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Alameda County
Environmental Health

May 15, 2012

Dilan Roe
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Re: **Report Submittal**
Semi-Annual Monitoring Report – First Quarter 2012
76 (Former BP) Service Station No. 2611117
7210 Bancroft Avenue
Oakland, California

Dear Mr. Khatri,

I declare under penalty of perjury that, to the best of my knowledge, the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call me at (408) 826-1874.

Sincerely,



Douglas K. Umland, P.G.
Senior Project Manager
doug.umland@anteagroup.com
Antea Group

Enc: Antea Group, *Semi-Annual Monitoring Report – First Quarter 2012*

Semi-Annual Monitoring Report, First Quarter 2012

*76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue
Oakland, California USA*

*Alameda County Environmental Health,
Case No. RO0000356*

*Antea Group Project No. I42611117
May 15, 2012*

Prepared for:

Dilan Roe
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Prepared by:

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Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



Appendix C	Blaine Tech Services Groundwater Sampling Field Data Sheets
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Semi-Annual Monitoring Report

First Quarter 2012

76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, CA USA
Alameda County Environmental Health
Case No. R00000356

1.0 INTRODUCTION

Antea™Group completed this *Semi-Annual Monitoring Report, First Quarter 2012*, for 76 (Former BP) Service Station No. 11117 in Oakland, California (**Figure 1**). This report summarizes the data obtained from the most recent groundwater monitoring event completed February 20, 2012 and March 20, 2012. Please refer to **Figure 2** for the site layout. **Appendix A** contains additional site information and a history of previous environmental investigations and remediation activities.

1.1 Work Performed in the Fourth Quarter 2011 and First Quarter 2012

1. Antea Group performed the investigation field activities proposed in the *Remedial Action Investigation Work Plan* dated August 3, 2011, approved by Alameda County Environmental Health (ACEH) in a letter dated September 1, 2011.
2. Antea Group submitted the *Semi-Annual Monitoring Report – Third Quarter 2011* to ACEH on November 8, 2011.
3. Antea Group submitted a *Remedial Investigation Work Plan Addendum* to ACEH on December 13, 2011.
4. Subcontractor Blaine Tech Services, Inc. (Blaine Tech) conducted the first quarter 2012 groundwater monitoring event on February 20, 2012. Blaine Tech resampled groundwater monitoring well MW-4 on March 19, 2012 to confirm anomalous results.
5. Antea Group implemented the baseline and grab groundwater sampling, and hydraulic profile testing phase of the *Remedial Investigation Work Plan Addendum* on March 6, 7, and 13, 2012.
6. Antea Group and their subcontractors completed an injection event from March 26 to 30, 2012 per the *Remedial Investigation Work Plan Addendum*.

1.2 Work Proposed for the Second and Third Quarter 2012

1. Subcontractor Blaine Tech will perform the 30-day post-injection groundwater gauging and sampling event (completed on April 27, 2012).
2. Subcontractor Blaine Tech will perform the 60-day and 90-day post-injection groundwater gauging and sampling events in late May 2012 and late June 2012, respectively.
3. Antea Group will submit the *Semi-Annual Monitoring Report, First Quarter 2012* (contained herein) to ACEH by May 15, 2012.

4. Antea Group will prepare and submit a remedial action investigation report summarizing the field activities completed up to April 27, 2012 per the *Remedial Action Investigation Work Plan* and *Remedial Investigation Work Plan Addendum*, by June 30, 2012.
5. Blaine Tech will conduct the third quarter semi-annual groundwater monitoring scheduled for August 2012.

2.0 CURRENT PROJECT STATUS

Current phase of project:	Semi-Annual Groundwater Monitoring
Monitoring well gauging schedule:	Semi-Annually (1Q, 3Q): MW-1, MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, EX-1, and EX-2
Monitoring well sampling schedule:	Semi-Annually (1Q, 3Q): MW-4, MW-7, MW-9, MW-10, MW-11, EX-1, and EX-2 Annually (1Q): MW-1, MW-3, MW-6, and MW-8
Wells with historical measurable LNAPL (light non-aqueous phase liquid):	Yes, sporadic trace amounts in wells EX-2 and MW-4, and greater amounts in MW-2 between 1993 and 1998 (maximum of 4.25 feet was reported in well MW-2 on 1/25/1995).
Generalized site geology:	<u>Surface to ~3' bgs:</u> Gravel Fill <u>~3 to 30' bgs:</u> silt and silty sand <u>~30 to 45' bgs:</u> clay
Local receptors:	As many as 10 wells within one mile of the site, plus several sensitive receptors within 0.5 miles of the site. According to the October 2010 <i>Sensitive Receptor Survey</i> by Delta Consultants, no receptors likely to have been impacted by release from the site (See also Appendix A)
Current remediation technique	None (Remedial action investigation currently being performed)

2.1 Regulatory Correspondence

Antea Group received e-mail correspondences from ACEH dated February 17, 2012, March 2, 2012, and April 6, 2012 pertaining to our implementation of the *Remedial Investigation Work Plan* dated December 13, 2011 and an extension request for submitting the Soil and Water Investigation & Pilot Test Report. Copies of these correspondences are included in **Appendix B**.

2.2 Remediation Activities

Active remediation is not currently taking place on-site. However, Antea Group is performing field activities related to a remedial action investigation. In the *Remedial Investigation Work Plan* dated December 13, 2011, Antea Group proposed a three-phased pilot test consisting of: 1) subsurface characterization using hydraulic profile testing and baseline groundwater characterization within the pilot test area, 2) injection of Regenesis Plume Stop™ solution in the area surrounding MW-4 and DPE-5 via direct-push, and 3) post-injection groundwater monitoring.

On March 6, 7, and 13, 2012, Antea Group oversaw the first phase of the *Remedial Investigation Work Plan Addendum*. This scope of work included hydraulic profile testing, sampling of well MW-4, and discrete grab

groundwater sampling. Antea Group and subcontractors implemented the second phase (injection) from March 26 through March 30, 2012. Phase 3 consists of monitoring groundwater in select wells at 30 days, 60 days, and 90 days following the injection pilot test. As of the date of this report, the 30-day post-injection monitoring event is complete.

For a summary of previous remedial activities and pilot testing, please refer to **Appendix A**.

2.3 Groundwater Monitoring

During the first quarter 2012 groundwater monitoring event, Blaine Tech gauged, purged, and sampled 11 wells per their standard sampling protocol. **Table 1** contains soil boring and well construction details. **Appendix C** includes copies of Blaine Tech’s field data sheets, and the table below summarizes the recent gauging and sampling data.

Well gauging and sampling date:	February 20, 2012 and March 19, 2012 (MW-4 resampling)
Wells gauged:	MW-1, MW-3, MW-4, MW-6 through MW-11, EX-1, EX-2
Wells sampled:	MW-1, MW-3, MW-4, MW-6 through MW-11, EX-1, EX-2
Purge method:	*3 well casing volumes via electric, submersible pump, purged through a flow cell
Sample collection method:	Disposable bailers
Groundwater parameters measured (Appendix C):	Temperature, pH, Conductivity, Oxidation-reduction potential (ORP), Turbidity, Dissolved Oxygen (DO)
Wells with measurable LNAPL:	None

* MW-8 and MW-9 were sampled by hand bailing due to access issues

2.3.1 Groundwater Flow Gradient and Directional Trends

Currently, eleven site wells are gauged on a semi-annual basis. Antea Group determined the groundwater flow direction and gradient to be variable during the recent event (**Figure 3**). Overall, it appears that groundwater flow is generally to the northeast and contaminant migration is to the southeast. The previous monitoring and sampling event (August 2011) reported the groundwater gradient and flow direction to be variable, but generally to the northeast. Historical groundwater flow and gradient data are included for reference in **Appendix D**.

2.3.2 Groundwater Quality Data

Blaine Tech submitted the groundwater samples collected during the first quarter 2012 under chain-of-custody protocol to Pace Analytical Services, Inc. (Pace), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 01153CA). The complete analytical reports are included in **Appendix E**. The chain of custody requested the laboratory to analyze groundwater samples for the following contaminants of concern:

- Gasoline Range Organics (GRO) by California Method CA-LUFT;
- Benzene, toluene, ethylbenzene, total xylenes (BTEX compounds) by EPA Method 8260B.

- Methyl tert-butyl ether (MTBE), ethyl tert-butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary-amyl methyl ether (TAME), tertiary butyl alcohol (TBA), ethanol, 1,2-dichloroethane (1,2-DCA) and 1,2-dibromoethane (EDB) by EPA Method 8260B.

Groundwater analytical results are presented in **Table 2** (current), and **Tables 3 and 3a** (historical). Due to abnormally high concentrations from the February 20th event, Blaine Tech resampled MW-4 on March 19, 2012. Data discussed from this point forward for well MW-4 references groundwater samples collected on March 19, 2012. The following table presents the ranges of contaminant concentrations reported above the laboratory's respective minimum reporting limits in groundwater samples collected during the first quarter:

Constituents	Number of Samples Where Constituent was Reported Above LRL of the Total Samples Collected	Minimum Reported Concentration, in µg/L (Sample ID)	Maximum Reported Concentration, in µg/L (Sample ID)
GRO	4 of 11	204 (MW-9)	15,200 (MW-4)
Benzene	4 of 11	0.65 (MW-11)	4,800 (MW-4)
Toluene	3 of 11	3.5 (MW-11)	586 (EX-1)
Ethylbenzene	3 of 11	48.9 (MW-11)	562 (MW-4)
Total Xylenes	6 of 11	70.6 (MW-11)	712 (EX-1)
MTBE	6 of 11	0.66 (MW-6)	768 (MW-4)
TBA	4 of 11	5.3 (MW-10)	25,200 (MW-4)
ETBE	1 of 11	3.2 (MW-4)	3.2 (MW-4)
TAME	2 of 11	6.0 (MW-4)	12.9 (EX-1)
1,2-DCA	1 of 11	44.1 (EX-1)	44.1 (EX-1)

Explanations:

µg/L = Micrograms per liter

LRL = Laboratory reporting limit

2.3.3 Groundwater Contaminant Trends

Levels of GRO, BTEX compounds, MTBE and TBA continue to be reported in several of the site's monitoring wells. **Appendix F** includes concentration versus time graphs for GRO, benzene, MTBE, and TBA in selected wells.

- Reported concentrations of benzene, MTBE, and TBA in MW-4 continued to increase relative to the past four sampling events. Increases in GRO, MTBE, and TBA concentrations in MW-4 during the last two events represent return to previous trends prior to February 2010. Marked lower concentrations in MW-4 between February 2010 and February 2011 may indicate historical unknown sampling errors. Continued monitoring may help validate current concentrations. Note: MW-4 is centered in the current pilot study area, and future monitoring data will have to consider remedial efforts being made.
- Well EX-1 reported increases in GRO, benzene, MTBE and TBA since the last sampling event, however these results are consistent with historical trends. This coincides with the highest groundwater elevation in EX-1 since 2007.

- Well MW-10 reported an increase in MTBE since the last sampling event by nearly a factor of 5. This is the highest concentration recorded since the first quarter 2009, but remains consistent with historical trends and fluctuations in the well.
- Well MW-9 reported increases in GRO, benzene and TBA and a decrease in MTBE. . However, the reported concentrations are consistent with historical trends.
- Overall, trending for GRO, benzene, MTBE and TBA show relatively steady or decreasing concentrations.

Due to the enormous increased concentrations in MW-4 from the third quarter 2011, Antea Group resampled the well to verify groundwater conditions at the monitoring point. Resampled data for most constituents of concern are consistent with third quarter 2011 concentrations. The TBA concentration reported for the sample collected from well MW-4 in March 2012 is a historical high.

Dissolved GRO, benzene, and TBA plumes continue to be limited to the southeastern half of the site, extending off-site into and slightly east beyond 73rd Avenue to MW-9. However, the dissolved MTBE plume extends from the southeast portion of the site north to wells MW-7 and MW-10. **Figures 4 through 7** depict dissolved-phase isoconcentration maps reported during the first quarter 2012.

2.3.4 Monitored Natural Attenuation Parameters

Antea Group did not have the first quarter 2012 samples analyzed for monitoring natural attenuation parameters. Antea Group may analyze for these parameters in future sampling events as necessary.

2.3.5 Waste Disposal Summary

Approximately 200 gallons of wastewater was generated during well purging, well sampling, and equipment cleaning in the fourth quarter event. The wastewater was transported to Seaport Environmental in Redwood City, California for disposal. **Appendix G** includes copies of the first quarter 2012 non-hazardous waste manifests. The final waste manifest for waste generated during the March resampling of MW-4 will be included in the next quarterly report.

2.3.6 Quality Assurance / Quality Control

Antea Group’s QA/QC measures included use of a trip blank and a detailed QA/QC data validation check on the Pace Laboratory analytical results for the February and March 2012 sampling events. **Appendix E** includes Antea Group’s laboratory data validation checklist and the Pace laboratory reports.

Trip Blank (TB1_20120229):	No contaminants reported
Laboratory QA/QC Performed:	Yes (validated by Antea Group)
Laboratory Data Qualifiers:	Yes – CL, D6, S5, 1n, E, M1
Are the data valid for their intended purpose?	Yes, the data are valid

CL The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low. Noted on benzene analysis for sample MW-1

- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits. Noted in QA/QC analysis MS&MSD #105080 and #105081
- S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis). Noted for surrogate analysis for sample EX-1
- 1n Analyte was detected in the method blank. However, this sample had a concentration over ten times greater than the blank. Reported for benzene analysis in MW-4.
- E Analyte concentration exceeded the calibration range. The reported result is estimated. Reported on MS&MSD sample #108219 and #108220 for benzene, ethylbenzene, MTBE, TBA and total xylenes.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. Reported on benzene, TBA, 1,2-DCE, ethylbenzene, MTBE and total xylenes analysis for MW-4.

The above qualifiers CL, D6, S5 and 1n appear once each in the laboratory report. However, none of them invalidate any of the reported results. Qualifier "CL", noted for benzene analysis in sample MW-1, did not deviate the reported result from historical trends. Qualifiers E and M1 appear several times in the report for resampling of MW-4; however, LCS recovery accepted the results. Based on a review of the laboratory's analytical report, including their QA/QC procedures and those implemented by Antea Group, we conclude that the laboratory data obtained during this groundwater sampling event are valid for their intended purpose.

3.0 CONCLUSIONS

Concentrations for the contaminants of concern continue to be reported above the laboratory reporting limit, primarily at wells along the southeastern property line. No notable deviations in established concentration trends or plume configuration are noted.

Antea Group is currently conducting field activities per the scope of work described in the December 13, 2011 *Remedial Investigation Work Plan Addendum*. Upon completion, Antea Group will present the results of the remediation pilot testing investigation under separate cover. Meanwhile, Antea Group will continue semi-annual monitoring of groundwater per the existing monitoring schedule.

4.0 REMARKS

The findings contained in this report represent Antea Group's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Antea USA, Inc., the data from those reports are used "as is" and is assumed to be accurate. Antea USA, Inc does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This report is based upon a specific scope of work requested by the client. The Contract between Antea Group and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea Group's Client and anyone else specifically listed on this report. Antea Group will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea Group makes no express or implied warranty as to the contents of this report.

