20.85	0.00	147.23	--	--	--	--	--	--	--	--	
2/14/2007	P		16.57	0.00	151.51	520	<5.0	<5.0	<5.0	<5.0	740	3.08	7.30	v
5/22/2007	--		18.40	0.00	149.68	--	--	--	--	--	--	--	--	
8/15/2007	--		20.85	0.00	147.23	--	--	--	--	--	--	--	--	
11/8/2007	--		20.41	0.00	147.67	--	--	--	--	--	--	--	--	
2/20/2008	P		15.90	0.00	152.18	<50	<0.50	<0.50	<0.50	<0.50	700	4.34	7.09	
5/7/2008	--		19.41	0.00	148.67	--	--	--	--	--	--	--	--	
8/20/2008	--		21.34	0.00	146.74	--	--	--	--	--	--	--	--	
11/17/2008	--		20.54	0.00	147.54	--	--	--	--	--	--	--	--	
2/25/2009	P		14.89	0.00	153.19	130	<20	<20	<20	<20	540	4.28	6.87	
5/28/2009	--		18.57	0.00	149.51	--	--	--	--	--	--	--	--	
8/6/2009	--		20.83	0.00	147.25	--	--	--	--	--	--	--	--	
3/4/2010	P		14.02	0.00	154.06	430	<0.50	<0.50	<0.50	<1.0	920	3.30	7.02	
9/2/2010	--		20.43	0.00	147.65	--	--	--	--	--	--	--	--	
3/15/2011	P		14.86	0.00	153.22	<1,000	<0.50	<0.50	<0.50	<1.0	990	4.05	7.0	
8/17/2011	--		19.01	0.00	149.07	--	--	--	--	--	--	--	--	
2/6/2012	P		18.20	0.00	149.88	<50	<0.50	<0.50	<0.50	<1.0	22	1.58	7.44	
MW-8														
3/7/1991	--	165.74	16.72	0.00	149.02	2.7	780	450	64	310	--	--	--	
4/1/1991	--		12.54	0.00	153.20	15,000	3,600	2,600	410	1,900	--	--	--	
6/27/1991	--		--	--	--	12,000	3,400	1,100	240	750	--	--	--	
9/27/1991	--		--	--	--	41	5,700	5,200	1,100	4,300	--	--	--	
12/18/1991	--		--	--	--	3.2	990	150	120	250	--	--	--	
7/3/1992	--		18.78	0.00	146.96	72,000	19,000	32,000	3,000	15,000	--	--	--	
10/5/1992	--		20.48	0.00	145.26	--	--	--	--	--	--	--	--	
1/13/1993	--		12.87	0.00	152.87	--	--	--	--	--	--	--	--	
4/23/1993	--		13.90	0.00	151.84	--	--	--	--	--	--	--	--	t
7/12/1993	--		18.30	0.00	147.44	--	--	--	--	--	--	--	--	t

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-8 Cont.														
10/21/1993	--	165.74	21.91	0.00	142.88	--	--	--	--	--	--	--	--	
10/2/93-12/9/98	--		--	0.12	--	--	--	--	--	--	--	--	--	
1/21/1994	--		19.12	0.00	146.62	--	--	--	--	--	--	--	--	
4/20/1994	--		19.28	0.00	146.46	26,000	1,700	4,100	960	4,000	632	1.1	--	i
8/1/1994	--		--	--	--	--	--	--	--	--	--	--	--	
12/23/1994	--		13.81	0.00	151.93	--	--	--	--	--	--	--	--	
1/26/1995	--		--	--	--	--	--	--	--	--	--	--	--	
6/8/1995	--		17.82	0.00	147.92	--	--	--	--	--	--	--	--	
8/22/1995	--		19.41	0.00	146.33	--	--	--	--	--	--	--	--	
10/27/1995	--		20.47	0.00	145.27	--	--	--	--	--	--	--	--	
1/25/1996	--		13.35	0.00	152.39	--	--	--	--	--	--	--	--	
4/19/1996	--		14.40	0.00	151.34	--	--	--	--	--	--	--	--	
7/23/1996	--		18.35	0.00	147.39	--	--	--	--	--	--	--	--	
11/11/1996	--		19.41	0.00	146.33	--	--	--	--	--	--	--	--	
1/21/1997	--		12.29	0.00	153.45	--	--	--	--	--	--	--	--	
4/29/1997	--		--	--	--	--	--	--	--	--	--	--	--	e
8/21/1997	--		19.61	0.00	146.13	240,000	1,100	9,300	4,100	31,100	<1000	5.2	--	
11/5/1997	--		19.45	0.00	146.29	57,000	790	2,700	2,300	15,200	<1000	5	--	
2/3/1998	--		9.33	0.00	156.41	--	--	--	--	--	--	--	--	
2/4/1998	--		--	--	--	94,000	570	1,500	2,100	15,200	<2500	5.5	--	
5/28/1998	--		--	--	--	--	--	--	--	--	--	--	--	e
12/30/1998	--		15.48	0.00	150.26	120,000	460	2,300	2,200	15,000	150	--	--	
2/2/1999	--		18.29	0.00	147.45	82,000	450	2,200	3,700	26,000	<500	--	--	
5/10/1999	--		15.62	0.00	150.12	28,000	740	1,800	1,100	5,800	<25	--	--	
8/24/1999	--		18.41	0.00	147.33	75,000	530	1,400	3,300	21,000	150	--	--	
11/3/1999	--		18.71	0.00	147.03	70,000	600	1,300	3,600	20,500	750	--	--	
3/1/2000	--		19.37	0.00	146.37	27,000	1,600	1,200	2,600	6,600	120	--	--	
4/21/2000	--		--	--	--	--	--	--	--	--	--	--	--	e
7/31/2000	--		--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--		17.42	0.00	148.32	1,300,000	1,400	1,700	20,000	16,000	5,700	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-8 Cont.														
2/18/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	e
6/7/2001	--		--	--	--	--	--	--	--	--	--	--	--	e
9/5/2001	--		21.45	0.04	144.25	--	--	--	--	--	--	--	--	j
11/30/2001	--		18.31	0.00	147.43	--	--	--	--	--	--	--	--	h
12/6/2001	--		--	--	--	--	--	--	--	--	--	--	--	e
2/20/2002	--		14.02	0.00	151.72	20,000	163	114	403	3,810	80.4	--	--	
6/20/2002	--		17.56	0.00	148.18	28,000	466	141	962	5,850	2,520	--	--	
9/11/2002	--		19.45	0.00	146.29	190,000	1,500	670	4,500	23,000	1,200	--	--	
11/12/2002	--		19.15	0.00	146.59	420	6.4	2.9	16	110	31	--	--	t
1/29/2003	--		15.02	0.00	150.72	200,000	810	<500	2,000	11,000	<500	--	--	n
5/22/2003	--		15.07	0.00	150.67	--	--	--	--	--	--	--	--	t
6/24/2003	--		17.95	0.00	147.79	43,000	860	300	2,100	9,600	46	--	--	
7/28/2003	--		19.45	0.00	146.29	62,000	690	230	1,800	15,000	2,100	--	--	
8/12/2003	--		19.40	<0.01	146.34	--	--	--	--	--	--	--	--	o,t
9/12/2003	--		19.34	0.00	146.40	--	--	--	--	--	--	--	--	o
10/3/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
11/18/2003	P		18.80	<0.01	146.94	8,800	500	37	530	930	1,700	--	--	o,p
12/31/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
2/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
02/23/2004	P		12.82	<0.01	152.92	32,000	840	360	1,000	7,100	110	--	6.6	t
3/18/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
4/13/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
05/04/2004	P		18.87	<0.01	146.87	42,000	570	230	1,700	8,400	2,000	--	7.0	t
6/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
08/04/2004	--		19.37	0.05	146.41	--	--	--	--	--	--	--	--	
09/22/2004	NP		19.60	0.00	146.14	--	--	--	--	--	--	--	--	
11/10/2004	P		16.58	0.00	149.16	11,000	790	61	1,000	830	74	--	7.3	t
02/15/2005	P		12.85	0.00	152.89	38,000	1,300	390	2,300	7,900	<50	--	7.2	
05/16/2005	P		12.22	0.00	153.52	31,000	1,000	360	2,500	7,500	<50	--	6.5	
08/17/2005	P		17.80	0.00	147.94	60,000	540	240	2,500	8,600	<50	--	6.7	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-8 Cont.														
11/18/2005	P	165.74	21.02	0.00	144.72	33,000	340	120	1,400	4,900	140	--	6.9	
02/07/2006	P		10.73	0.00	155.01	5,700	94	27	260	820	7.5	--	6.6	
5/19/2006	P		13.89	0.00	151.85	40,000	1,100	320	2,900	6,000	<25	--	6.6	t
8/23/2006	P		18.85	0.00	146.89	21,000	520	150	1,800	6,300	82	--	7.35	
11/15/2006	P		18.75	0.00	146.99	3,300	81	<25	130	430	110	0.81	6.91	
2/14/2007	P		13.45	Sheen	152.29	9,300	320	<25	360	710	82	1.89	7.13	t
5/22/2007	P		15.92	Sheen	149.82	17,000	370	51	760	1,600	11	1.05	6.99	t
8/15/2007	P		19.11	Sheen	146.63	17,000	170	44	1,000	2,700	28	3.93	7.08	
11/8/2007	P		18.46	Sheen	147.28	24,000	150	43	1,100	3,200	27	1.29	7.14	t
2/20/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
5/7/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
8/20/2008	--		19.66	0.01	146.09	--	--	--	--	--	--	--	--	b
11/17/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P		11.50	Sheen	154.24	3,400	160	11	88	65	35	2.18	6.98	t
4/8/2009	--		14.55	0.00	151.19	--	--	--	--	--	--	--	--	
5/28/2009	P		16.12	Sheen	149.62	8,300	410	54	660	800	<2.5	0.06	6.78	t, x
6/16/2009	--		17.63	0.00	148.11	--	--	--	--	--	--	--	--	
8/6/2009	--		--	--	--	--	--	--	--	--	--	--	--	e
3/4/2010	P		10.33	0.00	155.41	11,000	520	110	830	1,600	<5.0	0.82	6.72	
9/2/2010	P		18.52	0.00	147.22	6,900	180	24	280	480	<5.0	0.56	6.75	
3/15/2011	P		11.03	Sheen	154.71	14,000	470	150	1,400	3,000	<2.5	0.90	6.6	
8/17/2011	P		17.14	0.00	148.60	4,100	180	24	280	340	<5.0	0.61	7.08	
2/6/2012	P		15.07	0.00	150.67	5,100	140	18	210	220	<5.0	0.91	7.17	
MW-9														
3/7/1991	--	166.20	16.79	0.00	149.41	7.1	220	4	2.4	2,400	--	--	--	
4/1/1991	--		12.89	0.00	153.31	12,000	2,000	2,600	360	1,600	--	--	--	
6/27/1991	--		--	--	--	3,600	520	400	85	310	--	--	--	
9/27/1991	--		--	--	--	3.2	720	150	50	180	--	--	--	
12/18/1991	--		--	--	--	--	2.5	1.1	0.3	5.8	--	--	--	
7/3/1992	--		18.89	0.00	147.31	5,700	17,000	840	230	800	--	--	--	