Prepared by:




Matt Corley
Staff Professional



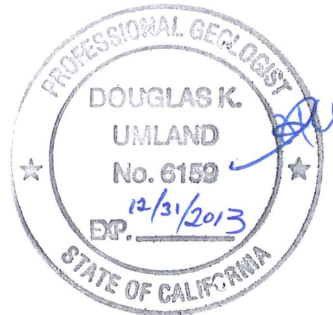
Nicole Persaud
Project Manager

Information, conclusions, and recommendations provided by Antea Group in this document regarding the site have been prepared under the supervision of and reviewed by the licensed professional whose signature follows.

Licensed Approver:



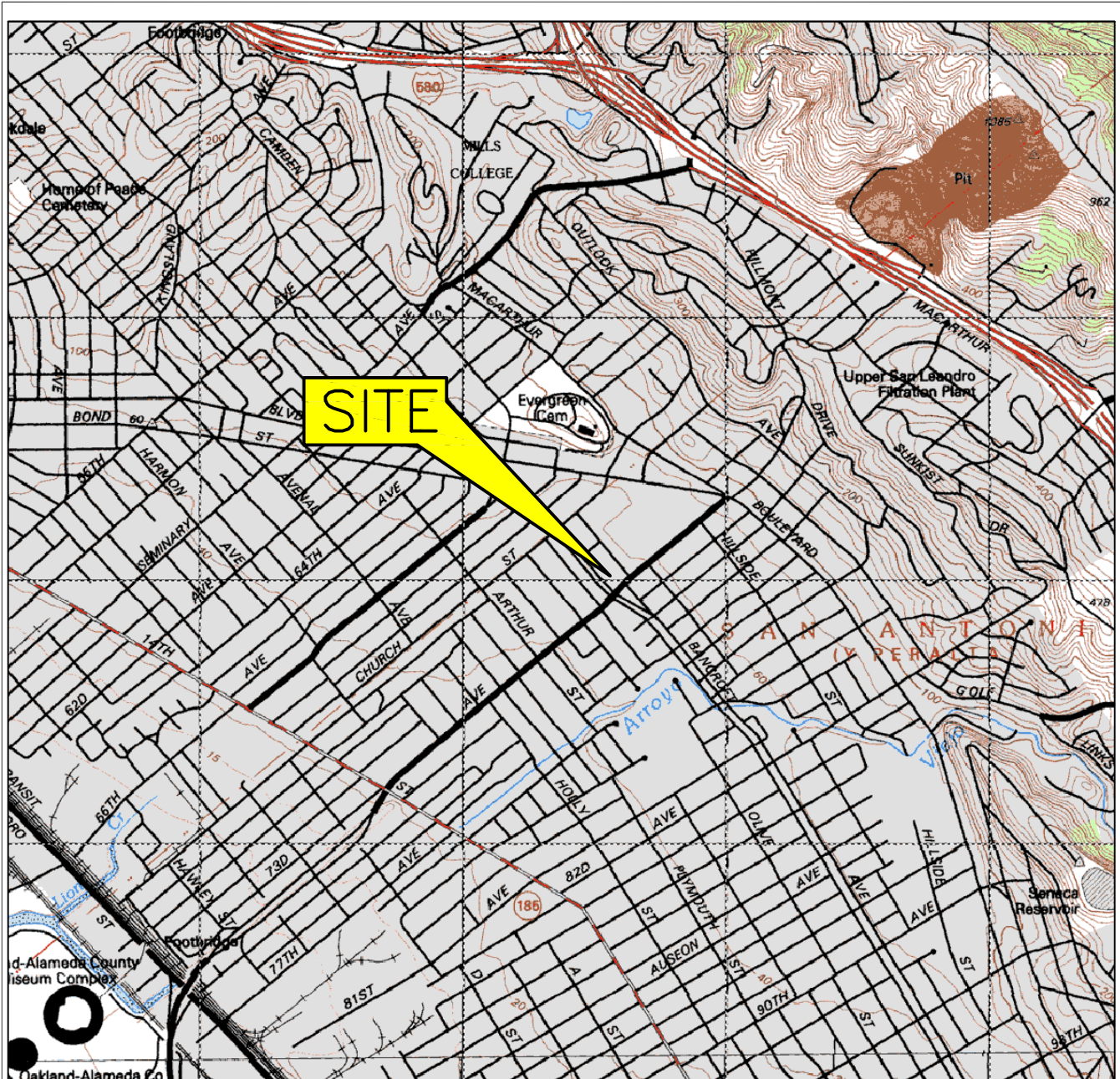
Douglas K. Umland
Senior Project Manager
California Registered Professional Geologist No. 6159



cc: Ms. Tiffany McClendon, One Eastmont Town Center, 7200 Bancroft Avenue, Oakland, CA 94605
GeoTracker (upload)

Figures

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Contour Map – February 20, 2012
Figure 4	Dissolved-Phase GRO Isoconcentration Map – February 20, 2012 and March 19, 2012
Figure 5	Dissolved-Phase Benzene Isoconcentration Map – February 20, 2012 and March 19, 2012
Figure 6	Dissolved-Phase MTBE Isoconcentration Map – February 20, 2012 and March 19, 2012
Figure 7	Dissolved-Phase TBA Isoconcentration Map – February 20, 2012 and March 19, 2012



0 2000 FT



SCALE 1:24,000



QUADRANGLE LOCATION

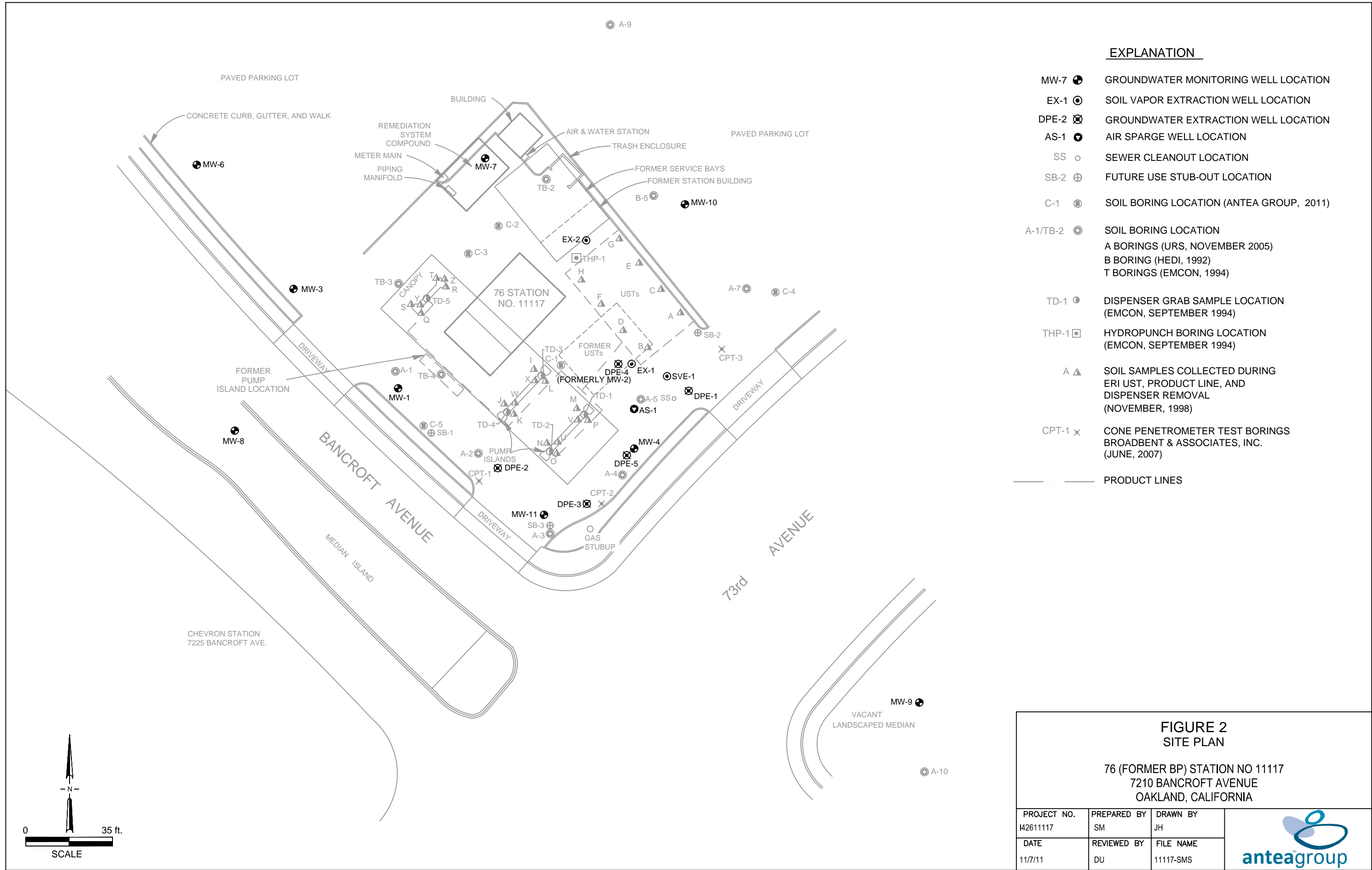
GENERAL NOTES:
 BASE MAP FROM USGS, 7.5 MINUTE
 TOPOGRAPHIC OAKLAND, CA. PHOTO REVISED 1980

FIGURE 1
 SITE LOCATION MAP

76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND CALIFORNIA

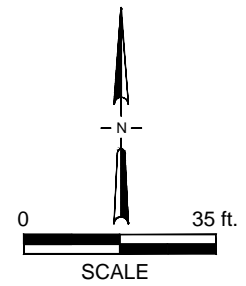
PROJECT NO. 142611117	PREPARED BY DK	DRAWN BY JH
DATE 03/30/11	REVIEWED BY DU	FILE NAME 11117-TOP0





EXPLANATION


- MW-7 ● GROUNDWATER MONITORING WELL LOCATION
- EX-1 ⊙ SOIL VAPOR EXTRACTION WELL LOCATION
- DPE-2 ⊗ GROUNDWATER EXTRACTION WELL LOCATION
- AS-1 ● AIR SPARGE WELL LOCATION
- SS ○ SEWER CLEANOUT LOCATION
- SB-2 ⊕ FUTURE USE STUB-OUT LOCATION
- C-1 ● SOIL BORING LOCATION (ANTEA GROUP, 2011)
- A-1/TB-2 ● SOIL BORING LOCATION
A BORINGS (URS, NOVEMBER 2005)
B BORING (HEDI, 1992)
T BORINGS (EMCON, 1994)
- TD-1 ● DISPENSER GRAB SAMPLE LOCATION (EMCON, SEPTEMBER 1994)
- THP-1 □ HYDROPUNCH BORING LOCATION (EMCON, SEPTEMBER 1994)
- A ▲ SOIL SAMPLES COLLECTED DURING ERI UST, PRODUCT LINE, AND DISPENSER REMOVAL (NOVEMBER, 1998)
- CPT-1 × CONE PENETROMETER TEST BORINGS BROADBENT & ASSOCIATES, INC. (JUNE, 2007)
- — — PRODUCT LINES

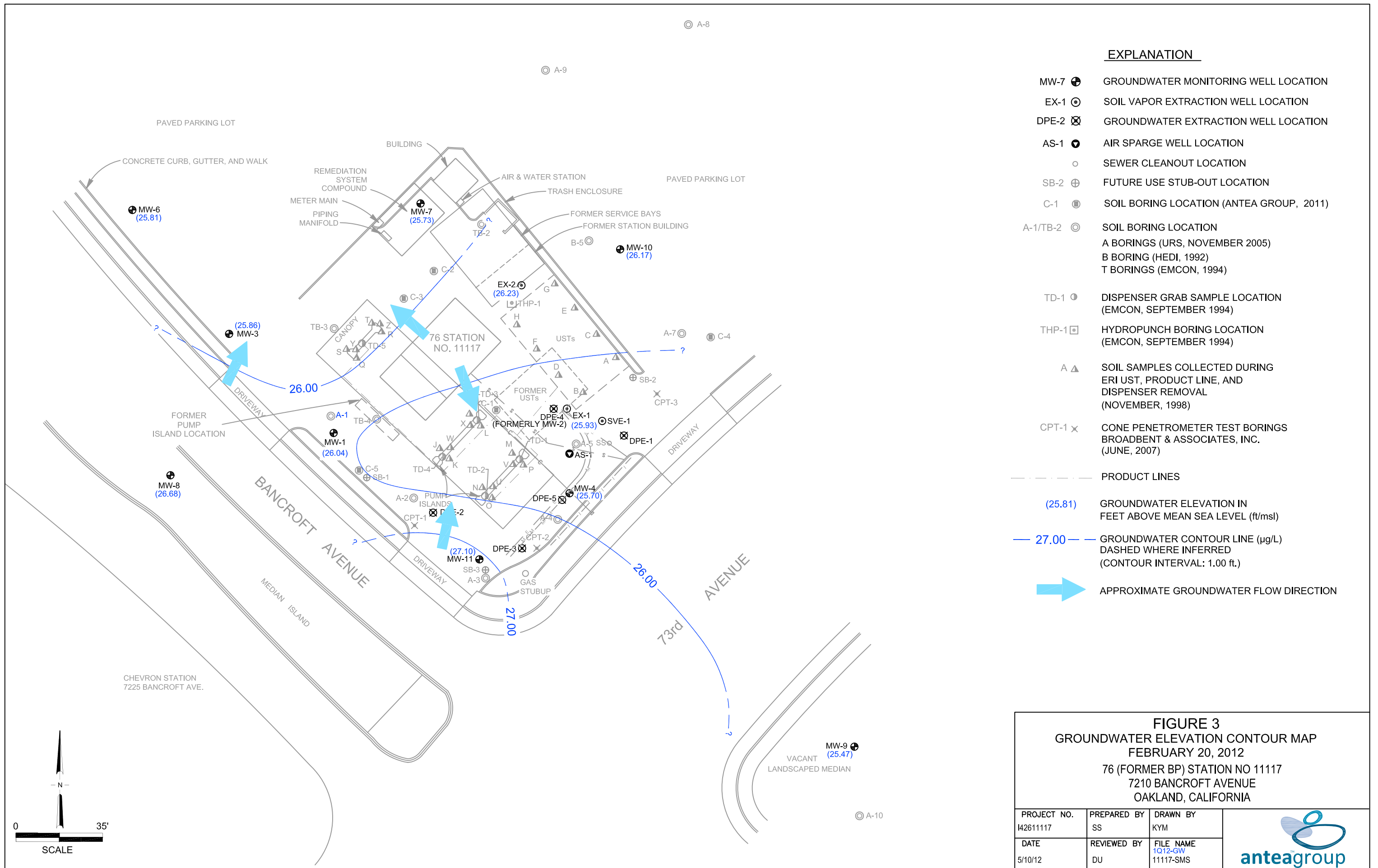


**FIGURE 2
SITE PLAN**

76 (FORMER BP) STATION NO 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH
DATE 11/7/11	REVIEWED BY DU	FILE NAME 11117-SMS



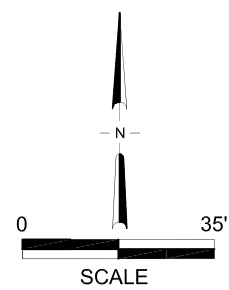


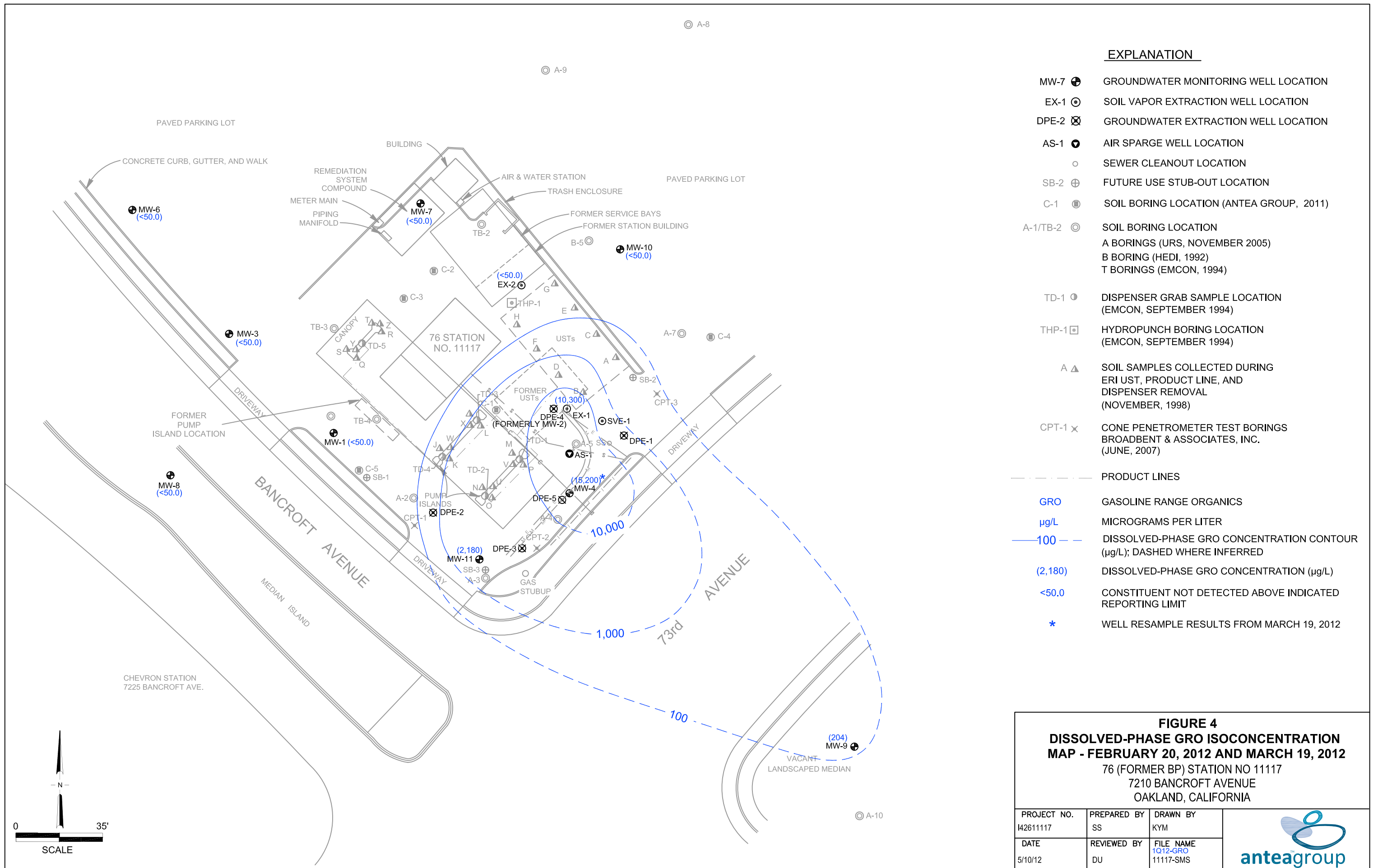
EXPLANATION

- MW-7 GROUNDWATER MONITORING WELL LOCATION
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(EMCON, SEPTEMBER 1994)
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(EMCON, SEPTEMBER 1994)
- A SOIL SAMPLES COLLECTED DURING
 ERI UST, PRODUCT LINE, AND
 DISPENSER REMOVAL
(NOVEMBER, 1998)
- CPT-1 CONE PENETROMETER TEST BORINGS
 BROADBENT & ASSOCIATES, INC.
(JUNE, 2007)
- PRODUCT LINES
- (25.81) GROUNDWATER ELEVATION IN
 FEET ABOVE MEAN SEA LEVEL (ft/msl)
- 27.00 — GROUNDWATER CONTOUR LINE (µg/L)
 DASHED WHERE INFERRED
 (CONTOUR INTERVAL: 1.00 ft.)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
 FEBRUARY 20, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SS	DRAWN BY KYM
DATE 5/10/12	REVIEWED BY DU	FILE NAME 1Q12-GW 11117-SMS



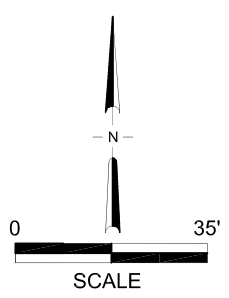


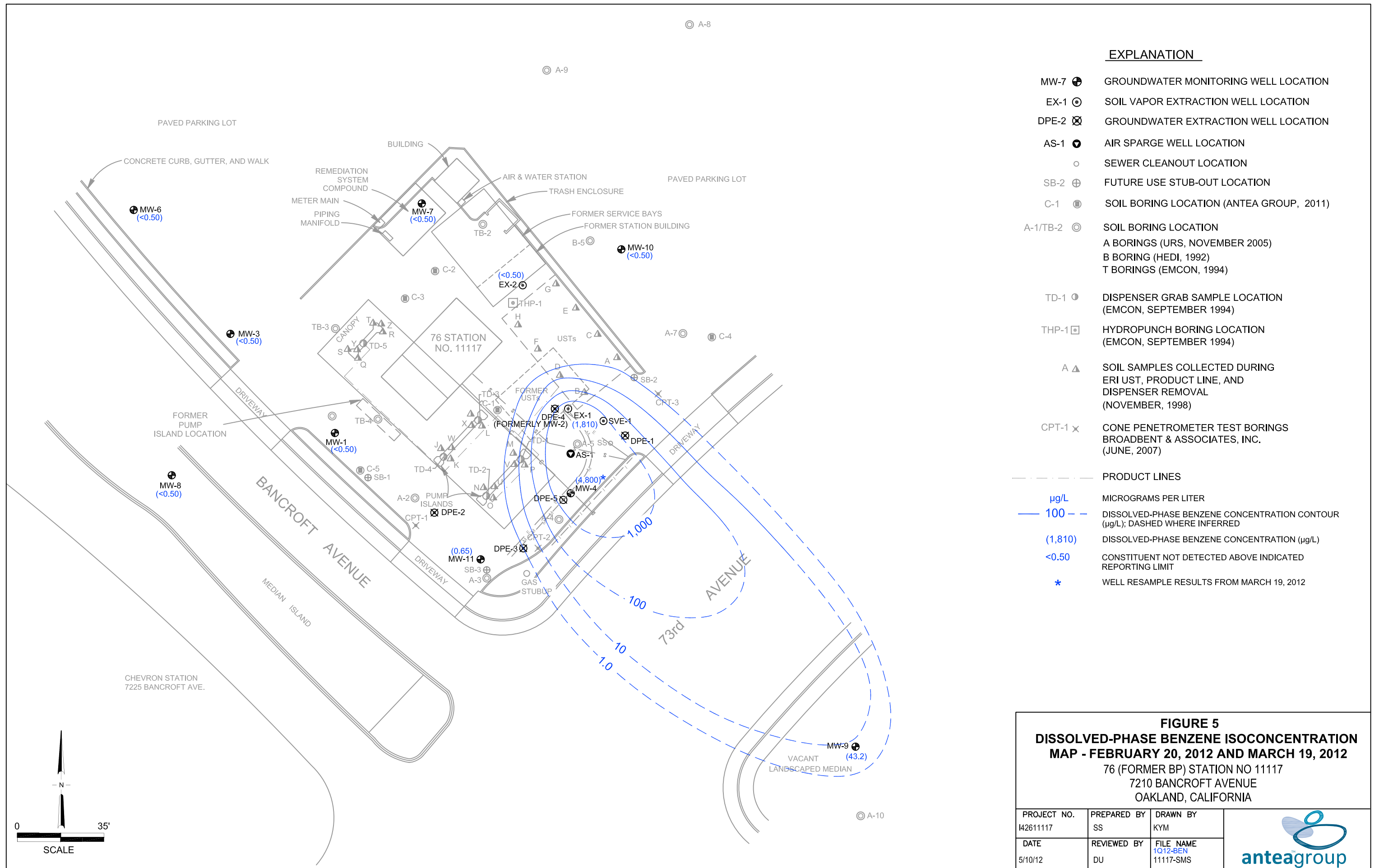
EXPLANATION

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- THP-1 ⊠ HYDROPUNCH BORING LOCATION (EMCON, SEPTEMBER 1994)
- A ▲ SOIL SAMPLES COLLECTED DURING ERI UST, PRODUCT LINE, AND DISPENSER REMOVAL (NOVEMBER, 1998)
- CPT-1 × CONE PENETROMETER TEST BORINGS BROADBENT & ASSOCIATES, INC. (JUNE, 2007)
- PRODUCT LINES
- GRO GASOLINE RANGE ORGANICS
- µg/L MICROGRAMS PER LITER
- 100 — DISSOLVED-PHASE GRO CONCENTRATION CONTOUR (µg/L); DASHED WHERE INFERRED
- (2,180) DISSOLVED-PHASE GRO CONCENTRATION (µg/L)
- <50.0 CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- * WELL RESAMPLE RESULTS FROM MARCH 19, 2012

FIGURE 4
DISSOLVED-PHASE GRO ISOCONCENTRATION
MAP - FEBRUARY 20, 2012 AND MARCH 19, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SS	DRAWN BY KYM	
DATE 5/10/12	REVIEWED BY DU	FILE NAME 1Q12-GRO 11117-SMS	



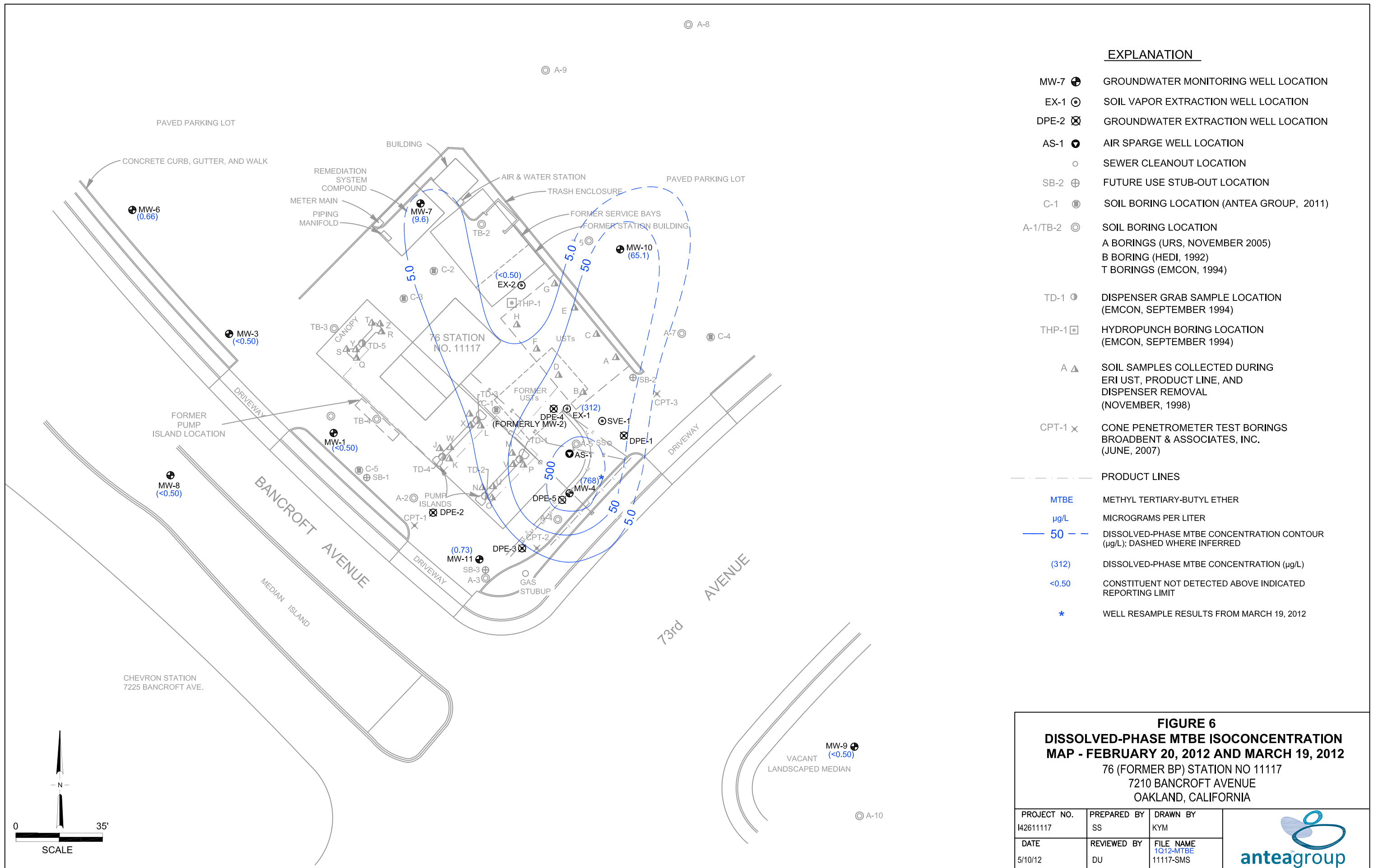


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- TD-1 ⊙ DISPENSER GRAB SAMPLE LOCATION
(EMCON, SEPTEMBER 1994)
- THP-1 ⊠ HYDROPUNCH BORING LOCATION
(EMCON, SEPTEMBER 1994)
- A ▲ SOIL SAMPLES COLLECTED DURING
ERI UST, PRODUCT LINE, AND
DISPENSER REMOVAL
(NOVEMBER, 1998)
- CPT-1 × CONE PENETROMETER TEST BORINGS
BROADBENT & ASSOCIATES, INC.
(JUNE, 2007)
- PRODUCT LINES
- µg/L MICROGRAMS PER LITER
- 100 — DISSOLVED-PHASE BENZENE CONCENTRATION CONTOUR
(µg/L); DASHED WHERE INFERRED
- (1,810) DISSOLVED-PHASE BENZENE CONCENTRATION (µg/L)
- <math><0.50</math> CONSTITUENT NOT DETECTED ABOVE INDICATED
REPORTING LIMIT
- * WELL RESAMPLE RESULTS FROM MARCH 19, 2012