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-9 Cont.														
10/5/1992	--	166.20	20.52	0.00	145.68	1,400	440	17	14	100	--	--	--	
1/13/1993	--		12.92	0.00	153.28	11,000	1,200	1,600	330	1,300	--	--	--	c,i
1/13/1993	--		12.92	0.00	153.28	11,000	1,200	1,700	340	1,400	--	--	--	i
4/23/1993	--		14.08	0.00	152.12	24,000	2,800	4,500	730	3,400	--	--	--	i
7/12/1993	--		18.44	0.00	147.76	10,000	1,200	900	310	1,200	--	--	--	c
7/12/1993	--		18.44	0.00	147.76	13,000	1,400	1,100	360	1,400	20.8	--	--	i
10/21/1993	--		21.81	0.00	143.50	--	--	--	--	--	--	--	--	
11/2/93-4/29/97	--		--	0.10	--	--	--	--	--	--	--	--	--	
1/21/1994	--		19.28	0.00	146.92	--	--	--	--	--	--	--	--	
4/20/1994	--		19.72	0.00	146.48	45,000	2,700	6,800	1,200	8,200	740	--	--	c,d
4/20/1994	--		19.72	0.00	146.48	43,000	2,800	6,800	1,300	7,900	768	1.7	--	i
8/1/1994	--		20.18	0.00	146.02	--	--	--	--	--	--	--	--	
12/23/1994	--		14.22	0.00	151.98	--	--	--	--	--	--	--	--	
1/26/1995	--		11.85	0.00	154.35	--	--	--	--	--	--	--	--	
6/8/1995	--		18.33	0.00	147.87	--	--	--	--	--	--	--	--	
8/22/1995	--		19.95	0.00	146.25	--	--	--	--	--	--	--	--	
10/27/1995	--		20.88	0.00	145.32	--	--	--	--	--	--	--	--	
1/25/1996	--		13.84	0.00	152.36	--	--	--	--	--	--	--	--	
4/19/1996	--		--	--	--	--	--	--	--	--	--	--	--	e
7/23/1996	--		18.84	0.00	147.36	--	--	--	--	--	--	--	--	
11/11/1996	--		19.91	0.00	146.29	--	--	--	--	--	--	--	--	
1/21/1997	--		12.93	0.00	153.27	--	--	--	--	--	--	--	--	
4/29/1997	--		18.03	0.10	148.17	--	--	--	--	--	--	--	--	t
4/30/1997	--		--	--	--	78,000	1,900	3,600	3,100	20,600	<5000	5.5	--	
8/21/1997	--		19.56	0.00	146.64	110,000	2,100	3,400	2,300	18,800	<500	5.1	--	
11/5/1997	--		20.59	0.01	145.60	59,000	1,400	1,700	2,200	17,000	<500	4.5	--	
2/3/1998	--		10.56	0.00	155.64	55,000	490	1,200	1,400	10,200	<1000	4.9	--	
5/28/1998	--		14.21	0.00	151.99	53,000	290	830	1,400	10,500	<500	--	--	c
5/28/1998	--		14.21	0.00	151.99	41,000	250	1,200	1,500	11,400	<250	3.8	--	
12/30/1998	--		15.61	0.00	150.59	83,000	860	1,300	2,400	21,000	180	--	--	

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-9 Cont.														
2/2/1999	--	166.20	12.33	0.00	153.87	75,000	530	960	1,900	17,000	<50	--	--	
5/10/1999	--		15.67	0.00	150.53	22,000	600	1,500	1,100	4,400	72	--	--	
8/24/1999	--		19.10	0.00	147.10	85,000	850	1,300	1,700	20,000	<250	--	--	
11/3/1999	--		19.58	0.00	146.62	72,000	700	780	1,900	19,000	<5.0	--	--	
3/1/2000	--		13.19	0.00	153.01	34,000	78	490	1,100	8,200	63	--	--	
4/21/2000	--		14.29	0.00	151.91	55,000	260	920	1,500	16,000	<5.0	--	--	
7/31/2000	--		15.01	0.00	151.19	1,200,000	1,500	6,300	15,000	120,000	1,600	--	--	
11/20/2000	--		18.23	0.00	147.97	320,000	3,500	19,000	5,000	40,000	3,900	--	--	
2/18/2001	--		13.14	0.00	153.06	32,000	290	417	1,180	10,400	121	--	--	
6/7/2001	--		17.41	0.00	148.79	96,000	421	704	2,330	17,300	223	--	--	
9/5/2001	--		20.56	0.00	145.64	39,000	445	323	1,240	8,940	310	--	--	
11/30/2001	--		17.42	0.00	148.78	60,000	310	586	1,890	14,200	285	--	--	
2/20/2002	--		13.87	0.00	152.33	14,000	64	122	897	2,650	293	--	--	
6/20/2002	--		18.22	0.00	147.98	29,000	307	168	1,100	5,670	208	--	--	
9/11/2002	--		20.27	0.00	145.93	230,000	1,400	680	3,600	23,000	<2500	--	--	
11/12/2002	--		19.40	0.00	146.80	840	5.8	3.6	28	160	21	--	--	t
1/29/2003	--		14.30	0.10	151.80	--	--	--	--	--	--	--	--	j,n
5/22/2003	--		15.16	0.00	151.04	23,000	260	<50	1,000	2,900	<50	--	--	t
6/24/2003	--		--	--	--	--	--	--	--	--	--	--	--	e
7/28/2003	--		19.55	<0.01	146.65	1,500,000	<500	<500	9,800	79,000	<500	--	--	
8/12/2003	--		19.60	<0.01	146.60	--	--	--	--	--	--	--	--	o,t
9/12/2003	--		19.60	<0.01	146.60	--	--	--	--	--	--	--	--	o,t
11/18/2003	P		18.98	<0.01	147.22	19,000	250	18	690	2,400	45	--	6.8	o,p
12/31/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
2/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
02/23/2004	P		13.91	<0.01	152.29	91,000	<250	440	2,200	13,000	<250	--	6.8	t
3/18/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
4/13/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
05/04/2004	P		18.11	<0.01	148.09	39,000	230	44	1,100	4,200	<25	--	6.9	t
6/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	

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Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-9 Cont.														
08/04/2004	--	166.20	18.90	0.03	147.32	--	--	--	--	--	--	--	--	
09/22/2004	NP		19.69	0.00	146.51	--	--	--	--	--	--	--	--	
11/10/2004	NP		16.95	0.00	149.25	31,000	300	<50	1,100	3,800	<50	--	7.3	t
02/15/2005	P		12.95	0.00	153.25	19,000	200	<50	720	2,000	<50	--	7.3	t
05/16/2005	P		12.53	0.00	153.67	17,000	99	15	770	2,500	<10	--	6.7	
08/17/2005	P		18.03	0.00	148.17	28,000	160	26	1,000	2,700	<12	--	6.8	
11/18/2005	P		19.04	0.00	147.16	12,000	98	<5.0	410	510	19	--	7.1	
02/07/2006	P		10.95	Sheen	155.25	18,000	110	8.7	770	1,500	<5.0	--	6.9	t
5/19/2006	--		--	--	--	--	--	--	--	--	--	--	--	e
8/23/2006	P		18.91	0.00	147.29	28,000	84	<50	1,600	6,200	<50	--	7.3	
11/15/2006	P		18.60	0.00	147.60	8,200	44	<25	190	370	26	0.92	6.88	
2/14/2007	P		13.30	0.00	152.90	20,000	64	<25	720	2,000	<25	0.87	7.17	t
5/22/2007	P		16.14	Sheen	150.06	16,000	80	<25	460	1,200	<25	0.81	7.08	t
8/15/2007	P		19.31	Sheen	146.89	5,900	27	<2.5	59	170	27	2.57	6.98	
11/8/2007	P		18.70	0.00	147.50	6,100	29	<5.0	98	250	52	1.24	7.47	
2/20/2008	--		12.79	0.03	153.43	--	--	--	--	--	--	--	--	b, j
5/7/2008	--		17.68	0.03	148.54	--	--	--	--	--	--	--	--	b, j
8/20/2008	--		19.75	0.01	146.46	--	--	--	--	--	--	--	--	b
11/17/2008	P		18.73	0.00	147.47	10,000	24	<2.5	160	140	33	--	6.64	w
2/25/2009	P		11.23	Sheen	154.97	14,000	60	<10	550	140	<10	2.27	6.69	t
4/8/2009	--		14.21	0.00	151.99	--	--	--	--	--	--	--	--	
5/28/2009	P		16.33	Sheen	149.87	15,000	49	<10	790	1,500	<10	0.07	6.83	t, x
6/16/2009	--		17.82	0.01	148.39	--	--	--	--	--	--	--	--	
8/6/2009	P		19.25	Sheen	146.95	6,800	19	<2.0	120	250	18	0.00	7.26	x
3/4/2010	P		10.32	0.00	155.88	6,000	29	<2.5	<2.5	100	<2.5	0.62	6.84	
9/2/2010	NP		18.72	0.00	147.48	5,700	31	<2.5	160	120	<2.5	0.46	6.85	
3/15/2011	P		11.08	0.00	155.12	6,500	17	<2.5	150	73	<2.5	1.07	6.8	
8/17/2011	--		17.35	0.00	148.85	5,200	9.5	<2.5	71	54	<2.5	0.64	7.18	
2/6/2012	P		15.52	0.00	150.68	4,200	14	<2.5	49	22	<2.5	1.43	7.21	
MW-10														

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-10 Cont.														
3/7/1991	--	167.01	18.09	0.00	148.92	1.6	120	190	32	230	--	--	--	
4/1/1991	--		13.92	0.00	153.09	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	12,000	7,300	500	150	300	--	--	--	
9/27/1991	--		--	--	--	57	12,000	7,200	1,400	4,600	--	--	--	
12/18/1991	--		--	--	--	5.3	2,500	120	36	79	--	--	--	
7/3/1992	--		19.92	0.00	147.09	8,600	5,100	1,300	180	690	--	--	--	
10/5/1992	--		21.92	0.00	145.09	--	--	--	--	--	--	--	--	
1/13/1993	--		14.43	0.00	152.58	--	--	--	--	--	--	--	--	
4/23/1993	--		15.26	0.00	151.75	--	--	--	--	--	--	--	--	
7/12/1993	--		19.78	0.00	147.23	--	--	--	--	--	--	--	--	
10/21/1993	--		22.90	0.00	144.11	--	--	--	--	--	--	--	--	
1/21/1994	--		20.25	0.00	146.76	--	--	--	--	--	--	--	--	
4/20/1994	--		20.74	0.00	146.27	100,000	12,000	24,000	2,400	14,000	1,577	1	--	d,i
8/1/1994	--		22.00	0.00	145.01	--	--	--	--	--	--	--	--	
12/23/1994	--		16.08	0.00	150.93	--	--	--	--	--	--	--	--	
1/26/1995	--		13.68	0.00	153.33	--	--	--	--	--	--	--	--	
6/8/1995	--		19.08	0.00	147.93	--	--	--	--	--	--	--	--	
8/22/1995	--		20.73	0.00	146.28	--	--	--	--	--	--	--	--	
10/27/1995	--		21.69	0.00	145.32	--	--	--	--	--	--	--	--	
1/25/1996	--		15.05	0.00	151.96	--	--	--	--	--	--	--	--	
4/19/1996	--		16.26	0.00	150.75	--	--	--	--	--	--	--	--	
7/23/1996	--		20.18	0.00	146.83	--	--	--	--	--	--	--	--	
9/4/1996	--		--	0.76	--	--	--	--	--	--	--	--	--	
11/11/1996	--		21.20	0.00	145.81	--	--	--	--	--	--	--	--	
1/21/1997	--		13.66	0.00	153.35	--	--	--	--	--	--	--	--	
4/29/1997	--		18.71	0.00	148.30	--	--	--	--	--	--	--	--	
4/30/1997	--		--	--	--	170,000	9,700	38,000	4,700	30,500	<5000	5.6	--	
8/21/1997	--		20.19	0.00	146.82	170,000	9,500	35,000	4,300	27,100	<5000	5.3	--	
11/5/1997	--		20.52	0.00	146.49	80,000	3,800	12,000	2,700	15,700	<500	4.4	--	
12/2/1997	--		--	0.03	--	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-10 Cont.														
2/3/1998	--	167.01	10.62	0.00	156.39	--	--	--	--	--	--	--	--	
2/4/1998	--		--	--	--	72,000	500	1,300	1,700	12,000	<1000	5.1	--	
5/28/1998	--		15.46	0.00	151.55	220,000	3,200	24,000	5,200	43,000	<1000	4.8	--	
12/30/1998	--		16.65	0.00	150.36	110,000	3,500	14,000	5,800	50,000	<50	--	--	
2/2/1999	--		14.58	0.00	152.43	74,000	1,000	2,800	1,000	26,000	860	--	--	
5/10/1999	--		15.72	0.00	151.29	81,000	2,800	2,800	3,000	17,000	220	--	--	
8/24/1999	--		19.85	0.00	147.16	54,000	3,500	3,800	1,500	9,100	<250	--	--	
11/3/1999	--		20.00	0.00	147.01	30,000	3,000	3,500	1,200	5,000	31	--	--	
3/1/2000	--		14.62	0.00	152.39	62,000	320	1,200	1,100	26,000	4,400	--	--	
4/21/2000	--		15.46	0.00	151.55	88,000	2,700	7,400	3,700	35,000	2,400	--	--	
7/31/2000	--		--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--		18.74	0.00	148.27	78,000	3,800	5,500	2,800	13,000	450	--	--	
2/18/2001	--		14.10	0.00	152.91	39,000	1,050	1,160	1,550	14,700	4,180	--	--	
6/7/2001	--		18.78	0.00	148.23	76,000	2,460	2,840	3,330	20,700	635	--	--	
9/5/2001	--		21.40	0.01	145.60	25,000	2,510	2,070	1,090	4,540	189	--	--	
11/30/2001	--		18.50	0.00	148.51	100,000	2,480	5,720	3,890	22,800	325	--	--	
2/20/2002	--		14.39	0.00	152.62	49,000	2,170	3,070	1,960	12,300	1,090	--	--	
6/20/2002	--		18.80	0.00	148.21	44,000	2,040	3,050	1,690	8,430	224	--	--	
9/11/2002	--		20.52	0.00	146.49	28,000	1,200	2,700	1,400	6,800	<250	--	--	
11/12/2002	--		20.37	0.07	146.57	--	--	--	--	--	--	--	--	j
1/29/2003	--		16.33	0.03	150.65	--	--	--	--	--	--	--	--	j,n
5/22/2003	--		16.32	0.00	150.69	13,000	2,100	850	630	1,600	300	--	--	t
6/24/2003	--		18.73	0.04	148.24	--	--	--	--	--	--	--	--	o
7/28/2003	--		20.39	0.04	146.58	--	--	--	--	--	--	--	--	j
8/12/2003	--		20.43	<0.01	146.58	--	--	--	--	--	--	--	--	o,t
9/12/2003	--		20.41	0.00	146.60	--	--	--	--	--	--	--	--	o
10/3/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
11/18/2003	P		19.55	<0.01	147.46	9,900	2,200	530	320	860	<50	--	6.8	o,p
12/31/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
2/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-10 Cont.														
02/23/2004	P	167.01	15.45	<0.01	151.56	46,000	1,900	2,000	1,800	9,000	180	--	6.7	t
3/18/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
4/13/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
05/04/2004	P		18.81	<0.01	148.20	35,000	3,100	3,600	1,400	5,600	<25	--	7.1	t
6/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
7/2/2004	--		--	<0.01	--	--	--	--	--	--	--	--	--	
08/04/2004	--		18.90	0.00	148.11	--	--	--	--	--	--	--	--	
09/22/2004	NP		20.60	0.00	146.41	--	--	--	--	--	--	--	--	
11/10/2004	P		17.95	0.00	149.06	9,800	470	91	450	1,700	230	--	7.3	t
01/13/2005	--		12.21	0.00	154.80	--	--	--	--	--	--	--	--	
02/15/2005	P		14.19	0.00	152.82	30,000	510	330	1,800	7,200	77	--	7.2	
05/16/2005	P		13.85	0.00	153.16	37,000	540	730	2,100	9,200	<50	--	6.7	
08/17/2005	P		19.01	0.00	148.00	15,000	1,100	420	1,200	4,100	<50	--	6.7	
11/18/2005	P		19.95	0.00	147.06	12,000	1,200	240	550	1,300	16	--	6.8	
02/07/2006	P		12.28	Sheen	154.73	22,000	340	580	1,300	4,500	73	--	6.8	t
5/19/2006	P		15.12	0.00	151.89	40,000	690	430	2,600	4,900	<25	--	6.9	t
8/23/2006	P		20.00	0.00	147.01	13,000	1,500	540	1,200	3,000	<10	--	6.97	
11/15/2006	P		19.84	0.00	147.17	3,800	700	22	67	160	54	0.65	6.78	
2/14/2007	P		14.94	Sheen	152.07	37,000	350	120	2,400	8,100	120	2.12	7.05	t
5/22/2007	P		17.17	Sheen	149.84	13,000	810	130	750	2,200	15	0.06	7.10	t
8/15/2007	P		20.30	Sheen	146.71	4,400	550	38	160	310	<10	3.09	7.09	
11/8/2007	P		19.58	Sheen	147.43	13,000	970	130	480	1,600	6.0	1.47	7.95	t
2/20/2008	--		14.27	0.05	152.78	--	--	--	--	--	--	--	--	b, j
5/7/2008	P		18.61	0.00	148.40	16,000	970	150	770	2,000	<20	2.18	6.98	t
8/20/2008	--		20.71	0.01	146.31	--	--	--	--	--	--	--	--	b
11/17/2008	P		19.71	0.00	147.30	10,000	960	57	270	720	23	--	6.54	t, w
2/25/2009	P		13.10	0.00	153.91	2,900	53	14	69	160	170	4.06	6.68	
4/8/2009	--		15.91	0.00	151.10	--	--	--	--	--	--	--	--	
5/28/2009	P		17.37	Sheen	149.64	15,000	640	280	790	2,500	65	0.03	6.69	t, x
6/16/2009	--		18.79	0.01	148.23	--	--	--	--	--	--	--	--	