FIGURE 5
DISSOLVED-PHASE BENZENE ISOCONCENTRATION
MAP - FEBRUARY 20, 2012 AND MARCH 19, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SS	DRAWN BY KYM	
DATE 5/10/12	REVIEWED BY DU	FILE NAME 1Q12-BEN 11117-SMS	



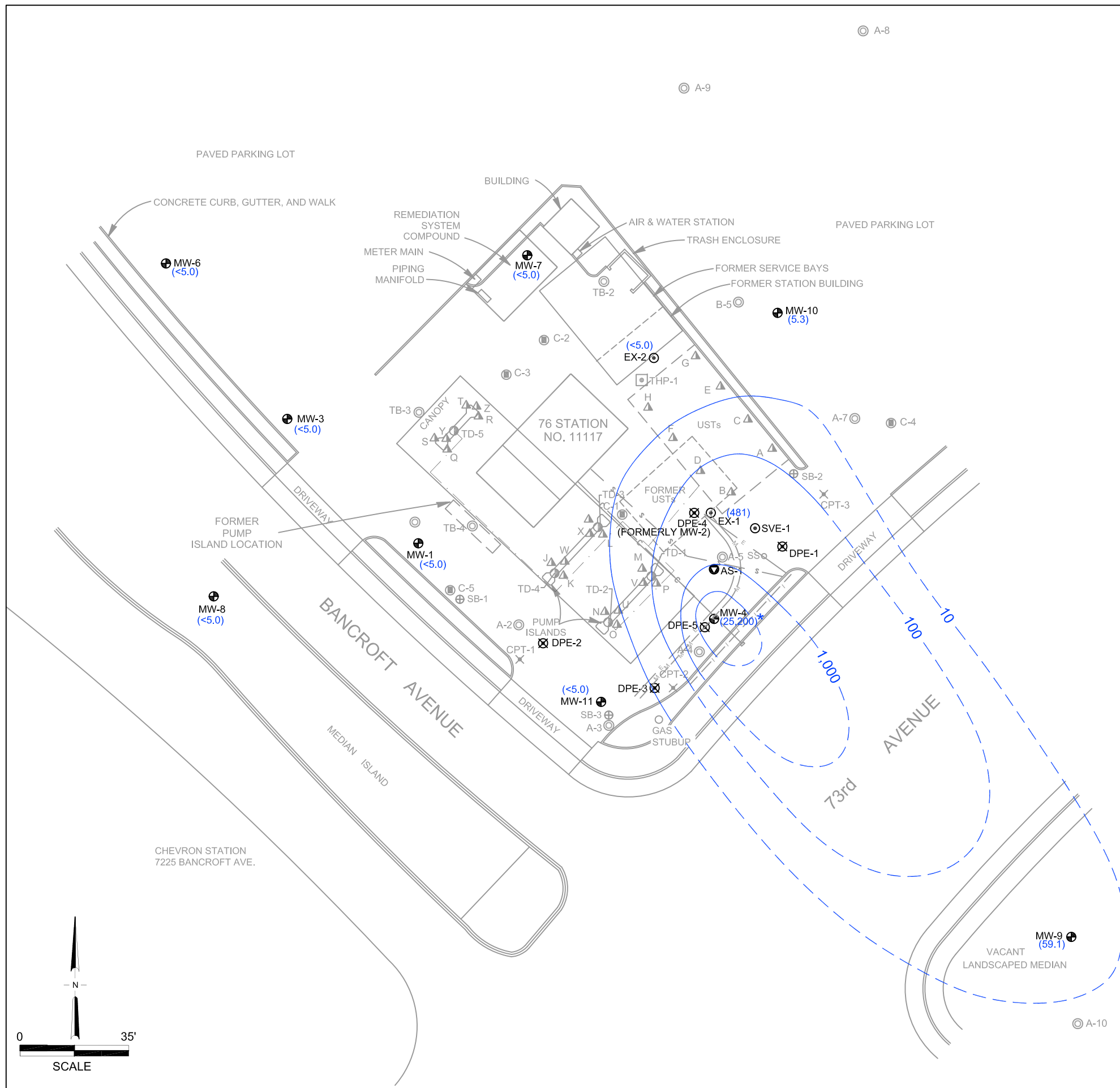
EXPLANATION

- MW-7 ⊕ GROUNDWATER MONITORING WELL LOCATION
- EX-1 ⊙ SOIL VAPOR EXTRACTION WELL LOCATION
- DPE-2 ⊗ GROUNDWATER EXTRACTION WELL LOCATION
- AS-1 ⊖ AIR SPARGE WELL LOCATION
- SEWER CLEANOUT LOCATION
- SB-2 ⊕ FUTURE USE STUB-OUT LOCATION
- C-1 ⊙ SOIL BORING LOCATION (ANTEA GROUP, 2011)
- A-1/TB-2 ⊙ SOIL BORING LOCATION
A BORINGS (URS, NOVEMBER 2005)
B BORING (HEDI, 1992)
T BORINGS (EMCON, 1994)
- TD-1 ⊙ DISPENSER GRAB SAMPLE LOCATION (EMCON, SEPTEMBER 1994)
- THP-1 ⊠ HYDROPUNCH BORING LOCATION (EMCON, SEPTEMBER 1994)
- A ▲ SOIL SAMPLES COLLECTED DURING ERI UST, PRODUCT LINE, AND DISPENSER REMOVAL (NOVEMBER, 1998)
- CPT-1 × CONE PENETROMETER TEST BORINGS BROADBENT & ASSOCIATES, INC. (JUNE, 2007)
- PRODUCT LINES
- MTBE METHYL TERTIARY-BUTYL ETHER
- µg/L MICROGRAMS PER LITER
- 50 — DISSOLVED-PHASE MTBE CONCENTRATION CONTOUR (µg/L); DASHED WHERE INFERRED
- (312) DISSOLVED-PHASE MTBE CONCENTRATION (µg/L)
- <math><0.50</math> CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- * WELL RESAMPLE RESULTS FROM MARCH 19, 2012

FIGURE 6
DISSOLVED-PHASE MTBE ISOCONCENTRATION
MAP - FEBRUARY 20, 2012 AND MARCH 19, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SS	DRAWN BY KYM
DATE 5/10/12	REVIEWED BY DU	FILE NAME 1Q12-MTBE 11117-SMS






EXPLANATION	
MW-7	GROUNDWATER MONITORING WELL LOCATION
EX-1	SOIL VAPOR EXTRACTION WELL LOCATION
DPE-2	GROUNDWATER EXTRACTION WELL LOCATION
AS-1	AIR SPARGE WELL LOCATION
○	SEWER CLEANOUT LOCATION
SB-2	FUTURE USE STUB-OUT LOCATION
C-1	SOIL BORING LOCATION (ANTEA GROUP, 2011)
A-1/TB-2	SOIL BORING LOCATION A BORINGS (URS, NOVEMBER 2005) B BORING (HEDI, 1992) T BORINGS (EMCON, 1994)
TD-1	DISPENSER GRAB SAMPLE LOCATION (EMCON, SEPTEMBER 1994)
THP-1	HYDROPUNCH BORING LOCATION (EMCON, SEPTEMBER 1994)
A	SOIL SAMPLES COLLECTED DURING ERI UST, PRODUCT LINE, AND DISPENSER REMOVAL (NOVEMBER, 1998)
CPT-1	CONE PENETROMETER TEST BORINGS BROADBENT & ASSOCIATES, INC. (JUNE, 2007)
PRODUCT LINES	
TBA	TERTIARY BUTYL ALCOHOL
µg/L	MICROGRAMS PER LITER
100	DISSOLVED-PHASE TBA CONCENTRATION CONTOUR (µg/L); DASHED WHERE INFERRED
(481)	DISSOLVED-PHASE TBA CONCENTRATION (µg/L)
<5.0	CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
*	WELL RESAMPLE RESULTS FROM MARCH 19, 2012

FIGURE 7
DISSOLVED-PHASE TBA ISOCONCENTRATION
MAP - FEBRUARY 20, 2012 AND MARCH 19, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SS	DRAWN BY KYM
DATE 5/10/12	REVIEWED BY DU	FILE NAME 1Q12-TBA 11117-SMS



Tables

Table 1	Soil Boring and Monitoring Well Construction Details
Table 2	Current Groundwater Gauging and Analytical Data
Table 3	Historical Groundwater Gauging and Analytical Data
Table 3a	Additional Historical Groundwater Analytical Data

**TABLE 1
SOIL BORING AND MONITORING WELL CONSTRUCTION DETAILS
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**

Updated 11/09/2011

Boring/Well ID	Well/Boring Completion Date	TOC Elevation ¹ (ft)	Borehole Depth (ft bgs)	Borehole Diameter (in)	Well Depth (ft)	Well Casing Diameter (in)	Well Casing Material	Well Screen Slot Size (in)	Well Screen Interval (ft bgs)	Cement Grout Seal Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Filter Pack Interval (ft bgs)	Comments
Soil Borings													
B-5	Jul-92	NA	50.0	8.0	NA	NA	NA	NA	NA to NA	0.0 to 50.0	NA to NA	NA to NA	
THP-1	Sep-94	NA	45.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 45.0	NA to NA	NA to NA	
TB-2	Sep-94	NA	45.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 45.0	NA to NA	NA to NA	
TB-3	Sep-94	NA	45.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 45.0	NA to NA	NA to NA	
TB-4	Sep-94	NA	45.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 45.0	NA to NA	NA to NA	
A-1	Sep-05	NA	46.5	4.25	NA	NA	NA	NA	NA to NA	0.0 to 46.5	NA to NA	NA to NA	
A-2	Sep-05	NA	42.0	2.0	NA	NA	NA	NA	NA to NA	0.0 to 42.0	NA to NA	NA to NA	
A-3	Nov-05	NA	36.0	2.0	NA	NA	NA	NA	NA to NA	0.0 to 36.0	NA to NA	NA to NA	
A-4	Nov-05	NA	36.0	2.0	NA	NA	NA	NA	NA to NA	0.0 to 36.0	NA to NA	NA to NA	
A-5	Nov-05	NA	36.0	2.0	NA	NA	NA	NA	NA to NA	0.0 to 36.0	NA to NA	NA to NA	
A-7	Nov-05	NA	36.5	4.25	NA	NA	NA	NA	NA to NA	0.0 to 36.5	NA to NA	NA to NA	
A-8	Nov-05	NA	36.5	4.25	NA	NA	NA	NA	NA to NA	0.0 to 36.5	NA to NA	NA to NA	
A-9	Nov-05	NA	36.5	4.25	NA	NA	NA	NA	NA to NA	0.0 to 36.5	NA to NA	NA to NA	
A-10	Nov-05	NA	39.0	4.25	NA	NA	NA	NA	NA to NA	0.0 to 39.0	NA to NA	NA to NA	
CPT-1	Apr-07	NA	60.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 60.0	NA to NA	NA to NA	
CPT-2	Apr-07	NA	60.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 60.0	NA to NA	NA to NA	
CPT-3	Apr-07	NA	60.0	1.75	NA	NA	NA	NA	NA to NA	0.0 to 60.0	NA to NA	NA to NA	
C-1	Oct-11	NA	35.0	3.25	NA	NA	NA	NA	NA to NA	0.0 to 35.0	NA to NA	NA to NA	
C-2	Oct-11	NA	35.0	3.25	NA	NA	NA	NA	NA to NA	0.0 to 35.0	NA to NA	NA to NA	
C-3	Oct-11	NA	35.0	3.25	NA	NA	NA	NA	NA to NA	0.0 to 35.0	NA to NA	NA to NA	
C-4	Oct-11	NA	35.0	3.25	NA	NA	NA	NA	NA to NA	0.0 to 35.0	NA to NA	NA to NA	
C-5	Oct-11	NA	35.0	3.25	NA	NA	NA	NA	NA to NA	0.0 to 35.0	NA to NA	NA to NA	
Groundwater Monitoring Wells													
MW-1	Dec-91	43.14	40	8	40	2	PVC	0.02	20.0 to 40.0	0.0 to 17.0	17.0 to 18.0	18.0 to 40.0	
MW-2	Dec-91	51.07	40	8	40	2	PVC	0.02	20.0 to 40.0	0.0 to 17.0	17.0 to 18.0	18.0 to 40.0	Well destroyed November 17, 2007
MW-3	Dec-89	43.27	45	8	45	2	PVC	0.02	30.0 to 45.0	0.0 to 3.0	3.0 to 25.0	25.0 to 45.0	
MW-4	Jul-92	43.64	40	8	40	2	PVC	0.02	20.0 to 40.0	0.0 to 17.0	17.0 to 18.0	18.0 to 40.0	
MW-6	Jul-92	43.64	40	8	40	2	PVC	0.02	20.0 to 40.0	0.0 to 17.0	17.0 to 18.0	18.0 to 40.0	
MW-7	Oct-94	44.21	45	8	45	2	PVC	0.02	25.0 to 45.0	0.0 to 21.0	21.0 to 23.0	23.0 to 45.0	
MW-8	Oct-94	44.18	40	8	40	2	PVC	0.02	25.0 to 40.0	0.0 to 21.0	21.0 to 23.0	23.0 to 40.0	
MW-9	Oct-94	44.35	40	8	40	2	PVC	0.02	25.0 to 40.0	0.0 to 21.0	21.0 to 23.0	23.0 to 40.0	
MW-10	Jul-97	46.17	37.5	8	35	2	PVC	0.02	15.0 to 35.0	0.0 to 13.0	13.0 to 14.0	14.0 to 37.5	
MW-11	Nov-07	43.34	40	10	40	4	PVC	0.02	15.0 to 40.0	0.0 to 10.0	10.0 to 13.0	13.0 to 40.0	Graphic log indicates TD = 35 ft bgs

TABLE 1
SOIL BORING AND MONITORING WELL CONSTRUCTION DETAILS
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

Updated 11/09/2011

Boring/Well ID	Well/Boring Completion Date	TOC Elevation ¹ (ft)	Borehole Depth (ft bgs)	Borehole Diameter (in)	Well Depth (ft)	Well Casing Diameter (in)	Well Casing Material	Well Screen Slot Size (in)	Well Screen Interval (ft bgs)	Cement Grout Seal Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Filter Pack Interval (ft bgs)	Comments
Remediation Wells													
EX-1	Nov-99	44.20	39.5	10	40	4	PVC	0.02	18.0 to 38.0	0.0 to 15.0	15.0 to 16.0	16.0 to 39.5	
EX-2	Nov-99	45.33	36.5	10	40	4	PVC	0.02	15.0 to 35.0	0.0 to 13.0	13.0 to 13.0	13.0 to 36.5	
DPE-1	Nov-07	44.28	40	10	38	4	PVC	0.02	15.0 to 40.0	0.0 to 10.0	10.0 to 13.0	13.0 to 40.0	
DPE-2	Nov-07	43.03	40	10	40	4	PVC	0.02	15.0 to 40.0	0.0 to 10.0	10.0 to 13.0	13.0 to 40.0	
DPE-3	Nov-07	43.27	40	10	40	4	PVC	0.02	13.0 to 38.0	0.0 to 8.0	8.0 to 11.0	11.0 to 40.0	
DPE-4	Nov-07	44.08	45	10	38	4	PVC	0.01	15.0 to 40.0	0.0 to 10.0	10.0 to 13.0	13.0 to 45.0	Installed in same borehole as destroyed well MW-2
DPE-5	Nov-07	44.60	40	10	35	4	PVC	0.01	15.0 to 40.0	0.0 to 10.0	10.0 to 13.0	13.0 to 40.0	Log indicates Screen Interval at 15-38 ft bgs
SVE-1	Oct-11	44.78	22	10	22	4	PVC	0.02	10.0 to 22.0	0.0 to 6.0	6.0 to 8.0	8.0 to 22.0	
AS-1	Oct-11	44.64	35	3.25	35	0.25/2.0	Teflon/SS	NA	33.5 to 34.0	0.0 to 31.5	31.5 to 32.5	32.5 to 35.0	