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Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-10 Cont.														
8/6/2009	P	167.01	20.19	Sheen	146.82	23,000	850	490	1,200	4,100	<25	0.06	7.23	x
3/4/2010	P		12.32	Sheen	154.69	12,000	71	72	740	1,800	<2.5	0.56	6.81	
9/2/2010	--		19.63	0.02	147.40	--	--	--	--	--	--	--	--	b, j
3/15/2011	--		13.20	0.01	153.82	--	--	--	--	--	--	--	--	b, j
8/17/2011	P		18.27	0.00	148.74	4,000	780	39	250	290	<5.0	0.44	7.18	
2/6/2012	P		16.32	0.00	150.69	6,300	1,100	39	340	470	<5.0	0.71	7.21	
QC-2														
10/5/1992	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f
1/13/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f,i
4/23/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f,i
7/12/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f
10/21/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f
1/21/1994	--		--	--	--	<50	<0.5	2.1	<0.5	2.1	--	--	--	f
4/20/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f
12/23/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	f
1/26/1995	--		--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	f
6/8/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	f
8/22/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	d,f
10/30/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	f
1/25/1996	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	f
4/19/1996	--		--	--	--	<50	<0.5	<1	<1	<1	<10	--	--	f
RW-1														
7/9/1990	--	168.01	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--		--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--		17.62	0.00	150.39	--	--	--	--	--	--	--	--	t
4/1/1991	--		14.40	0.00	153.61	--	--	--	--	--	--	--	--	
6/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--		--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--		--	--	--	--	--	--	--	--	--	--	--	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
RW-1 Cont.														
7/3/1992	--	168.01	20.66	0.00	147.35	--	--	--	--	--	--	--	--	t
10/5/1992	--		23.34	0.00	144.67	--	--	--	--	--	--	--	--	
1/13/1993	--		16.59	0.00	151.42	--	--	--	--	--	--	--	--	
4/23/1993	--		16.17	0.00	151.84	--	--	--	--	--	--	--	--	
7/12/1993	--		20.18	0.00	147.83	--	--	--	--	--	--	--	--	
10/21/1993	--		25.70	0.00	142.31	--	--	--	--	--	--	--	--	
1/21/1994	--		21.24	0.00	146.77	--	--	--	--	--	--	--	--	
4/20/1994	--		32.20	0.00	135.81	--	--	--	--	--	--	--	--	
8/1/1994	--		21.70	0.00	146.31	29,000	580	950	300	7,800	1,200	1.1	--	d
12/23/1994	--		16.02	0.00	151.99	1,300	25	8.6	1.4	69	616	1.8	--	i
1/26/1995	--		13.78	0.00	154.23	<50	<0.5	<0.5	<0.5	<1	--	--	--	
1/26/1995	--		13.78	0.00	154.23	<50	<0.5	<0.5	<0.5	<1	--	--	--	c
6/8/1995	--		20.05	0.00	147.96	1,300	130	<1.0	<1.0	36	--	--	--	
8/22/1995	--		21.74	0.00	146.27	2,800	210	9.3	4.3	250	<25	--	--	c
8/22/1995	--		21.74	0.00	146.27	3,300	230	13	4.9	280	<25	6.6	--	d
10/27/1995	--		32.00	0.00	136.01	--	--	--	--	--	--	--	--	
10/30/1995	--		--	--	--	240	1.6	<1.0	<1.0	<2.0	630	--	--	c
10/30/1995	--		--	--	--	230	1.4	<1.0	<1.0	<2.0	650	6.9	--	
1/25/1996	--		15.41	0.00	152.60	15,000	3,400	930	330	2,500	5,300	--	--	
4/19/1996	--		16.83	0.00	151.18	35,000	5,500	3,300	1,700	9,400	14,000	7.6	--	
4/19/1996	--		16.83	0.00	151.18	33,000	5,600	3,200	1,700	8,800	15,000	--	--	c
7/23/1996	--		20.76	0.00	147.25	47,000	3,700	2,500	930	5,300	35,000	--	--	c
7/23/1996	--		20.76	0.00	147.25	46,000	3,600	2,300	900	5,100	36,000	7.4	--	
11/11/1996	--		21.73	0.00	146.28	31,000	2,900	1,000	860	4,600	22,000	--	--	c
11/11/1996	--		21.73	0.00	146.28	34,000	3,000	1,200	880	4,600	22,000	8.3	--	
1/21/1997	--		14.20	0.00	153.81	270	42	17	2.7	36	1,500	--	--	c
1/21/1997	--		14.20	0.00	153.81	260	40	16	2.7	34	1,500	6.1	--	
4/29/1997	--		19.15	0.00	148.86	32,000	3,100	590	1,300	6,000	46,000	5.3	--	
8/21/1997	--		20.67	0.00	147.34	7,600	730	58	370	1,780	9,500	4.7	--	
11/5/1997	--		21.01	0.00	147.00	39,000	2,300	86	1,300	3,840	56,000	4.5	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
RW-1 Cont.														
2/3/1998	--	168.01	10.68	0.00	157.33	3,400	31	11	29	161	3,200	5.1	--	
5/28/1998	--		15.55	0.00	152.46	2,000	90	15	60	305	2,700	4.3	--	
12/30/1998	--		17.35	0.00	150.66	--	--	--	--	--	--	--	--	
2/2/1999	--		14.58	0.00	153.43	82,000	2,300	120	2,000	3,200	51000/78000	--	--	g
5/10/1999	--		16.00	0.00	152.01	15,000	620	88	340	660	61,000	--	--	
8/24/1999	--		20.00	0.00	148.01	52,000	1,400	170	2,200	2,900	37,000	--	--	
11/3/1999	--		20.39	0.00	147.62	17,000	2,500	86	1,500	970	54,000	--	--	
3/1/2000	--		12.97	0.00	155.04	17,000	580	78	790	1,100	13,000	--	--	
4/21/2000	--		16.02	0.00	151.99	31,000	2,100	100	1,400	1,100	39,000	--	--	
7/31/2000	--		21.89	0.00	146.12	47,000	1,300	170	2,700	2,300	30,000	--	--	
11/20/2000	--		19.15	0.00	148.86	--	--	--	--	--	--	--	--	h
2/18/2001	--		15.35	0.00	152.66	14,000	589	89	600	712	13,000	--	--	
6/7/2001	--		19.09	0.00	148.92	28,000	1,140	68.2	504	530	19,100	--	--	
9/5/2001	--		22.06	0.02	145.93	--	--	--	--	--	--	--	--	j
11/30/2001	--		19.53	0.00	148.48	20,000	405	39.4	545	740	8,260	--	--	
2/20/2002	--		15.99	0.00	152.02	13,000	469	29	434	655	7,240	--	--	
6/20/2002	--		19.31	0.00	148.70	--	--	--	--	--	--	--	--	j,l
9/11/2002	--		21.07	0.03	146.91	--	--	--	--	--	--	--	--	j
11/12/2002	--		20.92	0.02	147.07	--	--	--	--	--	--	--	--	j
1/29/2003	--		16.31	0.04	151.66	--	--	--	--	--	--	--	--	j,n
5/22/2003	--		16.68	0.00	151.33	--	--	--	--	--	--	--	--	j,t
6/24/2003	--		19.76	0.07	148.18	--	--	--	--	--	--	--	--	o
7/28/2003	--		21.04	0.04	146.93	--	--	--	--	--	--	--	--	j
8/12/2003	--		21.41	<0.01	146.60	--	--	--	--	--	--	--	--	o,t
9/12/2003	--		21.10	0.07	146.84	--	--	--	--	--	--	--	--	o
10/3/2003	--		--	0.03	--	--	--	--	--	--	--	--	--	
11/18/2003	P		20.10	<0.01	147.91	12,000	770	<50	320	250	6,100	--	6.6	o,p
12/31/2003	--		--	<0.01	--	--	--	--	--	--	--	--	--	
02/23/2004	--		14.35	0.01	153.67	--	--	--	--	--	--	--	--	
3/18/2004	--		--	0.09	--	--	--	--	--	--	--	--	--	

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
RW-1 Cont.														
4/13/2004	--	168.01	--	0.02	--	--	--	--	--	--	--	--	--	
05/04/2004	--		19.58	0.02	148.45	--	--	--	--	--	--	--	--	
6/2/2004	--		--	0.05	--	--	--	--	--	--	--	--	--	
7/2/2004	--		--	0.11	--	--	--	--	--	--	--	--	--	
08/04/2004	--		22.05	0.05	146.00	--	--	--	--	--	--	--	--	
09/22/2004	NP		21.28	0.06	146.78	--	--	--	--	--	--	--	--	
10/26/2004	--		--	0.01	--	--	--	--	--	--	--	--	--	
11/10/2004	--		18.56	0.02	149.47	--	--	--	--	--	--	--	--	
12/27/2004	--		--	0.03	--	--	--	--	--	--	--	--	--	
01/13/2005	--		12.51	0.01	155.51	--	--	--	--	--	--	--	--	
02/15/2005	--		15.24	0.03	152.79	--	--	--	--	--	--	--	--	
03/07/2005	--		11.90	0.02	156.13	--	--	--	--	--	--	--	--	
4/29/2005	--		--	0.03	--	--	--	--	--	--	--	--	--	
05/16/2005	--		14.39	0.02	153.64	--	--	--	--	--	--	--	--	j
6/21/2005	--		--	0.03	--	--	--	--	--	--	--	--	--	
7/7/2005	--		--	0.06	--	--	--	--	--	--	--	--	--	
08/17/2005	--		19.91	0.03	148.12	--	--	--	--	--	--	--	--	j
9/6/2005	--		--	0.03	--	--	--	--	--	--	--	--	--	
10/4/2005	--		--	0.07	--	--	--	--	--	--	--	--	--	
11/18/2005	--		20.36	0.07	147.71	--	--	--	--	--	--	--	--	b, j
12/30/2005	--		--	0.04	--	--	--	--	--	--	--	--	--	
1/24/2006	--		--	0.01	--	--	--	--	--	--	--	--	--	
02/07/2006	--		12.87	0.01	155.15	--	--	--	--	--	--	--	--	j
3/30/2006	--		--	0.02	--	--	--	--	--	--	--	--	--	
5/19/2006	--		15.87	0.04	152.17	--	--	--	--	--	--	--	--	b
8/23/2006	--		20.50	0.07	147.56	--	--	--	--	--	--	--	--	b, j
11/15/2006	--		20.52	0.07	147.54	--	--	--	--	--	--	--	--	b, j
2/14/2007	--		15.44	0.04	152.60	--	--	--	--	--	--	--	--	b, j
5/22/2007	--		17.78	Sheen	150.23	--	--	--	--	--	--	--	--	j, l
8/15/2007	--		20.80	0.02	147.23	--	--	--	--	--	--	--	--	b, j

**Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
RW-1 Cont.														
11/8/2007	--	168.01	20.32	0.01	147.70	--	--	--	--	--	--	--	--	b, j
2/20/2008	--		14.55	0.02	153.48	--	--	--	--	--	--	--	--	b, j
5/7/2008	--		--	--	--	--	--	--	--	--	--	--	--	e
8/20/2008	--		21.34	0.02	146.69	--	--	--	--	--	--	--	--	b
11/17/2008	P		20.41	0.00	147.60	13,000	120	<20	590	320	120	--	6.47	w
2/25/2009	--		13.40	0.02	154.63	--	--	--	--	--	--	--	--	b
4/8/2009	--		16.45	0.00	151.56	--	--	--	--	--	--	--	--	
5/28/2009	--		17.88	0.01	150.14	--	--	--	--	--	--	--	--	b
6/16/2009	--		19.30	0.01	148.72	--	--	--	--	--	--	--	--	
8/6/2009	--		20.72	0.01	147.30	--	--	--	--	--	--	--	--	b, j
3/4/2010	P		12.33	Sheen	155.68	8,000	20	<2.5	230	140	110	1.24	6.77	
9/2/2010	NP		20.14	0.00	147.87	4,700	18	<2.5	78	46	<2.5	0.66	7.31	
3/15/2011	P		13.03	0.00	154.98	7,000	3.7	<2.5	44	31	6.7	0.79	7.0	
8/17/2011	P		18.60	0.00	149.41	2,800	7.5	<2.5	12	10	8.8	0.43	7.14	
2/6/2012	P		16.81	0.00	151.20	1,300	3.1	<2.5	5.2	5.1	2.9	0.61	7.03	

Symbols & Abbreviations:

-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing measured in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
SEQ/SEQM= Sequoia Analytical/Sequoia Analytical Morgan Hill (Laboratories)
SPH = Separate phase hydrocarbons
CEL = Calscience Environmental Laboratories

Footnotes:

a = Casing elevations surveyed to the nearest 0.01 ft MSL
b = GWE adjusted assuming a specific gravity of 0.75 for free product (FP)
c = Blind duplicate.
d = A copy of the documentation for this data is included in Appendix C of Alisto report 10-024-10-001
e = Well inaccessible
f = Travel blank
g = EPA Methods 8020/8260 used
h = Unable to sample
i = A copy of the documentation for this data can be found in Blaine Tech Services report 010607-M-3. MTBE data for the January 13, 1993 and April 23, 1993 sampling events has been destroyed. No chromatograms could be located for MTBE data from wells MW-5, MW-6, and MW-7, sampled on October 21, 1993
j = Well not sampled due to presence of SPH and nature of the product
k = Could not purge and sample; waste drum full
l = Value represents the depth to product. Unable to determine depth to water, product disabled the interface probe.
m = Discrete p[ak @ C6-7
n = TPH-g, BTEX, and MTBE analyzed by EPA method 8260 B beginning on 1st quarter 2003 sampling event (1/29/03)
o = Groundwater samples are not collected during FP bailing event
p = Well not included in the monthly FP bailing program
q = Well not sampled in November 2003 due to the presence of a pile of gravel dumped over the well box
r = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose
s = MW-7 TOC elevation raised +0.47 ft during well repair on January 20, 2004
t = Sheen in well
u = Calib. verif. is within method limits but outside contract limits
v = GRO result partly due to individual peak(s) in quantitation range
w = DO meter not working at time of measurement
x = DO measurement suspect
y = Sample dilution was done with headspace in the sample vial. The samples were originally analyzed from VOAs without headspace

Notes:

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g 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 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 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
4/30/1997	--	--	6,900	--	--	--	--	--	
4/30/1997	--	--	7,700	--	--	--	--	--	
8/21/1997	--	--	5,200	--	--	--	--	--	
8/21/1997	--	--	5,700	--	--	--	--	--	
11/5/1997	--	--	8,000	--	--	--	--	--	
11/5/1997	--	--	8,200	--	--	--	--	--	
2/4/1998	--	--	<10000	--	--	--	--	--	
2/4/1998	--	--	<10000	--	--	--	--	--	
5/28/1998	--	--	2,900	--	--	--	--	--	
12/30/1998	--	--	3,600	--	--	--	--	--	
2/2/1999	--	--	3,500	--	--	--	--	--	
5/10/1999	--	--	3,000	--	--	--	--	--	
8/24/1999	--	--	<50	--	--	--	--	--	
11/3/1999	--	--	8,900	--	--	--	--	--	
4/21/2000	--	--	1,300	--	--	--	--	--	
7/31/2000	--	--	2,700	--	--	--	--	--	
11/20/2000	--	--	3,900	--	--	--	--	--	
2/26/2001	--	--	1,890	--	--	--	--	--	
6/7/2001	--	--	2,720	--	--	--	--	--	
12/6/2001	--	--	5,400	--	--	--	--	--	
2/20/2002	--	--	106	--	--	--	--	--	
5/19/2006	<6,000	<400	86	<10	<10	<10	<10	<10	
11/17/2008	<6,000	350	590	<10	<10	27	<10	<10	
3/4/2010	<2,000	<80	<10	<10	<10	<10	<10	<10	
9/2/2010	<1,000	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
3/15/2011	<2500	<40	16	<5.0	<5.0	<5.0	<5.0	<5.0	
8/17/2011	<500	<8.0	8.3	<1.0	<1.0	<1.0	<1.0	<1.0	
2/6/2012	<500	100	10	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-2									
4/20/1994	--	--	24	--	--	--	--	--	
4/30/1997	--	--	<5000	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2 Cont.									
8/21/1997	--	--	<500	--	--	--	--	--	
11/5/1997	--	--	<2500	--	--	--	--	--	
2/3/1998	--	--	<2500	--	--	--	--	--	
5/28/1998	--	--	900	--	--	--	--	--	
12/30/1998	--	--	<250	--	--	--	--	--	
2/2/1999	--	--	<500	--	--	--	--	--	
5/10/1999	--	--	75	--	--	--	--	--	
8/24/1999	--	--	<250	--	--	--	--	--	
11/3/1999	--	--	2,200	--	--	--	--	--	
3/1/2000	--	--	44	--	--	--	--	--	
4/21/2000	--	--	260	--	--	--	--	--	
7/31/2000	--	--	490	--	--	--	--	--	
11/20/2000	--	--	2,800	--	--	--	--	--	
2/18/2001	--	--	1,010	--	--	--	--	--	
6/7/2001	--	--	567	--	--	--	--	--	
9/5/2001	--	--	1,510	--	--	--	--	--	
11/30/2001	--	--	794	--	--	--	--	--	
2/20/2002	--	--	160	--	--	--	--	--	
6/20/2002	--	--	659	--	--	--	--	--	
9/11/2002	--	--	<5000	--	--	--	--	--	
11/12/2002	--	--	1,900	--	--	--	--	--	
1/29/2003	<4000	<2000	820	<50	<50	<50	<50	<50	
5/22/2003	<10000	<2000	1,000	<50	<50	<50	--	--	
7/28/2003	<20000	<4000	1,700	<100	<100	<100	<100	<100	a
11/18/2003	<5,000	<1,000	500	<25	<25	<25	--	--	
02/23/2004	<25,000	<5,000	790	<120	<120	<120	<120	<120	
05/04/2004	<50,000	<10,000	780	<250	<250	<250	<250	<250	
08/04/2004	<50,000	<10,000	430	<250	<250	<250	<250	<250	
11/10/2004	<5,000	<1,000	310	<25	<25	<25	<25	<25	
02/15/2005	<20,000	<4,000	690	<100	<100	<100	<100	<100	
05/16/2005	<50,000	<10,000	560	<250	<250	<250	<250	<250	
08/17/2005	<20,000	<4,000	480	<100	<100	<100	<100	<100	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2 Cont.									
11/18/2005	<20,000	<4,000	340	<100	<100	<100	<100	<100	b
02/07/2006	<60,000	<4,000	440	<100	<100	<100	160	<100	
5/19/2006	<60,000	<4,000	430	<100	<100	<100	<100	<100	b
8/23/2006	<60,000	<4,000	480	<100	<100	<100	<100	<100	
11/15/2006	<60,000	<4,000	400	<100	<100	<100	<100	<100	
2/14/2007	<60,000	<4,000	810	<100	<100	<100	<100	<100	
5/22/2007	<150,000	<10,000	1,000	<250	<250	<250	<250	<250	
8/15/2007	<30,000	2,400	260	<50	<50	<50	<50	<50	b
11/8/2007	<30,000	2,800	240	<50	<50	<50	<50	<50	
11/17/2008	<6,000	1,800	320	<10	<10	<10	<10	<10	
2/25/2009	<150,000	<5,000	<250	<250	<250	<250	<250	<250	
5/28/2009	<75,000	<2,500	510	<120	<120	<120	<120	<120	
3/4/2010	<1,000	2,600	350	<5.0	<5.0	12	<5.0	<5.0	
9/2/2010	<2,000	<80	470	<10	<10	14	<10	<10	
3/15/2011	<50,000	<800	500	<100	<100	<100	<100	<100	
8/17/2011	<50,000	<800	150	<100	<100	<100	<100	<100	
2/6/2012	<50,000	<800	360	<100	<100	<100	<100	<100	
MW-3									
7/12/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
1/21/1994	--	--	<5.0	--	--	--	--	--	
4/20/1994	--	--	28.7	--	--	--	--	--	
8/1/1994	--	--	5.43	--	--	--	--	--	
8/1/1994	--	--	<5.0	--	--	--	--	--	
12/23/1994	--	--	9.8	--	--	--	--	--	
8/22/1995	--	--	<5.0	--	--	--	--	--	
10/30/1995	--	--	<5.0	--	--	--	--	--	
1/25/1996	--	--	5.1	--	--	--	--	--	
4/19/1996	--	--	<10	--	--	--	--	--	
7/23/1996	--	--	<10	--	--	--	--	--	
11/11/1996	--	--	<50	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
1/21/1997	--	--	<10	--	--	--	--	--	
4/29/1997	--	--	<10	--	--	--	--	--	
8/21/1997	--	--	<10	--	--	--	--	--	
11/5/1997	--	--	<50	--	--	--	--	--	
2/3/1998	--	--	<10	--	--	--	--	--	
5/28/1998	--	--	<50	--	--	--	--	--	
2/2/1999	--	--	<5.0	--	--	--	--	--	
3/1/2000	--	--	<0.5	--	--	--	--	--	
2/18/2001	--	--	1	--	--	--	--	--	
2/20/2002	--	--	<0.5	--	--	--	--	--	
1/27/2003	<40	<20	0.76	<50	<50	<50	<50	<50	
02/23/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/15/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	u
2/20/2008	<100	<10	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2010	<100	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/15/2011	<250	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
7/12/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
1/21/1994	--	--	<5.0	--	--	--	--	--	
4/20/1994	--	--	<5.0	--	--	--	--	--	
8/1/1994	--	--	<5.0	--	--	--	--	--	
8/22/1995	--	--	<5.0	--	--	--	--	--	
1/25/1996	--	--	58	--	--	--	--	--	
11/11/1996	--	--	34	--	--	--	--	--	
4/29/1997	--	--	<10	--	--	--	--	--	
11/5/1997	--	--	76	--	--	--	--	--	
5/28/1998	--	--	160	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-4 Cont.									
2/2/1999	--	--	130	--	--	--	--	--	
3/1/2000	--	--	110	--	--	--	--	--	
2/18/2001	--	--	97.3	--	--	--	--	--	
2/20/2002	--	--	81	--	--	--	--	--	
1/29/2003	<40	<20	66	<0.50	<0.50	<0.50	<0.50	<0.50	
02/23/2004	<100	<20	65	<0.50	<0.50	<0.50	<0.50	<0.50	
02/15/2005	<100	<20	62	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2006	<300	<20	29	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	61	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2008	<100	<10	36	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	26	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2010	<100	4.4	34	<0.50	<0.50	<0.50	<0.50	<0.50	
3/15/2011	<250	4.1	26	<0.50	<0.50	<0.50	<0.50	<0.50	
2/6/2012	<250	<4.0	32	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-5									
7/12/1993	--	--	<5.0	--	--	--	--	--	
1/21/1994	--	--	<5.0	--	--	--	--	--	
4/20/1994	--	--	21.2	--	--	--	--	--	
8/1/1994	--	--	<5.0	--	--	--	--	--	
12/23/1994	--	--	7.81	--	--	--	--	--	
8/22/1995	--	--	<130	--	--	--	--	--	
10/30/1995	--	--	<250	--	--	--	--	--	
1/25/1996	--	--	<5.0	--	--	--	--	--	
1/25/1996	--	--	<5.0	--	--	--	--	--	
4/19/1996	--	--	<50	--	--	--	--	--	
7/23/1996	--	--	<10	--	--	--	--	--	
11/11/1996	--	--	<10	--	--	--	--	--	
1/21/1997	--	--	<50	--	--	--	--	--	
4/29/1997	--	--	<50	--	--	--	--	--	
8/21/1997	--	--	<10	--	--	--	--	--	
11/5/1997	--	--	<10	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-5 Cont.									
2/3/1998	--	--	<10	--	--	--	--	--	
5/28/1998	--	--	<10	--	--	--	--	--	
2/2/1999	--	--	9.1	--	--	--	--	--	
3/1/2000	--	--	2.9	--	--	--	--	--	
2/18/2001	--	--	5.67	--	--	--	--	--	
2/20/2002	--	--	55.6	--	--	--	--	--	
11/12/2002	--	--	210	--	--	--	--	--	
1/29/2003	<400	<200	82	<5.0	<5.0	<5.0	<5.0	<5.0	
5/22/2003	<10000	<2000	<50	<50	<50	<50	--	--	
7/28/2003	<2000	<400	120	<10	<10	<10	<10	<10	
11/18/2003	--	--	--	--	--	--	--	--	Well inaccessible
02/23/2004	<5,000	<1,000	100	<25	<25	<25	38	<25	
05/04/2004	<5,000	<1,000	42	<25	<25	<25	<25	<25	
08/04/2004	<5,000	<1,000	390	<25	<25	<25	<25	<25	
11/10/2004	<1,000	<200	530	<5.0	<5.0	5.5	<5.0	<5.0	
02/15/2005	<1,000	<200	260	<5.0	<5.0	<5.0	<5.0	<5.0	
05/16/2005	<1,000	<200	370	<5.0	<5.0	<5.0	<5.0	<5.0	
08/17/2005	<1,000	<200	51	<5.0	<5.0	<5.0	<5.0	<5.0	
11/18/2005	<1,000	<200	340	<5.0	<5.0	<5.0	<5.0	<5.0	b
02/07/2006	<3,000	<200	200	<5.0	<5.0	<5.0	<5.0	<5.0	
5/19/2006	<3,000	<200	44	<5.0	<5.0	<5.0	<5.0	<5.0	b
8/23/2006	<3,000	<200	230	<5.0	<5.0	<5.0	<5.0	<5.0	
11/15/2006	<1,500	<100	490	<2.5	<2.5	4.2	<2.5	<2.5	
2/14/2007	<1,500	<100	420	<2.5	<2.5	3.6	<2.5	<2.5	
5/22/2007	<1,500	<100	26	<2.5	<2.5	<2.5	<2.5	<2.5	
8/15/2007	<6,000	<400	280	<10	<10	<10	<10	<10	
11/8/2007	<1,500	310	270	<2.5	<2.5	<2.5	<2.5	<2.5	
2/20/2008	<1,000	<100	43	<5.0	<5.0	<5.0	<5.0	<5.0	
5/7/2008	<6,000	<200	30	<10	<10	<10	<10	<10	
8/20/2008	<1,200	270	260	<2.0	<2.0	3.0	<2.0	<2.0	
2/25/2009	<300	110	68	<0.50	<0.50	0.62	<0.50	<0.50	
5/28/2009	<600	<20	11	<1.0	<1.0	<1.0	<1.0	<1.0	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-5 Cont.									
8/6/2009	<3,000	340	190	<5.0	<5.0	<5.0	<5.0	<5.0	
3/4/2010	<100	38	15	<0.50	<0.50	<0.50	<0.50	<0.50	
9/2/2010	<100	<4.0	13	<0.50	<0.50	<0.50	<0.50	<0.50	
3/15/2011	<250	<4.0	5.9	<0.50	<0.50	<0.50	<0.50	<0.50	
8/17/2011	<2,500	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
2/6/2012	<2,500	<40	9.8	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-6									
7/12/1993	--	--	<5.0	--	--	--	--	--	
1/21/1994	--	--	<5.0	--	--	--	--	--	
4/20/1994	--	--	17.4	--	--	--	--	--	
8/1/1994	--	--	8.66	--	--	--	--	--	
8/22/1995	--	--	<5.0	--	--	--	--	--	
1/25/1996	--	--	9.9	--	--	--	--	--	
11/11/1996	--	--	<10	--	--	--	--	--	
4/29/1997	--	--	<10	--	--	--	--	--	
11/5/1997	--	--	85	--	--	--	--	--	
5/28/1998	--	--	<10	--	--	--	--	--	
05/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2008	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2010	<100	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/15/2011	<250	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-7									
7/12/1993	--	--	<5.0	--	--	--	--	--	
1/21/1994	--	--	<5.0	--	--	--	--	--	
4/20/1994	--	--	<5.0	--	--	--	--	--	
8/1/1994	--	--	<5.0	--	--	--	--	--	
8/22/1995	--	--	<5.0	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-7 Cont.									
1/25/1996	--	--	<5.0	--	--	--	--	--	
11/11/1996	--	--	<10	--	--	--	--	--	
4/29/1997	--	--	<10	--	--	--	--	--	
11/5/1997	--	--	<10	--	--	--	--	--	
5/28/1998	--	--	<10	--	--	--	--	--	
02/07/2006	<3,000	<200	270	<5.0	<5.0	<5.0	<5.0	<5.0	
2/14/2007	<3,000	<200	740	<5.0	<5.0	9.6	<5.0	<5.0	
2/20/2008	<100	13	700	<0.50	<0.50	12	0.60	<0.50	
2/25/2009	<12,000	<400	540	<20	<20	<20	<20	<20	
3/4/2010	<100	4.0	920	<0.50	<0.50	17	0.74	<0.50	
3/15/2011	<250	130	990	<0.50	<0.50	17	0.81	<0.50	
2/6/2012	<250	<4.0	22	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-8									
4/20/1994	--	--	632	--	--	--	--	--	
8/21/1997	--	--	<1000	--	--	--	--	--	
11/5/1997	--	--	<1000	--	--	--	--	--	
2/4/1998	--	--	<2500	--	--	--	--	--	
12/30/1998	--	--	150	--	--	--	--	--	
2/2/1999	--	--	<500	--	--	--	--	--	
5/10/1999	--	--	<25	--	--	--	--	--	
8/24/1999	--	--	150	--	--	--	--	--	
11/3/1999	--	--	750	--	--	--	--	--	
3/1/2000	--	--	120	--	--	--	--	--	
11/20/2000	--	--	5,700	--	--	--	--	--	
2/20/2002	--	--	80.4	--	--	--	--	--	
6/20/2002	--	--	2,520	--	--	--	--	--	
9/11/2002	--	--	1,200	--	--	--	--	--	
11/12/2002	--	--	31	--	--	--	--	--	
1/29/2003	<4000	<2000	<500	<50	<50	<50	<50	<50	
5/22/2003	<5000	<1000	--	<25	<25	<25	--	--	
6/24/2003	--	--	46	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-8 Cont.									
7/28/2003	<20000	<4000	2,100	<100	<100	<100	<100	<100	
11/18/2003	<2,000	<400	1,700	<10	<10	20	--	--	a,b
02/23/2004	<10,000	<2,000	110	<50	<50	<50	<50	<50	
05/04/2004	<5,000	<1,000	2,000	<25	<25	33	<25	<25	
11/10/2004	<5,000	<1,000	74	<25	<25	<25	<25	<25	
02/15/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
05/16/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
08/17/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
11/18/2005	<10,000	<2,000	140	<50	<50	<50	<50	<50	b
02/07/2006	<3,000	<200	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	
5/19/2006	<15,000	<1,000	<25	<25	<25	<25	<25	<25	b
8/23/2006	<15,000	<1,000	82	<25	<25	<25	<25	<25	
11/15/2006	<15,000	<1,000	110	<25	<25	<25	<25	<25	
2/14/2007	<15,000	<1,000	82	<25	<25	<25	<25	<25	
5/22/2007	<6,000	<400	11	<10	<10	<10	<10	<10	
8/15/2007	<6,000	<400	28	<10	<10	<10	<10	<10	
11/8/2007	<15,000	<1,000	27	<25	<25	<25	<25	<25	
2/25/2009	<6,000	<200	35	<10	<10	<10	<10	<10	
5/28/2009	<1,500	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
3/4/2010	<1,000	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
9/2/2010	<1,000	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
3/15/2011	<1,200	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
8/17/2011	<2,500	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
2/6/2012	2,900	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
MW-9									
7/12/1993	--	--	20.8	--	--	--	--	--	
4/20/1994	--	--	740	--	--	--	--	--	
4/20/1994	--	--	768	--	--	--	--	--	
4/30/1997	--	--	<5000	--	--	--	--	--	
8/21/1997	--	--	<500	--	--	--	--	--	
11/5/1997	--	--	<500	--	--	--	--	--	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
2/3/1998	--	--	<1000	--	--	--	--	--	
5/28/1998	--	--	<500	--	--	--	--	--	
5/28/1998	--	--	<250	--	--	--	--	--	
12/30/1998	--	--	180	--	--	--	--	--	
2/2/1999	--	--	<50	--	--	--	--	--	
5/10/1999	--	--	72	--	--	--	--	--	
8/24/1999	--	--	<250	--	--	--	--	--	
11/3/1999	--	--	<5.0	--	--	--	--	--	
3/1/2000	--	--	63	--	--	--	--	--	
4/21/2000	--	--	<5.0	--	--	--	--	--	
7/31/2000	--	--	1,600	--	--	--	--	--	
11/20/2000	--	--	3,900	--	--	--	--	--	
2/18/2001	--	--	121	--	--	--	--	--	
6/7/2001	--	--	223	--	--	--	--	--	
9/5/2001	--	--	310	--	--	--	--	--	
11/30/2001	--	--	285	--	--	--	--	--	
2/20/2002	--	--	293	--	--	--	--	--	
6/20/2002	--	--	208	--	--	--	--	--	
9/11/2002	--	--	<2500	--	--	--	--	--	
11/12/2002	--	--	21	--	--	--	--	--	
5/22/2003	<10000	<2000	<50	<50	<50	<50	--	--	
7/28/2003	<100000	<20000	<500	<500	<500	<500	<500	<500	
11/18/2003	<2,000	<400	45	<10	<10	<10	--	--	a,b
02/23/2004	<50,000	<10,000	<250	<250	<250	<250	<250	<250	
05/04/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
11/10/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
02/15/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
05/16/2005	<2,000	<400	<10	<10	<10	<10	<10	<10	
08/17/2005	<2,500	<500	<12	<12	<12	<12	<12	<12	
11/18/2005	<1,000	<200	19	<5.0	<5.0	<5.0	<5.0	<5.0	b
02/07/2006	<3,000	<200	<5.0	<5.0	<5.0	5.4	<5.0	<5.0	
8/23/2006	<30,000	<2,000	<50	<50	<50	<50	<50	<50	