Notes:

ft = feet	B and C = soil boring
in = inches	A = hydropunch boring
TOC = Top of Casing	CPT = cone penetrometer boring
bgs = below ground surface	MW = monitoring well
NA = not applicable	EX = extraction well
PVC = polyvinyl chloride	DPE = extraction well
SS = stainless steel	AS=air sparge well
	SVE=soil vapor extraction well

¹ = TOC Elevations were surveyed to a local datum on the following dates:

MW-2 -- January 1, 1992 by HETI

MW-1, MW-3 through MW-11, EX-1, EX-2, DPE-1 through DPE-5, AS-1, and SVE-1 -- October 24, 2011 by Mid Coast Engineers

TABLE 2
CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA												
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
EX-1	2/20/2012	44.20	18.27	NP	25.93	10300	1810	586	350	712	312	<2.5	<2.5	12.9	481	<1250	<5.0	44.1
EX-2	2/20/2012	45.33	19.10	NP	26.23	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-1	2/20/2012	43.14	17.10	NP	26.04	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-3	2/20/2012	43.27	17.41	NP	25.86	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-4 **	2/20/2012	43.64	17.94	NP	25.70	692000	4870	505	7080	29800	228	<25.0	<25.0	<25.0	4700	<12500	<50.0	115
	3/19/2012	43.64	17.75	NP	25.89	15200	4800	125	562	512	768	<0.50	3.2	6.0	25200	<250	<1.0	<1.0
MW-6	2/20/2012	43.64	17.83	NP	25.81	<50.0	<0.50	<0.50	<0.50	<1.5	0.66	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-7	2/20/2012	44.21	18.48	NP	25.73	<50.0	<0.50	<0.50	<0.50	<1.5	9.6	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-8	2/20/2012	44.18	17.50	NP	26.68	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-9	2/20/2012	44.35	18.88	NP	25.47	204	43.2	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	59.1	<250	<1.0	<1.0
MW-10	2/20/2012	46.17	20.00	NP	26.17	<50.0	<0.50	<0.50	<0.50	<1.5	65.1	<0.50	<0.50	<0.50	5.3	<250	<1.0	<1.0
MW-11	2/20/2012	43.34	16.24	NP	27.10	2180	0.65	3.5	48.9	70.6	0.73	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0

Gauging Notes:

TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available
** - Well MW-4 was resampled.

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit
ug/L - micrograms/liter
GRO- gasoline range organics
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)	
DPE-1	12/14/2007	38.95	21.62	NP	17.33	--	360	24	<0.5	3.4	<0.5	--	<0.5	3.4	<0.5	1300	<300	<0.5	<0.5	
	2/12/2008	38.95	16.13	NP	22.82	--	4700	2000	310	130	360	--	<10	<10	<10	3900	<2000	<10	<10	
	5/22/2008	38.95	18.03	NP	20.92	--	16000	3900	94	510	1700	--	<40	<40	<40	4400	<24000	<40	<40	
	8/25/2008	38.95	20.95	NP	18.00	--	1300	250	<20	<20	<20	--	<20	<20	<20	4000	<12000	<20	<20	
	12/17/2008	38.95	22.33	NP	16.62	--	480	<5	<5	<5	<5	--	<5	<5	<5	1200	<3000	<5	<5	
	2/25/2009	38.95	18.15	NP	20.80	--	1100	170	<10	<10	<10	--	--	--	--	--	--	--	--	--
8/15/2011	38.95	16.46	NP	22.49	--	571	16.4	5.4	6.3	12.0	1.1	<0.50	<0.50	<0.50	140	<250	<1.0	<1.0		
DPE-2	12/14/2007	37.64	20.09	NP	17.55	--	2500	1.2	0.99	12	32	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
	2/12/2008	37.64	14.35	NP	23.29	--	1100	9.1	9.3	33	91	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5	
	5/22/2008	37.64	16.60	NP	21.04	--	1000	1.2	3.7	11	18	--	<0.5	<0.5	<0.5	<10	<300	<0.5	<0.5	
	8/25/2008	37.64	19.47	NP	18.17	--	780	0.52	<0.5	7.1	6.6	--	<0.5	<0.5	<0.5	<10	<300	<0.5	<0.5	
	12/17/2008	37.64	21.35	NP	16.29	--	21000	230	180	630	1900	--	<10	<10	<10	<200	<6000	<10	<10	
	2/25/2009	37.64	16.60	NP	21.04	--	16000	170	180	580	1500	<10	--	--	--	--	--	--	--	--
8/15/2011	37.64	15.29	NP	22.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DPE-3	12/14/2007	37.82	20.45	NP	17.37	--	1300	1800	840	830	1200	--	<25	<25	<25	1700	<15000	<25	<25	
	2/12/2008	37.82	14.88	NP	22.94	--	50	31	55	140	300	--	<5	<5	<5	<100	<1000	<5	<5	
	5/22/2008	37.82	16.92	NP	20.90	--	800	950	160	890	330	--	<20	<20	<20	<400	<12000	<20	<20	
	8/25/2008	37.82	19.77	NP	18.05	--	3900	8.5	21	91	260	--	<2.5	<2.5	<2.5	<50	<1500	<2.5	<2.5	
	12/17/2008	37.82	21.61	NP	16.21	--	24000	410	210	980	2900	--	<20	<20	<20	<400	<12000	<20	<20	
	2/25/2009	37.82	17.18	NP	20.64	--	4400	22	12	130	150	<2.5	--	--	--	--	--	--	--	--
8/15/2011	37.82	15.59	NP	22.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DPE-4	12/14/2007	38.46	21.00	NP	17.46	--	510000	12000	27000	4900	27000	--	<500	<500	<500	<20000	<300000	<500	<500	
	2/12/2008	38.46	15.43	NP	23.03	--	100000	6600	21000	3800	22000	--	<50	<50	55	<1000	<10000	<50	<50	
	5/22/2008	38.46	17.38	NP	21.08	--	130000	9700	26000	5000	28000	--	<400	<400	<400	<8000	<240000	<400	<400	
	8/25/2008	38.46	20.36	NP	18.10	--	190000	9100	19000	4100	22000	--	<400	<400	<400	<8000	<240000	<400	<400	
	12/17/2008	38.46	21.89	NP	16.57	--	160000	10000	20000	4500	22000	--	<400	<400	<400	<8000	<240000	<400	<400	
	2/25/2009	38.46	17.59	NP	20.87	--	130000	9900	21000	4600	22000	4500	--	--	--	--	--	--	--	--
8/15/2011	38.46	16.15	NP	22.31	--	57600	5920	7240	3830	12100	5560	<0.50	12.2	132	6920	<250	<1.0	<1.0		
DPE-5	12/14/2007	38.23	20.86	NP	17.37	--	300000	9200	4100	4600	20000	--	<500	<500	<500	<20000	<300000	<500	<500	
	2/12/2008	38.23	15.20	NP	23.03	--	63000	5600	2200	3400	12000	--	<50	<50	<50	2000	<10000	<50	<50	
	5/22/2008	38.23	17.37	NP	20.86	--	34000	6800	620	2600	6000	--	<200	<200	<200	4500	<120000	<200	<200	
	8/25/2008	38.23	21.80	NP	16.43	--	40000	5200	940	2100	5400	--	<100	<100	<100	5100	<60000	<100	<100	
	12/17/2008	38.23	21.96	NP	16.27	--	33000	4800	130	1700	2500	--	<100	<100	<100	6100	<60000	<100	<100	
	2/25/2009	38.23	17.47	NP	20.76	--	50000	6600	590	2300	6100	3100	--	--	--	--	--	--	--	--
8/15/2011	38.23	15.96	NP	22.27	--	15900	2420	127	1340	1650	773	<0.50	1.2	10.0	2510	<250	<1.0	<1.0		
EX-1	5/4/2004	44.20	16.29	NP	27.91	--	12000	2300	430	740	1100	--	<25	<25	38	<1000	<5000	<25	<25	
	8/31/2004	44.20	19.39	NP	24.81	--	13000	2500	95	650	1500	--	<50	<50	<50	<2000	<10000	<50	<50	
	11/23/2004	44.20	17.90	NP	26.30	--	13000	2700	94	460	1700	--	<25	<25	74	<1000	<5000	<25	<25	
	1/18/2005	44.20	14.20	NP	30.00	--	16000	2100	390	570	2500	--	<25	<25	54	<1000	<5000	<25	<25	
	6/29/2005	44.20	14.22	NP	29.98	--	6400	1100	52	280	790	--	<25	<25	30	<1000	<5000	<25	<25	
	9/1/2005	44.20	17.22	NP	26.98	--	7900	2000	94	400	870	--	<25	<25	46	<1000	<5000	<25	<25	
	11/3/2005	44.20	19.92	NP	24.28	--	22000	3200	640	550	3300	--	<25	<25	87	<1000	<5000	<25	<25	
	2/14/2006	44.20	15.40	NP	28.80	--	3500	<25	<25	<25	74	--	<25	<25	<25	<1000	<15000	<25	<25	
	5/30/2006	44.20	13.43	NP	30.77	--	8600	1400	120	490	1300	--	<25	<25	37	<1000	<15000	<25	<25	
	8/29/2006	44.20	17.74	NP	26.46	--	22000	2900	210	1400	3600	--	<25	<25	56	<1000	<15000	<25	<25	
	11/29/2006	44.20	20.25	NP	23.95	--	15000	4000	110	770	2700	--	<50	<50	75	<2000	<30000	<50	<50	
	2/20/2007	44.20	16.75	NP	27.45	--	10000	2500	<50	550	1300	--	<50	<50	<50	<2000	<30000	<50	<50	
	5/25/2007	44.20	17.04	NP	27.16	--	8600	2100	88	700	1400	--	<50	<50	<50	<2000	<30000	<50	<50	
	8/9/2007	44.20	19.76	NP	24.44	--	4800	870	40	230	460	--	<10	<10	15	440	<6000	<10	<10	
	11/9/2007	44.20	21.57	NP	22.63	--	5300	2700	29	220	200	--	<25	<25	<25	1900	<15000	<25	<25	
	12/14/2007	38.98	21.60	NP	17.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/12/2008	38.98	15.92	NP	23.06	--	19000	2500	<50	360	860	320	<50	<50	<50	2200	<10000	<50	<50	
	5/22/2008	38.98	17.85	NP	21.13	--	9300	1600	<50	310	1100	970	<50	<50	<50	<1000	<30000	<50	<50	
8/25/2008	38.98	20.71	NP	18.27	--	6100	1100	29	360	370	430	<25	<25	<25	830	<15000	<25	<25		
12/17/2008	38.98	22.20	NP	16.78	--	11000	1400	47	720	360	690	<25	<25	<25	980	<15000	<25	<25		

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-2	2/28/2002	49.95	17.42	NP	32.53	--	120000	13900	18800	3030	19600	--	--	--	--	--	--	--	--
	6/28/2002	49.95	17.04	NP	32.91	--	3700	190	23.3	139	287	--	--	--	--	--	--	--	--
	9/12/2002	49.95	19.52	NP	30.43	--	100000	13000	22000	3600	20000	--	--	--	--	--	--	--	--
	12/12/2002	49.95	21.08	NP	28.87	--	120000	13000	21000	4400	25000	--	--	--	--	--	--	--	--
	3/10/2003	49.95	17.84	NP	32.11	--	100000	17000	21000	3400	20000	--	--	--	--	--	--	--	--
	5/12/2003	49.95	16.66	NP	33.29	--	150000	16000	24000	3500	22000	--	--	--	--	--	--	--	--
	8/27/2003	49.95	19.65	NP	30.30	--	120000	14000	12000	3900	20000	--	<120	<120	140	<5000	<25000	--	--
	11/10/2003	49.95	20.80	NP	29.15	--	97000	12000	9500	3600	15000	--	<250	<250	<250	<10000	<50000	--	--
	2/3/2004	49.95	16.82	NP	33.13	--	130000	14000	19000	3400	20000	--	--	--	--	--	--	--	--
	5/4/2004	49.95	16.19	NP	33.76	--	120000	12000	16000	3700	22000	--	<250	<250	<250	<10000	<50000	<250	<250
	8/31/2004	49.95	19.50	NP	30.45	--	99000	10000	13000	3700	18000	--	--	--	--	--	--	--	--
	11/23/2004	49.95	18.20	NP	31.75	--	110000	8200	17000	4000	23000	--	<250	<250	<250	<10000	<50000	<250	<250
	1/18/2005	49.95	14.91	NP	35.04	--	96000	6500	14000	3500	21000	--	<100	<100	<100	<4000	<20000	<100	<100
	6/29/2005	49.95	13.98	NP	35.97	--	54000	6200	4900	3300	12000	--	--	--	--	--	--	--	--
	9/1/2005	49.95	17.00	NP	32.95	--	58000	6300	6000	3300	15000	--	<100	<100	100	<4000	<20000	<100	<100
	11/3/2005	49.95	20.25	NP	29.70	--	63000	7400	3700	3300	10000	--	<100	<100	100	<4000	<20000	<100	<100
	2/14/2006	49.95	13.72	NP	36.23	--	97000	7500	11000	4300	16000	--	<100	<100	<100	<4000	<60000	<100	<100
	5/30/2006	49.95	13.50	NP	36.45	--	28000	5200	2500	1500	3300	--	<100	<100	<100	<4000	<60000	<100	<100
8/29/2006	49.95	18.16	NP	31.79	--	65000	7200	4500	3200	11000	--	<100	<100	100	<4000	<60000	<100	<100	
11/29/2006	49.95	20.06	NP	29.89	--	46000	8500	4600	3300	10000	--	<120	<120	120	<5000	<75000	<120	<120	
2/20/2007	49.95	16.43	NP	33.52	--	78000	9700	12000	4100	16000	--	<100	<100	<100	<4000	<60000	<100	<100	
5/25/2007	49.95	16.80	NP	33.15	--	62000	7400	9500	4100	15000	--	<200	<200	<200	<8000	<120000	<200	<200	
8/9/2007	49.95	19.55	NP	30.40	--	58000	7400	5000	3800	12000	--	<100	<100	<100	<4000	<60000	<100	<100	
11/9/2007	49.95	21.53	NP	28.42	--	49000	6300	3300	2900	8300	--	<100	<100	<100	<4000	<60000	<100	<100	
MW-3	1/5/1992	43.27	33.69	NP	9.58	4000	7400	790	23	210	40	--	--	--	--	--	--	--	
	1/10/1992	43.27	33.74	NP	9.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/5/1992	43.27	29.65	NP	13.62	--	0	130	5.3	93	20	--	--	--	--	--	--	--	
	7/24/1992	43.27	30.14	NP	13.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	7/27/1992	43.27	30.14	NP	13.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/15/1992	43.27	31.07	NP	12.20	<50	450	55	3.1	34	7.1	--	--	--	--	--	--	--	
	12/15/1992	43.27	31.93	NP	11.34	710	12000	940	<50	310	120	--	--	--	--	--	--	--	
	3/15/1993	43.27	25.71	NP	17.56	60	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	6/7/1993	43.27	25.80	NP	17.47	<50	150	3.6	<0.5	0.9	1.3	--	--	--	--	--	--	--	
	9/23/1993	43.27	29.18	NP	14.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/24/1993	43.27	NG	NG	NG	<50	160	8.4	<0.5	3.7	1.3	--	--	--	--	--	--	--	
	12/27/1993	43.27	29.25	NP	14.02	--	9400	1100	48	530	120	--	--	--	--	--	--	--	
	4/5/1994	43.27	26.84	NP	16.43	--	7000	860	19	330	52	--	--	--	--	--	--	--	
	7/22/1994	43.27	26.90	NP	16.37	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	10/13/1994	43.27	27.83	NP	15.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	1/25/1995	51.40	21.65	NP	29.75	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/19/1995	51.40	19.33	NP	32.07	--	2400	170	8	130	27	--	--	--	--	--	--	--	
	7/5/1995	51.40	20.27	NP	31.13	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	10/5/1995	51.40	23.73	NP	27.67	--	2300	210	3.1	10	5.1	--	--	--	--	--	--	--	
	1/12/1996	51.40	24.84	NP	26.56	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/22/1996	51.40	18.60	NP	32.80	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	7/2/1996	51.40	18.88	NP	32.52	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	11/8/1996	51.40	19.14	NP	32.26	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
1/3/1997	51.40	18.72	NP	32.68	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
4/28/1997	51.40	19.38	NP	32.02	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
7/1/1997	51.40	21.65	NP	29.75	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
10/2/1997	51.40	23.45	NP	27.95	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
1/9/1998	51.40	20.10	NP	31.30	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
5/6/1998	51.40	15.57	NP	35.83	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
7/21/1998	51.40	15.88	NP	35.52	--	51	<0.5	<1	<1	<1	--	--	--	--	--	--	--		

**TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-3	12/30/1998	51.40	20.30	NP	31.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/1999	51.40	19.75	NP	31.65	--	<50	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	5/10/1999	51.40	16.17	NP	35.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	51.40	22.05	NP	29.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/1999	51.40	22.55	NP	28.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	51.40	16.40	NP	35.00	--	350	22	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/22/2000	51.40	9.49	NP	41.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	51.40	13.02	NP	38.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/11/2000	51.40	13.30	NP	38.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	51.40	16.49	NP	34.91	--	1000	66.4	0.597	6.96	<1.5	--	--	--	--	--	--	--	--
	6/19/2001	51.40	18.82	NP	32.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	51.40	21.59	NP	29.81	--	230	<0.5	0.593	<0.5	<1.5	--	--	--	--	--	--	--	--
	12/27/2001	51.40	17.37	NP	34.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/2002	51.40	15.81	NP	35.59	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	6/28/2002	51.40	17.09	NP	34.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/12/2002	51.40	18.80	NP	32.60	--	52	3.3	8.6	1.7	12	--	--	--	--	--	--	--	--
	12/12/2002	51.40	20.57	NP	30.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/10/2003	51.40	16.68	NP	34.72	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/12/2003	51.40	14.72	NP	36.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/27/2003	51.40	18.50	NP	32.90	--	<50	<0.5	<0.5	<0.5	0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	11/10/2003	51.40	19.66	NP	31.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/2004	51.40	15.33	NP	36.07	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	8/31/2004	51.40	18.13	NP	33.27	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	11/23/2004	51.40	16.48	NP	34.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2005	51.40	13.06	NP	38.34	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	6/29/2005	51.40	13.00	NP	38.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/1/2005	51.40	16.00	NP	35.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/3/2005	51.40	18.91	NP	32.49	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/2006	51.40	12.90	NP	38.50	--	86	<0.5	<0.5	<0.5	0.55	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/30/2006	51.40	12.55	NP	38.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/2006	51.40	16.68	NP	34.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/29/2006	51.40	19.10	NP	32.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2/20/2007	51.40	15.29	NP	36.11	--	56	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
5/25/2007	51.40	15.94	NP	35.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/9/2007	51.40	18.70	NP	32.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
11/9/2007	51.40	20.27	NP	31.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/14/2007	37.56	20.21	NP	17.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/11/2008	37.56	14.68	NP	22.88	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5	
5/22/2008	37.56	16.64	NP	20.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/25/2008	37.56	19.40	NP	18.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2008	37.56	22.13	NP	15.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/25/2009	37.56	16.81	NP	20.75	--	71	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--	
5/21/2009	37.56	16.40	NP	21.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/14/2009	37.56	19.60	NP	17.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/10/2010	37.56	14.81	NP	22.75	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/20/2010	37.56	16.80	NP	20.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/7/2011	37.56	14.39	NP	23.17	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/15/2011	37.56	15.56	NP	22.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/20/2012	43.27	17.41	NP	25.86	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
MW-4	7/24/1992	43.64	30.02	NP	13.62	--	42000	3200	3600	1400	4100	--	--	--	--	--	--	--	
	7/27/1992	43.64	30.02	NP	13.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/15/1992	43.64	31.14	NP	12.50	1700	55000	7600	13000	2800	9500	--	--	--	--	--	--	--	

**TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-4	12/15/1992	43.64	31.98	NP	11.66	2200	36000	3700	4700	1200	4000	--	--	--	--	--	--	--	--
	3/15/1993	43.64	25.34	NP	18.30	1200	69000	7600	15000	2500	11000	--	--	--	--	--	--	--	--
	6/7/1993	43.64	25.67	NP	17.97	2500	73000	10000	19000	3400	14000	--	--	--	--	--	--	--	--
	9/23/1993	43.64	29.37	NP	14.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/1993	43.64	NG	NG	NG	5700	68000	11000	2100	8600	990	--	--	--	--	--	--	--	--
	12/27/1993	43.64	29.40	NP	14.24	--	32000	2500	4400	1300	4400	--	--	--	--	--	--	--	--
	4/5/1994	43.64	27.09	NP	16.55	--	64000	6500	14000	1900	9600	--	--	--	--	--	--	--	--
	7/22/1994	43.64	27.33	NP	16.31	--	85000	10000	20000	3200	13000	--	--	--	--	--	--	--	--
	10/13/1994	43.64	28.25	NP	15.39	--	51000	7100	13000	2100	8900	--	--	--	--	--	--	--	--
	1/25/1995	50.88	21.85	NP	29.03	--	26000	3600	9600	1200	6400	--	--	--	--	--	--	--	--
	4/19/1995	50.88	19.44	NP	31.44	--	89000	12000	24000	3500	18000	--	--	--	--	--	--	--	--
	7/5/1995	50.88	20.52	NP	30.36	--	130000	13000	29000	3300	25000	--	--	--	--	--	--	--	--
	10/5/1995	50.88	24.23	NP	26.65	--	110000	10000	23000	3600	17000	--	--	--	--	--	--	--	--
	1/12/1996	50.88	25.34	NP	25.54	--	46000	3500	8300	1100	8000	--	--	--	--	--	--	--	--
	4/22/1996	50.88	19.13	NP	31.75	--	40000	5100	9600	980	11800	--	--	--	--	--	--	--	--
	7/2/1996	50.88	20.67	NP	30.21	--	74000	9800	21000	2100	16600	--	--	--	--	--	--	--	--
	11/8/1996	50.88	20.95	NP	29.93	--	100000	7900	16000	2500	13700	--	--	--	--	--	--	--	--
	1/3/1997	50.88	20.54	NP	30.34	--	99000	17000	30000	4300	22700	--	--	--	--	--	--	--	--
	4/28/1997	50.88	21.28	NP	29.60	--	130000	12000	28000	3800	21000	--	--	--	--	--	--	--	--
	7/1/1997	50.88	23.61	NP	27.27	--	110000	16000	25000	4900	24400	--	--	--	--	--	--	--	--
	10/2/1997	50.88	25.39	NP	25.49	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/3/1997	50.88	NG	NG	NG	--	66000	8200	8600	2700	13400	--	--	--	--	--	--	--	--
	1/9/1998	50.88	21.25	NP	29.63	--	100000	9700	3200	1500	4700	--	--	--	--	--	--	--	--
	5/6/1998	50.88	15.96	NP	34.92	--	430000	6900	31000	11000	56000	--	--	--	--	--	--	--	--
	7/21/1998	50.88	16.10	NP	34.78	--	250000	11000	26000	5500	26900	--	--	--	--	--	--	--	--
	12/30/1998	50.88	20.91	NP	29.97	--	370000	11000	22000	8500	40000	92000	--	--	--	--	--	--	--
	2/2/1999	50.88	20.13	NP	30.75	--	190000	4100	19000	4800	32000	--	--	--	--	--	--	--	--
	5/10/1999	50.88	16.63	NP	34.25	--	2700	23	7.1	8.1	25	--	--	--	--	--	--	--	--
	9/23/1999	50.88	22.48	NP	28.40	--	180000	11000	29000	7000	38000	--	--	--	--	--	--	--	--
	12/23/1999	50.88	22.94	NP	27.94	--	66000	6300	5200	2200	7800	--	--	--	--	--	--	--	--
	3/27/2000	50.88	16.84	NP	34.04	--	120000	8700	12000	3800	16000	--	--	--	--	--	--	--	--
	5/22/2000	50.88	17.85	NP	33.03	--	110000	7600	16000	4400	20000	--	--	--	--	--	--	--	--
	8/31/2000	50.88	21.71	NP	29.17	--	110000	8800	7600	3400	14000	--	--	--	--	--	--	--	--
	12/11/2000	50.88	22.05	NP	28.83	--	70000	4580	3480	2550	9220	--	--	--	--	--	--	--	--
	3/20/2001	50.88	17.68	NP	33.20	--	100000	7100	4530	2540	9370	--	--	--	--	--	--	--	--
	6/19/2001	50.88	19.40	NP	31.48	--	180000	7430	14600	5400	25300	--	--	--	--	--	--	--	--
	9/20/2001	50.88	22.01	0.03	28.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/27/2001	50.88	17.96	NP	32.92	--	120000	6880	9030	2840	14600	--	--	--	--	--	--	--	--
	2/28/2002	50.88	17.06	NP	33.82	--	80000	4920	5450	2220	12300	--	--	--	--	--	--	--	--
	6/28/2002	50.88	17.76	NP	33.12	--	48000	2780	2770	1530	6790	--	--	--	--	--	--	--	--
9/12/2002	50.88	19.45	NP	31.43	--	46000	4500	6800	2600	10000	--	--	--	--	--	--	--	--	
12/12/2002	50.88	21.29	NP	29.59	--	36000	5200	3400	2000	6500	--	--	--	--	--	--	--	--	
3/10/2003	50.88	17.16	NP	33.72	--	70000	7000	4800	3300	13000	--	--	--	--	--	--	--	--	
5/12/2003	50.88	14.51	NP	36.37	--	75000	7600	3700	3400	13000	--	--	--	--	--	--	--	--	
8/27/2003	50.88	19.32	NP	31.56	--	77000	7500	1300	2100	4000	--	<250	<250	250	<10000	<50000	--	--	
11/10/2003	50.88	20.36	NP	30.52	--	110000	7100	3100	2100	5800	--	<500	<500	<500	<20000	<100000	--	--	
2/3/2004	50.88	16.51	NP	34.37	--	160000	8400	9700	5000	23000	--	<500	<500	<500	<20000	<100000	<500	<500	
5/4/2004	50.88	16.47	NP	34.41	--	110000	8100	7500	4300	17000	--	<250	<250	<250	<10000	<50000	<250	<250	
8/31/2004	50.88	19.16	NP	31.72	--	91000	6600	8400	3700	14000	--	<250	<250	<250	<10000	<50000	<250	<250	
11/23/2004	50.88	18.02	NP	32.86	--	7400000	20000	150000	320000	1400000	--	<2500	<2500	<2500	<100000	<500000	<2500	<2500	
1/18/2005	50.88	14.21	NP	36.67	--	170000	5400	14000	6900	33000	--	<250	<250	<250	<10000	<50000	<250	<250	
6/29/2005	50.88	13.86	NP	37.02	--	640000	3500	25000	24000	110000	--	<250	<250	<250	<10000	<50000	<250	<250	

**TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-6	5/10/1999	51.05	16.75	NP	34.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	51.05	22.55	NP	28.50	--	<50	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	12/23/1999	51.05	23.00	NP	28.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	51.05	16.89	NP	34.16	--	1700	4.4	0.54	<0.5	1	--	--	--	--	--	--	--	--
	5/22/2000	51.05	18.02	NP	33.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	51.05	21.62	NP	29.43	--	1200	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	12/11/2000	51.05	21.81	NP	29.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	51.05	16.97	NP	34.08	--	3300	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--
	6/19/2001	51.05	19.30	NP	31.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	51.05	22.00	NP	29.05	--	2200	2.04	8.1	3.62	13.7	--	--	--	--	--	--	--	--
	12/27/2001	51.05	17.85	NP	33.20	--	830	0.59	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	2/28/2002	51.05	16.31	NP	34.74	--	1100	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	6/28/2002	51.05	17.57	NP	33.48	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	9/12/2002	51.05	19.27	NP	31.78	--	190	1.9	4.6	1	7.3	--	--	--	--	--	--	--	--
	12/12/2002	51.05	20.94	NP	30.11	--	270	<2.5	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	--
	3/10/2003	51.05	17.11	NP	33.94	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/12/2003	51.05	15.18	NP	35.87	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	8/27/2003	51.05	18.90	NP	32.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	11/10/2003	51.05	20.13	NP	30.92	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	2/3/2004	51.05	15.83	NP	35.22	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	5/4/2004	51.05	15.62	NP	35.43	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	8/31/2004	51.05	18.56	NP	32.49	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	11/23/2004	51.05	16.95	NP	34.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2005	51.05	13.61	NP	37.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	6/29/2005	51.05	13.55	NP	37.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/1/2005	51.05	16.52	NP	34.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/3/2005	51.05	19.28	NP	31.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/2006	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/30/2006	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/2006	51.05	17.15	NP	33.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/29/2006	51.05	19.50	NP	31.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/2007	51.05	15.81	NP	35.24	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/25/2007	51.05	16.38	NP	34.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
8/9/2007	51.05	19.15	NP	31.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
11/9/2007	51.05	20.70	NP	30.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/14/2007	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/11/2008	51.05	15.08	NP	35.97	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5	
5/22/2008	51.05	17.07	NP	33.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/25/2008	51.05	19.82	NP	31.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2008	51.05	21.58	NP	29.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/25/2009	51.05	17.34	NP	33.71	--	120	<0.50	<0.50	<0.50	<0.50	13	--	--	--	--	--	--	--	
5/21/2009	51.05	16.85	NP	34.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/14/2009	51.05	20.03	NP	31.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/10/2010	51.05	15.31	NP	35.74	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/20/2010	51.05	16.60	NP	34.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/7/2011	51.05	14.86	NP	36.19	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/15/2011	51.05	16.07	NP	34.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/20/2012	43.64	17.83	NP	25.81	--	<50.0	<0.50	<0.50	<0.50	<1.5	0.66	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
MW-7	1/25/1995	51.40	21.67	NP	29.73	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/19/1995	51.40	25.27	NP	26.13	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	7/5/1995	51.40	24.63	NP	26.77	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	10/5/1995	51.40	28.21	NP	23.19	--	83	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	