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Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
11/15/2006	<15,000	<1,000	26	<25	<25	<25	<25	<25	
2/14/2007	<15,000	<1,000	<25	<25	<25	<25	<25	<25	
5/22/2007	<15,000	<1,000	<25	<25	<25	<25	<25	<25	
8/15/2007	<1,500	<100	27	<2.5	<2.5	<2.5	<2.5	<2.5	b
11/8/2007	<3,000	<200	52	<5.0	<5.0	<5.0	<5.0	<5.0	
11/17/2008	<1,500	<50	33	<2.5	<2.5	<2.5	<2.5	<2.5	
2/25/2009	<6,000	<200	<10	<10	<10	<10	<10	<10	
5/28/2009	<6,000	<200	<10	<10	<10	<10	<10	<10	
8/6/2009	<1,200	<40	18	<2.0	<2.0	<2.0	<2.0	<2.0	
3/4/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
9/2/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
3/15/2011	<1,200	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
8/17/2011	<1,300	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
2/6/2012	<1,300	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
MW-10									
4/20/1994	--	--	1,577	--	--	--	--	--	
4/30/1997	--	--	<5000	--	--	--	--	--	
8/21/1997	--	--	<5000	--	--	--	--	--	
11/5/1997	--	--	<500	--	--	--	--	--	
2/4/1998	--	--	<1000	--	--	--	--	--	
5/28/1998	--	--	<1000	--	--	--	--	--	
12/30/1998	--	--	<50	--	--	--	--	--	
2/2/1999	--	--	860	--	--	--	--	--	
5/10/1999	--	--	220	--	--	--	--	--	
8/24/1999	--	--	<250	--	--	--	--	--	
11/3/1999	--	--	31	--	--	--	--	--	
3/1/2000	--	--	4,400	--	--	--	--	--	
4/21/2000	--	--	2,400	--	--	--	--	--	
11/20/2000	--	--	450	--	--	--	--	--	
2/18/2001	--	--	4,180	--	--	--	--	--	
6/7/2001	--	--	635	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-10 Cont.									
9/5/2001	--	--	189	--	--	--	--	--	
11/30/2001	--	--	325	--	--	--	--	--	
2/20/2002	--	--	1,090	--	--	--	--	--	
6/20/2002	--	--	224	--	--	--	--	--	
9/11/2002	--	--	<250	--	--	--	--	--	
5/22/2003	<10000	<2000	300	<50	<50	<50	--	--	
11/18/2003	<10,000	<2,000	<50	<50	<50	<50	--	--	b
02/23/2004	<20,000	<4,000	180	<100	<100	<100	<100	<100	
05/04/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
11/10/2004	<5,000	<1,000	230	<25	<25	<25	<25	<25	b
02/15/2005	<10,000	<2,000	77	<50	<50	<50	<50	<50	
05/16/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
08/17/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
11/18/2005	<2,500	<500	16	<12	<12	<12	<12	<12	b
02/07/2006	<15,000	<1,000	73	<25	<25	<25	<25	<25	
5/19/2006	<15,000	<1,000	<25	<25	<25	<25	<25	<25	b
8/23/2006	<6,000	<400	<10	<10	<10	<10	<10	<10	
11/15/2006	<6,000	<400	54	<10	<10	<10	<10	<10	
2/14/2007	<6,000	<400	120	<10	<10	<10	<10	<25	
5/22/2007	<6,000	<400	15	<10	<10	<10	<10	<10	
8/15/2007	<6,000	<400	<10	<10	<10	<10	<10	<10	
11/8/2007	<3,000	<200	6.0	<5.0	<5.0	<5.0	<5.0	<5.0	
5/7/2008	<12,000	<400	<20	<20	<20	<20	<20	<20	
11/17/2008	<12,000	<400	23	<20	<20	<20	<20	<20	
2/25/2009	<6,000	280	170	<10	<10	<10	<10	<10	
5/28/2009	<1,500	110	65	<2.5	<2.5	<2.5	<2.5	<2.5	
8/6/2009	<15,000	<500	<25	<25	<25	<25	<25	<25	
3/4/2010	<500	160	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
8/17/2011	<2,500	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
2/6/2012	<2,500	<40	<5.0	<5.0	<4.0	<5.0	<5.0	<5.0	
QC-2									

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
QC-2 Cont.									
8/22/1995	--	--	<5.0	--	--	--	--	--	
10/30/1995	--	--	<5.0	--	--	--	--	--	
1/25/1996	--	--	<5.0	--	--	--	--	--	
4/19/1996	--	--	<10	--	--	--	--	--	
RW-1									
8/1/1994	--	--	1,200	--	--	--	--	--	
12/23/1994	--	--	616	--	--	--	--	--	
8/22/1995	--	--	<25	--	--	--	--	--	
8/22/1995	--	--	<25	--	--	--	--	--	
10/30/1995	--	--	630	--	--	--	--	--	
10/30/1995	--	--	650	--	--	--	--	--	
1/25/1996	--	--	5,300	--	--	--	--	--	
4/19/1996	--	--	14,000	--	--	--	--	--	
4/19/1996	--	--	15,000	--	--	--	--	--	
7/23/1996	--	--	35,000	--	--	--	--	--	
7/23/1996	--	--	36,000	--	--	--	--	--	
11/11/1996	--	--	22,000	--	--	--	--	--	
11/11/1996	--	--	22,000	--	--	--	--	--	
1/21/1997	--	--	1,500	--	--	--	--	--	
1/21/1997	--	--	1,500	--	--	--	--	--	
4/29/1997	--	--	46,000	--	--	--	--	--	
8/21/1997	--	--	9,500	--	--	--	--	--	
11/5/1997	--	--	56,000	--	--	--	--	--	
2/3/1998	--	--	3,200	--	--	--	--	--	
5/28/1998	--	--	2,700	--	--	--	--	--	
2/2/1999	--	--	51000/78000	--	--	--	--	--	
5/10/1999	--	--	61,000	--	--	--	--	--	
8/24/1999	--	--	37,000	--	--	--	--	--	
11/3/1999	--	--	54,000	--	--	--	--	--	
3/1/2000	--	--	13,000	--	--	--	--	--	
4/21/2000	--	--	39,000	--	--	--	--	--	

**Table 2. Summary of Fuel Additives Analytical Data
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
RW-1 Cont.									
7/31/2000	--	--	30,000	--	--	--	--	--	
2/18/2001	--	--	13,000	--	--	--	--	--	
6/7/2001	--	--	19,100	--	--	--	--	--	
11/30/2001	--	--	8,260	--	--	--	--	--	
2/20/2002	--	--	7,240	--	--	--	--	--	
11/18/2003	<10,000	11,000	6,100	<50	<50	160	--	--	a,b
11/17/2008	<12,000	<400	120	<20	<20	<20	<20	<20	
3/4/2010	<500	45	110	<2.5	<2.5	5.7	<2.5	<2.5	
9/2/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
3/15/2011	<1,200	<20	6.7	<2.5	<2.5	<2.5	<2.5	<2.5	
8/17/2011	<1,300	<20	8.8	<2.5	<2.5	<2.5	<2.5	<2.5	
2/6/2012	<1,300	<20	2.9	<2.5	<2.5	<2.5	<2.5	<2.5	

Symbols & Abbreviations:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Diisopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

Footnotes:

a = The result for TBA was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria

b = The continuing calibration verification for ethanol was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be useful for its intended purpose

Notes:

All volatile organic compounds analyzed using EPA Method 8260B

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 3. Historical Groundwater Gradient - Direction and Magnitude
Former BP Station #11132, 3201 35th Ave, Oakland, CA**

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

Notes:

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. Bio-Degradation Parameters
Former BP Station #11132, 3201 35th Ave, Oakland, CA

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote
	Dissolved Oxygen	Nitrate (NO3)	Manganese	Ferrous Iron	Sulfate (SO4)	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO2	Methane	Total Alkalinity			
MW-1													
11/17/2008	--	<0.1	2.750	3.400	<1	<0.050	--	65	4.830	426	126	6.60	DO meter not working
3/4/2010	0.54	--	--	--	--	--	--	--	--	--	-106	6.96	
9/2/2010	0.52	--	--	--	--	--	--	--	--	--	186	7.01	
3/15/2011	0.85	--	--	--	--	--	--	--	--	--	-95	7.0	
8/17/2011	0.71	--	--	--	--	--	--	--	--	--	-71	7.39	
2/6/2012	0.78	--	--	--	--	--	--	--	--	--	33	7.34	
MW-2													
11/17/2008	--	<0.1	6.380	7.300	1.1	<0.050	--	98.5	5.350	838	111	6.46	DO meter not working
2/25/2009	2.11	<0.1	5.380	8.600	5.1	<0.050	--	294	3.480	846	-8	6.50	
5/28/2009	0.16	<0.1	5.340	2.400	8.7	<0.050	--	209	1.160	782	-75	6.59	BV (S2-, FE); DO measurement suspect
3/4/2010	1.28	--	--	--	--	--	--	--	--	--	-92	6.80	
9/2/2010	0.70	--	--	--	--	--	--	--	--	--	230	6.90	
3/15/2011	0.69	--	--	--	--	--	--	--	--	--	-94	6.8	
8/17/2011	0.50	--	--	--	--	--	--	--	--	--	-53	7.07	
2/6/2012	0.91	--	--	--	--	--	--	--	--	--	-9	7.08	
MW-3													
2/25/2009	3.45	1.6	0.0185	<0.100	29	<0.050	--	17.4	<0.0010	146	78	7.09	
3/4/2010	3.16	--	--	--	--	--	--	--	--	--	-10	7.06	
3/15/2011	3.14	--	--	--	--	--	--	--	--	--	75	7.2	
MW-4													
2/25/2009	2.80	3.8	<0.0050	<0.100	42	<0.050	--	44.1	<0.0010	244	-23	6.83	
3/4/2010	0.63	--	--	--	--	--	--	--	--	--	74	6.80	
3/15/2011	1.05	--	--	--	--	--	--	--	--	--	28	6.9	
2/6/2012	1.06	--	--	--	--	--	--	--	--	--	189	7.28	
MW-5													
8/20/2008	5.57	0.11	6.310	<0.10	12	<0.050	--	1,660	0.0355	698	170	6.86	BV (S2-, FE)
2/25/2009	4.38	0.22	2.930	<0.100	7.7	<0.050	--	17.6	0.00133	352	23	6.65	BV (S2-, FE)
5/28/2009	0.04	<0.1	4.450	0.840	2.9	<0.050	--	145	0.128	898	-89	6.82	BV (S2-, FE); DO measurement suspect

Table 4. Bio-Degradation Parameters
Former BP Station #11132, 3201 35th Ave, Oakland, CA

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote
	Dissolved Oxygen	Nitrate (NO3)	Manganese	Ferrous Iron	Sulfate (SO4)	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO2	Methane	Total Alkalinity			
MW-5 Cont.													
8/6/2009	0.06	<0.1	5.820	<0.100	10	<0.050	--	139	0.00312	694	--	7.27	DO measurement suspect
3/4/2010	0.66	--	--	--	--	--	--	--	--	--	-69	6.87	
9/2/2010	0.75	--	--	--	--	--	--	--	--	--	190	6.75	
3/15/2011	0.85	--	--	--	--	--	--	--	--	--	-50	6.8	
8/17/2011	0.61	--	--	--	--	--	--	--	--	--	-29	7.11	
2/6/2012	1.31	--	--	--	--	--	--	--	--	--	35	7.21	
MW-6													
2/25/2009	2.39	2.2	0.0176	<0.100	55	<0.050	--	23.4	<0.0010	196	16	7.09	
3/4/2010	0.88	--	--	--	--	--	--	--	--	--	4	7.01	
3/15/2011	1.43	--	--	--	--	--	--	--	--	--	74	7.1	
MW-7													
2/25/2009	4.28	1.2	0.0167	<0.100	16	<0.050	--	36	<0.0010	280	90	6.87	BV (S2-, FE)
3/4/2010	3.30	--	--	--	--	--	--	--	--	--	-36	7.02	
3/15/2011	4.05	--	--	--	--	--	--	--	--	--	8	7.0	
2/6/2012	1.58	--	--	--	--	--	--	--	--	--	178	7.44	
MW-8													
2/25/2009	2.18	0.1	4.140	3.000	4.7	<0.050	--	198	1.890	702	19	6.98	
5/28/2009	0.06	<0.1	3.040	1.500	2.2	<0.050	--	186	1.750	664	-41	6.78	BV (S2-, FE); DO measurement suspect
3/4/2010	0.82	--	--	--	--	--	--	--	--	--	63	6.72	
9/2/2010	0.56	--	--	--	--	--	--	--	--	--	199	6.75	
3/15/2011	0.90	--	--	--	--	--	--	--	--	--	-56	6.6	
8/17/2011	0.61	--	--	--	--	--	--	--	--	--	-30	7.08	
2/6/2012	0.91	--	--	--	--	--	--	--	--	--	22	7.17	
MW-9													
11/17/2008	--	0.18	3.190	3.400	12	<0.050	--	19.5	1.290	480	139	6.64	DO meter not working
2/25/2009	2.27	<0.1	3.060	1.900	1.9	<0.050	--	156	1.960	554	-23	6.69	
5/28/2009	0.07	<0.1	2.730	0.900	3.8	<0.050	--	169	0.826	522	-73	6.83	BV (S2-, FE); DO measurement suspect
8/6/2009	0.00	0.39	2.680	2.500	15	<0.050	--	--	0.573	478	--	7.26	DO measurement suspect

Table 4. Bio-Degradation Parameters
Former BP Station #11132, 3201 35th Ave, Oakland, CA

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote	
	Dissolved Oxygen	Nitrate (NO3)	Manganese	Ferrous Iron	Sulfate (SO4)	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO2	Methane	Total Alkalinity				
MW-9 Cont.														
3/4/2010	0.62	--	--	--	--	--	--	--	--	--	--	-83	6.84	
9/2/2010	0.46	--	--	--	--	--	--	--	--	--	--	214	6.85	
3/15/2011	1.07	--	--	--	--	--	--	--	--	--	--	-69	6.8	
2/6/2012	1.43	--	--	--	--	--	--	--	--	--	--	113	7.21	
MW-10														
11/17/2008	--	<0.1	4.890	4.700	1.7	<0.050	--	283	1.720	686	160	6.54	6.54	DO meter not working
2/25/2009	4.06	0.29	4.530	3.700	13	<0.050	--	182	0.117	572	-33	6.68	6.68	BV (S2-, FE)
5/28/2009	0.03	<0.1	4.380	4.000	6.9	<0.050	--	657	0.618	634	-40	6.69	6.69	BV (S2-, FE); DO measurement suspect
8/6/2009	0.06	<0.1	4.770	0.130	1.7	<0.050	--	81.4	0.587	728	--	7.23	7.23	DO measurement suspect
3/4/2010	0.56	--	--	--	--	--	--	--	--	--	-115	6.81	6.81	
8/17/2011	0.44	--	--	--	--	--	--	--	--	--	-72	7.18	7.18	
2/6/2012	0.71	--	--	--	--	--	--	--	--	--	-19	7.21	7.21	
QC-2														
RW-1														
11/17/2008	--	<0.1	0.581	0.990	<1	<0.050	--	35.8	3.780	94	108	6.47	6.47	DO meter not working
3/4/2010	1.24	--	--	--	--	--	--	--	--	--	-116	6.77	6.77	
9/2/2010	0.66	--	--	--	--	--	--	--	--	--	131	7.31	7.31	
3/15/2011	0.79	--	--	--	--	--	--	--	--	--	-41	7.0	7.0	
8/17/2011	0.43	--	--	--	--	--	--	--	--	--	-80	7.14	7.14	
2/6/2012	0.61	--	--	--	--	--	--	--	--	--	101	7.03	7.03	

Symbols & Abbreviations:

< = Not detected at or above specified laboratory reporting limit

ORP = Oxygen reduction potential

DO = Dissolved oxygen

CO₂ = Carbon dioxide

S₂- = Soluble Sulfide

mV = Millivolts

μg/L = Micrograms per liter

mg/L = Milligrams per liter

BV = Sample received after holding time expired