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HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
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Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	1/12/1996	51.40	29.29	NP	22.11	--	63	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	4/22/1996	51.40	23.11	NP	28.29	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	7/2/1996	51.40	23.56	NP	27.84	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	11/8/1996	51.40	20.06	NP	31.34	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	1/3/1997	51.40	23.42	NP	27.98	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	4/28/1997	51.40	24.12	NP	27.28	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	7/1/1997	51.40	26.40	NP	25.00	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	10/2/1997	51.40	28.14	NP	23.26	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	1/9/1998	51.40	24.02	NP	27.38	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	5/6/1998	51.40	21.00	NP	30.40	--	1900	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	7/21/1998	51.40	21.17	NP	30.23	--	50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	12/30/1998	51.40	22.13	NP	29.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/1999	51.40	22.08	NP	29.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/10/1999	51.40	18.58	NP	32.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	51.40	24.29	NP	27.11	--	70	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	12/23/1999	51.40	24.53	NP	26.87	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	51.40	18.58	NP	32.82	--	910	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/22/2000	51.40	19.49	NP	31.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	51.40	22.53	NP	28.87	--	440	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	12/11/2000	51.40	22.75	NP	28.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	51.40	18.79	NP	32.61	--	1100	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--
	6/19/2001	51.40	19.82	NP	31.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	51.40	21.35	NP	30.05	--	1300	1.21	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--
	12/27/2001	51.40	20.36	NP	31.04	--	510	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	2/28/2002	51.40	21.86	NP	29.54	--	250	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	6/28/2002	51.40	22.64	NP	28.76	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	9/12/2002	51.40	23.51	NP	27.89	--	<50	<0.5	<0.5	<0.5	1	--	--	--	--	--	--	--	--
	12/12/2002	51.40	23.75	NP	27.65	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	3/10/2003	51.40	21.25	NP	30.15	--	61	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/12/2003	51.40	21.44	NP	29.96	--	<100	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	8/27/2003	51.40	23.30	NP	28.10	--	120	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	11/10/2003	51.40	20.24	NP	31.16	--	230	<1	<1	<1	<1	--	<1	<1	<1	<40	<200	--	--
	2/3/2004	51.40	20.63	NP	30.77	--	<250	<2.5	<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<100	<500	<2.5	<2.5
5/4/2004	51.40	21.89	NP	29.51	--	<250	<2.5	<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<100	<500	<2.5	<2.5	
8/31/2004	51.40	23.16	NP	28.24	--	<500	<5	<5	<5	<5	--	<5	<5	<5	<200	<1000	<5	<5	
11/23/2004	51.40	21.65	NP	29.75	--	590	<2.5	5	11	51	--	<2.5	<2.5	<2.5	<100	<500	<2.5	<2.5	
1/18/2005	51.40	16.28	NP	35.12	--	<250	<2.5	<2.5	<2.5	2.5	--	<2.5	<2.5	<2.5	<100	<500	<2.5	<2.5	
6/29/2005	51.40	14.50	NP	36.90	--	2200	43	97	92	390	--	<2.5	<2.5	<2.5	<100	<500	<2.5	<2.5	
9/1/2005	51.40	20.41	NP	30.99	--	<500	<5	<5	<5	<5	--	<5	<5	<5	<200	<1000	<5	<5	
11/3/2005	51.40	21.00	NP	30.40	--	130	<1	<1	<1	1	--	<1	<1	<1	<40	<200	<1	<1	
2/14/2006	51.40	16.31	NP	35.09	--	100	<0.5	<0.5	<0.5	0.87	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
5/30/2006	51.40	17.58	NP	33.82	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
8/29/2006	51.40	18.64	NP	32.76	--	100	<2.5	<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<100	<1500	<2.5	<2.5	
11/29/2006	51.40	20.35	NP	31.05	--	84	<2.5	<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<100	<1500	<2.5	<2.5	
2/20/2007	51.40	17.09	NP	34.31	--	160	<2.5	<2.5	<2.5	<2.5	--	<2.5	<2.5	<2.5	<100	<1500	<2.5	<2.5	
5/25/2007	51.40	17.20	NP	34.20	--	70	<1	<1	<1	<1	--	<1	<1	<1	<40	<600	<1	<1	
8/9/2007	51.40	19.95	NP	31.45	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
11/9/2007	51.40	23.28	NP	28.12	--	61	<0.5	<0.5	<0.5	1.3	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5	
12/14/2007	38.99	23.07	NP	15.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/11/2008	38.99	17.21	NP	21.78	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5	
5/22/2008	38.99	17.55	NP	21.44	--	200	<1	<1	<1	<1	--	<1	<1	<1	<20	<600	<1	<1	
8/25/2008	38.99	20.55	NP	18.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<300	<0.5	<0.5	

**TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-8	11/29/2006	50.88	19.35	NP	31.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/2007	50.88	14.57	NP	36.31	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/25/2007	50.88	16.11	NP	34.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/9/2007	50.88	19.25	NP	31.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/2007	50.88	20.92	NP	29.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2007	38.44	21.26	NP	17.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/12/2008	38.44	14.00	NP	24.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5
	5/22/2008	38.44	16.86	NP	21.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/25/2008	38.44	19.92	NP	18.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/17/2008	38.44	21.45	NP	16.99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/25/2009	38.44	16.19	NP	22.25	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	--	--
	5/21/2009	38.44	16.10	NP	22.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/14/2009	38.44	20.17	NP	18.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/10/2010	38.44	15.33	NP	23.11	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
8/20/2010	38.44	16.29	NP	22.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/7/2011	38.44	14.35	NP	24.09	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/15/2011	38.44	15.83	NP	22.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/20/2012	44.18	17.50	NP	26.68	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
MW-9	1/25/1995	51.05	22.32	NP	28.73	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/19/1995	51.05	19.86	NP	31.19	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	7/5/1995	51.05	20.78	NP	30.27	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	10/5/1995	51.05	24.33	NP	26.72	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	1/12/1996	51.05	25.44	NP	25.61	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/22/1996	51.05	18.01	NP	33.04	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	7/2/1996	51.05	19.70	NP	31.35	--	<50	<0.5	<1	<1	<1	--	--	<1	--	--	--	--	
	11/8/1996	51.05	19.96	NP	31.09	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	1/3/1997	51.05	19.52	NP	31.53	--	<250	<2.5	<5	<5	<5	--	--	--	--	--	--	--	
	4/28/1997	51.05	20.22	NP	30.83	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	7/1/1997	51.05	22.59	NP	28.46	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	10/2/1997	51.05	24.33	NP	26.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/3/1997	51.05	NG	NG	NG	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	1/9/1998	51.05	21.11	NP	29.94	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	5/6/1998	51.05	18.26	NP	32.79	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	7/21/1998	51.05	18.46	NP	32.59	--	70	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	12/30/1998	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/1999	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/10/1999	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/1999	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/22/2000	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/11/2000	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/19/2001	51.05	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	51.05	22.20	NP	28.85	--	6300	2.87	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--
12/27/2001	51.05	18.92	NP	32.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/28/2002	51.05	17.22	NP	33.83	--	19000	1560	61.3	84	111	--	--	--	--	--	--	--	--	
6/28/2002	51.05	18.20	NP	32.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
9/12/2002	51.05	19.92	NP	31.13	--	5100	570	180	<25	220	--	--	--	--	--	--	--	--	
12/12/2002	51.05	21.78	NP	29.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
3/10/2003	51.05	18.25	NP	32.80	--	26000	2500	<100	<100	<100	--	--	--	--	--	--	--	--	
5/12/2003	51.05	16.29	NP	34.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/27/2003	51.05	19.69	NP	31.36	--	11000	830	<50	<50	<50	--	<50	<50	<50	<2000	<10000	--	--	

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HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA**



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-9	11/10/2003	51.05	19.97	NP	31.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/2004	51.05	17.23	NP	33.82	--	6200	180	<50	<50	<50	--	<50	<50	<50	<2000	<10000	<50	<50
	5/4/2004	51.05	17.17	NP	33.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2004	51.05	19.71	NP	31.34	--	<2500	210	<25	<25	<25	--	<25	<25	<25	<1000	<5000	<25	<25
	11/23/2004	51.05	18.58	NP	32.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2005	51.05	14.98	NP	36.07	--	490	32	<2.5	<2.5	8.9	--	<2.5	<2.5	<2.5	150	<500	<2.5	<2.5
	6/29/2005	51.05	14.74	NP	36.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/1/2005	51.05	17.42	NP	33.63	--	3500	1300	<25	<25	28	--	<25	<25	<25	2700	<5000	<25	<25
	11/3/2005	51.05	19.90	NP	31.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/2006	51.05	12.95	NP	38.10	--	2700	<25	<25	<25	<25	--	<25	<25	<25	<1000	<15000	<25	<25
	5/30/2006	51.05	13.76	NP	37.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/2006	51.05	17.86	NP	33.19	--	1200	580	<25	<25	<25	--	<25	<25	<25	2100	<15000	<25	<25
	11/29/2006	51.05	20.25	NP	30.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/2007	51.05	16.91	NP	34.14	--	780	66	1.5	2	1.4	--	<1	<1	<1	380	<600	<1	<1
	5/25/2007	51.05	17.28	NP	33.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/9/2007	51.05	19.71	NP	31.34	--	650	150	<0.5	<0.5	2	--	<0.5	<0.5	<0.5	790	<300	<0.5	<0.5
	11/9/2007	51.05	21.62	NP	29.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/14/2007	38.63	21.66	NP	16.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/12/2008	38.63	16.30	NP	22.33	--	890	27	2.5	28	5.4	--	<0.5	<0.5	<0.5	37	<100	<0.5	<0.5
	5/22/2008	38.63	18.10	NP	20.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/25/2008	38.63	20.93	NP	17.70	--	180	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	75	<300	<0.5	<0.5
	12/17/2008	38.63	22.86	NP	15.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2/25/2009	38.63	18.78	NP	19.85	--	600	11	0.86	1.1	2.2	<0.50	--	--	--	--	--	--	--	
5/21/2009	38.63	17.95	NP	20.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/14/2009	38.63	20.81	NP	17.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/10/2010	38.63	16.71	NP	21.92	--	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0	
8/20/2010	38.63	17.22	NP	21.41	--	137	26.5	<0.50	<0.50	<1.5	0.91	<0.50	<0.50	<0.50	92.5	<250	<1.0	<1.0	
2/7/2011	38.63	16.18	NP	22.45	--	78.5	1.6	<0.50	<0.50	<1.5	0.64	<0.50	<0.50	<0.50	27.6	<250	<1.0	<1.0	
8/15/2011	38.63	VO	VO	VO	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/20/2012	44.35	18.88	NP	25.47	--	204	43.2	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	59.1	<250	<1.0	<1.0	
MW-10	1/9/1998	46.17	20.97	NP	25.20	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	5/6/1998	46.17	18.07	NP	28.10	--	800	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	7/21/1998	46.17	18.28	NP	27.89	--	80	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	12/30/1998	46.17	22.22	NP	23.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/2/1999	46.17	21.83	NP	24.34	--	940	<10	<10	<10	<10	--	--	--	--	--	--	--	
	5/10/1999	46.17	17.99	NP	28.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/23/1999	46.17	22.61	NP	23.56	--	<50	<1	<1	<1	1.4	--	--	--	--	--	--	--	
	12/23/1999	46.17	23.75	NP	22.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/27/2000	46.17	18.83	NP	27.34	--	1900	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	5/22/2000	46.17	19.47	NP	26.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/31/2000	46.17	22.64	NP	23.53	--	1700	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	12/11/2000	46.17	22.84	NP	23.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/20/2001	46.17	19.57	NP	26.60	--	16000	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	
	6/19/2001	46.17	20.63	NP	25.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/20/2001	46.17	23.07	NP	23.10	--	5800	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	
	12/27/2001	46.17	20.92	NP	25.25	--	6600	17.3	14.5	<12.5	<25	--	--	--	--	--	--	--	
	2/28/2002	46.17	18.52	NP	27.65	--	3600	10.8	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	6/28/2002	46.17	18.41	NP	27.76	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	9/12/2002	46.17	20.57	NP	25.60	--	660	<5	<5	<5	<5	--	--	--	--	--	--	--	
	12/12/2002	46.17	22.80	NP	23.37	--	1400	<5	<5	<5	<5	--	--	--	--	--	--	--	
3/10/2003	46.17	19.26	NP	26.91	--	1700	<5	<5	5.3	15	--	--	--	--	--	--	--		
5/12/2003	46.17	17.90	NP	28.27	--	1500	<12	<12	<12	<12	--	--	--	--	--	--	--		
8/27/2003	46.17	20.82	NP	25.35	--	4100	<25	<25	<25	<25	--	<25	<25	<25	<1000	<5000	--	--	
11/10/2003	46.17	21.92	NP	24.25	--	<5000	<50	<50	<50	<50	--	<50	<50	<50	<2000	<10000	--	--	

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	DRO (ug/L)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
QC-2	10/5/1995	NSVD	NG	NG	NG	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	1/12/1996	NSVD	NG	NG	NG	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	4/22/1996	NSVD	NG	NG	NG	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--
	7/2/1996	NSVD	NG	NG	NG	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	--

Gauging Notes:

TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
NG - Not gauged
VO - Vehicle Obstruction
NSVD - Not surveyed
-- - No information available

Analytical Notes:

-- - No information available
< - Not detected at or above indicated laboratory reporting limit
NS - Well not sampled.
ug/L - micrograms/liter
DRO- diesel range organics
GRO- gasoline range organics
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether

TABLE 3a
 ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA																		
		Biochemical Oxygen Demand (ug/L)	Chemical Oxygen Demand (ug/L)	Chloride (ug/L)	Chromium (ug/L)	Chromium, Hexavalent (ug/L)	Iron SW6010 T (ug/L)	Iron, Ferric (ug/L)	Iron, Ferrous A3500D (ug/L)	Methane (ug/L)	Nitrate as N (ug/L)	Nitrite as N (ug/L)	Nitrogen (ug/L)	Nitrogen, Ammonia (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Phosphate, Ortho (ug/L)	Phosphorous (ug/L)	Sulfate (ug/L)	Sulfide (ug/L)	Total Organic Carbon (ug/L)
DPE-1	8/15/2011	4560	27900	25200	0.66	<0.2	11100	9490	1600	1500	108	13.1	<1000	<100	121	219	236	14300	1040	3640
DPE-4	8/15/2011	55000	113000	26400	4	<0.2	10800	3230	7600	16100	<50.0	39.6	1770	<100	62.1	502	732	<1000	1080	14000
DPE-5	8/15/2011	21200	53900	32100	28	<0.2	20500	14000	6500	13900	<50.0	28.8	1320	<100	<50.0	240	134	<1000	1600	9360
EX-1	8/15/2011	8680	29800	19100	2.9	<0.2	1420	<100	1400	5040	52.9	<10.0	1120	185	59.7	148	107	3830	1080	11600
	2/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EX-2	8/15/2011	579000	7420	17100	2.2	<0.2	932	932	<100	208	12100	<10.0	<1000	<100	12100	162	106	17600	760	2010
	2/20/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analytical Notes:

- - No information available
- < - Not detected at or above indicated laboratory reporting limit
- NS - Well not sampled.
- ug/L - micrograms/liter

Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



Appendix A

Site Details and Summary of Previous Environmental Investigations

SITE LOCATION AND BACKGROUND

The Site is an active 76-brand gasoline retail outlet located on the northern corner of Bancroft Avenue and 73rd Avenue at 7210 Bancroft Avenue in Oakland, Alameda County, California (**Figure 1**). The site consists of a service station building, three 12,000-gallon gasoline underground storage tanks (USTs), and one 10,000-gallon diesel UST with associated piping and dispensers. The site is covered with asphalt or concrete surfacing except for planters along the southeastern and southwestern property boundaries and at the north corner of the property.

Land use in the immediate vicinity of the site is mixed commercial and residential. BP acquired the facility from Mobil Oil Corporation in 1989. In January 1994, BP transferred the property to TOSCO Marketing Company (TOSCO) and has not operated the facility since that time.

SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS

1984 UST Replacement: In 1984, the pre-existing USTs at the site were removed and three single-walled fiberglass gasoline underground storage tanks (USTs) (6,000-gallon, 10,000-gallon, and 12,000-gallon) and one 6,000-gallon diesel UST were installed in a cavity immediately to the northeast of the former USTs. A UST removal/installation report is not on file, and it is unknown if one was ever prepared. No documentation was reportedly found referencing the conditions of the removed USTs or reporting evidence of the hydrocarbon impacts in the soil and groundwater, if any, at the time of the UST removal.

1989 Phase II Environmental Audit: In December 1989, Hunter Environmental Services, Inc. (Hunter) performed a Phase II Environmental Audit on the adjacent Eastmont Town Center site located to the north and northwest of the former BP Site. Part of the Phase II study included the installation monitoring well MW-3 near the western boundary of the former BP Site. Soil samples collected from 10 and 20 feet below ground surface (bgs) from MW-3 were analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethyl benzene, and total xylenes (BTEX), and oil and grease. No analytes were reported above their respective laboratory reporting limits (LRLs). A groundwater sample collected from MW-3 was reported to contain TPH and benzene at concentrations of 2,700 micrograms per liter ($\mu\text{g/L}$) and 530 $\mu\text{g/L}$, respectively (Hunter, 1989).

1991 Phase I Subsurface Investigation: In December 1991, Hydro Environmental Technologies, Inc. (Hydro) drilled two on-site soil borings (MW-1 and MW-2) to total depths of 40 feet bgs, and soil samples were collected at 10-foot intervals between 5 and 25 feet bgs. First groundwater was encountered at approximately 30 feet bgs. The analytical results of the soil samples from MW-1 and MW-2 reported total petroleum hydrocarbons as gasoline (TPH-g) and BTEX at concentrations below their respective LRLs (Hydro, 1991).

1992 Phase I Subsurface Investigation: In July 1992, Hydro advanced boring MW-4 and MW-6 to total depths of 40 feet bgs, and boring B-5 was advanced to 50 feet bgs, First groundwater was encountered at approximately 30 feet bgs in borings MW-4 and MW-6, and no free water was encountered in boring B-5. The analytical results of soil samples collected at 30 feet bgs from B-5 and MW-6 reported TPH-g and BTEX at concentrations below their respective LRLs. The maximum TPH-g and BTEX concentrations in soil reported in MW-4 were 6,000 milligrams per kilogram (mg/kg) and 34 mg/kg, respectively, from a depth of 20 feet bgs. Borings MW-4 and MW-6 were subsequently converted into monitoring wells (Hydro, 1992).

1994 Baseline Assessment Report: In September 1994, EMCON performed a Supplemental Site Assessment at the site. Four exploratory soil borings (THP-1, TB-2, TB-3, TB-4) were advanced to a maximum depth of 45 feet bgs north of the former and existing UST complexes (THP-1), at the former service bays (TB-2), north of the northern pump island (TB-3), and at a former pump island (TB-4). Additionally, one soil sample was collected from beneath each of the five dispensers (TD-1 through TD-5). Groundwater was encountered in TB-2 and TB-3 at approximately 33 to 36 feet bgs and groundwater samples were collected from TB-2 and TB-3 via temporarily well points. Maximum concentrations of 16 mg/kg TPH-g (TD-3), TPH as diesel (TPH-d) at concentrations ranging from 110 mg/kg to 5,000 mg/kg (TD-1 through TD-5), and benzene at concentrations below LRLs were reported in soil samples. TPHg was not reported above the LRLs and a maximum concentration of 0.7 µg/L benzene (TB-3) was reported in groundwater samples (EMCON, 1994).

1994 Well Installation: In October 1994, Hydro advanced boring MW-7 to a total depth of 45 feet bgs, and borings MW-8 and MW-9 were advanced to total depths of 40 feet bgs. First encountered groundwater was at approximately 27 feet bgs to 32 feet bgs. TPH-g and BTEX were not detected above their respective LRLs in soil samples collected from 25 feet bgs in each boring. The three borings were subsequently converted into monitoring wells MW-7 through MW-9 (Hydro, 1995).

1997 Offsite Well Installation: In July 1997, Pacific Environmental Group (PEG) drilled one boring (MW-10) offsite to a depth of approximately 37.5 feet bgs. Soil samples were collected and the boring was subsequently converted into a monitoring well. First groundwater was encountered at approximately 26 feet bgs. No TPH-g, BTEX or methyl tertiary butyl ether (MTBE) was detected in soil samples at concentrations above their respective LRLs in MW-10. TPH-g and BTEX were not detected in the groundwater sample from MW-10 at concentrations above their respective LRLs. However, MTBE was detected at concentration of 13 µg/L using EPA Method 8020 (PEG, 1997).

1998 UST and Associated Piping and Dispenser Removal: In August 1998, Environmental Resolutions, Inc. (ERI) removed the three gasoline USTs (6,000-gallon, 10,000-gallon, and 12,000-gallon), one 6,000-gallon diesel UST, and associated dispensers and piping from the site. There was no visible evidence of leakage from the USTs removed. A total of eight native soil samples were collected from beneath each end of the removed USTs (denoted as A through H on **Figure 2**) at depths of 14 to 16 feet bgs, and a total of 18 soil samples (denoted as I through Z on **Figure 2**) were collected from the former dispenser locations and from beneath the associated product lines at three feet bgs (ERI, 1998).

TPH-g was reported in five of the eight UST excavation samples at concentrations ranging from 3.7 mg/kg (S-15-T2S) to 5,300 mg/kg (S-15-T1S). TPH-d was detected at 630 mg/kg (S-15-T1N) and 800mg/kg (S-15 T1S) into two samples, benzene concentrations ranged between 0.40 mg/kg (S-15-T1N) to 0.95 mg/kg (S-16-T3N) in three samples, MTBE concentrations ranged between 0.028 mg/kg (S-14-T4S) to 5.3 mg/kg (S-16-T3N) in seven samples, and lead was not reported in the sample analyzed for lead. TPH-g was reported in nine of the eighteen dispenser and product line samples with concentrations ranging between 1.4 mg/kg (S-3-PL12) to 7,200 mg/kg (S-3-D4). TPH-d was detected between 4.8 mg/kg (S-3-PL12) to 190 mg/kg (S-3-PL11) in five samples, benzene was detected between 0.0089 mg/kg (S-3-PL12) to 22 mg/kg (S-3-D4) in three samples and MTBE was detected between 0.048 mg/kg (S-3-PL12) to 15 mg/kg (S-3-PL1) in ten samples (ERI, 1998).

During the 1998 UST replacement activities, approximately 389 tons of soil and backfill were transported off-site disposal. The existing 10,000-gallon diesel and three 12,000-gallon gasoline USTs were installed as replacements (ERI, 1998).

1999 Groundwater Recovery Test: In April 1999, Alisto Engineering Group (Alisto) conducted groundwater recovery tests on wells MW-1 through MW-4, MW-6, MW-7 and MW-10 to assess the spatial variation in hydraulic conductivity in the shallow water-bearing zone across the Site. Testing by the Bouwer-Rice method yielded hydraulic conductivities of 2.46×10^{-2} ft/min for MW-1, 2.42×10^{-4} ft/min for MW-2, 3.82×10^{-4} ft/min for MW-3, 5.75×10^{-4} ft/min for MW-4, 1.99×10^{-2} ft/min for MW-6, 1.09×10^{-4} ft/min for MW-7 and 8.78×10^{-5} ft/min for MW-10. The geometric mean of the hydraulic conductivity and flow velocity values were calculated to be 1.37×10^{-5} feet per second and 73.85 feet per year, respectively (Alisto, 1999).

1999 Extraction Well Installation: In November 1999, Cambria Environmental Technology, Inc. (Cambria) installed two 4-inch diameter wells (EX-1 and EX-2) on-site to facilitate potential remedial activities at the site. Well EX-1 was drilled to 39.5 feet bgs and EX-2 was drilled to 36.5 feet bgs. Groundwater was first encountered at 26 feet bgs. No TPH-G or BTEX, and relatively low MTBE concentrations (below 0.012 mg/kg) were reported in soil samples collected from EX-1 and EX-2 (Cambria, 2000).

2000 Interim Remedial Action and Recovery Testing: Between March 16 and April 30, 2000, Cambria conducted interim remedial activities at the site to evaluate the effectiveness of hydrocarbon and MTBE reduction using short-term groundwater extraction. During eight extraction events, approximately 10,900 gallons of groundwater was extracted from wells EX-1, EX-2 and MW-2. During the extraction events, stable to slightly decreasing hydrocarbon and MTBE concentration trends were reported in samples collected from wells MW-2 and EX-1, located immediately southwest of the existing USTs. Samples from well EX-2, located north of the existing USTs, exhibited lower hydrocarbon and MTBE concentrations than MW-2 and EX-1. In April 2000, during the batch extraction events, recovery tests were conducted on wells EX-1, EX-2 and MW-2. Based on the recovery test measurements, the calculated hydraulic conductivity values ranged from 1.85×10^{-4} ft/min to 8.33×10^{-4} ft/min with resulting flow velocities of 16 ft/year to 73 ft/year at well MW-2 (Cambria, 2000).

The calculated hydraulic conductivity values ranged from 2.02×10^{-5} ft/min to 3.85×10^{-5} ft/min for well EX-1 with resulting flow velocities of 1.8 to 3.4 Ft/yr. And a well EX-2, the calculated hydraulic conductivity values ranged from 3.04×10^{-4} ft/min to 2.13×10^{-3} ft/min for resulting flow velocities of 27 ft/year to 187 ft/year. The geometric mean of these values is a hydraulic conductivity of 3.0×10^{-4} ft/min and resulting flow velocity of 26 ft/year (Cambria, 2000).

2001 Dual-Phase Extraction Pilot Test: From October 29, through November 2, 2001, Cambria performed a dual phase soil vapor and groundwater extraction (DPE) pilot test on the monitoring wells with the highest historical hydrocarbon concentrations (i.e., MW-2 and MW-4) and the extraction wells (EX-1 and EX-2) at the site. The DPE test results indicated that the vacuum influence was limited to within 18 to 28 feet of the extraction well. Water levels typically decreased several feet in the extraction wells and had a varied response in the observation wells. Estimated vapor-phase removal rates were approximately 200-pounds of hydrocarbon per day in wells MW-4 and EX-1, and less than 5-pounds of hydrocarbon per day in wells MW-2 and EX-2 (Cambria 2002).

Soil vapor concentrations showed a decreasing trend in wells MW-4 and EX-1 during the short-term pilot tests. Grab water samples collected before and after the pilot tests remained the same order of magnitude. A total of 6,500 gallons of water was extracted during the DPE pilot test and appropriately disposed off-site. Overall, the test results indicated that DPE is a feasible remedial alternative for the site (Cambria, 2002). Alameda County Environmental Health (ACEH) approved Cambria's August 8, 2002, *Dual Phase Extraction Pilot Test Report* as a Corrective Action Plan (CAP).

2005 Soil and Water Investigation: In Fall 2005, URS completed nine Geoprobe soil borings with co-located Hydropunch borings. The first phase of work was on-site source area characterization: five boring locations (A-1 through A-5) were advanced in the vicinity of the possible hydrocarbons source areas such as locations of former and current USTs, products dispensers, and in the vicinity of MW-4 to adequately characterize the lateral and vertical extent of petroleum hydrocarbons in soils in the identified source areas. An off-site assessment was completed during the second phase of work (borings A-7 through A-10) to further define the downgradient, cross-gradient, and up-gradient extent of the groundwater plume (soil boring A-6 was unable to be advanced due to close proximity to electric lines and product piping). Maximum concentrations of gasoline range organics (GRO), benzene, and MTBE were detected in soil at concentrations of 490 mg/kg [A-4 (23.5-24')], 0.11 mg/kg [A-5 (35-35.5')], and 0.84 mg/kg [A-1 (46-46.5')], respectively. Maximum concentrations of GRO, benzene, and MTBE were detected in ground water at concentrations of 510,000 µg/L [A-2 (21.3')], 11,000 µg/L [A-4 (34-36')], and 39,000 µg/L [A-4 (34-36')], respectively (URS, 2005).

The cross-gradient and downgradient lateral extents of the dissolved hydrocarbon plume were characterized during the last investigation. However, the vertical extent of the dissolved-phase hydrocarbons on the southern portion of the site was not defined. Specifically, significantly elevated concentrations were detected in Hydropunch groundwater samples collected from the bottom depths of soil borings A-2, A-3 and A-4. The bottom Hydropunch sample from boring A-2 (40-42 ft bgs) contained concentrations of GRO, benzene, and MTBE at 36,000 µg/L, 1,800 µg/L, and 110 µg/L, respectively. The bottom Hydropunch sample from boring A-3 (34-36 ft bgs) contained concentrations of GRO, benzene, and MTBE at 12,000µg/L, 21µg/L, and 8.3µg/L respectively. The bottom Hydropunch sample from boring A-4 (34-36 ft bgs) contained GRO, benzene, and MTBE concentrations of 120,000µg/L, 11,000µg/L and 39,000 µg/L respectively (URS, 2005).

Therefore, the vertical extent of dissolved phase petroleum hydrocarbon contamination remains unknown in this southern area of the site (URS, 2005). A work plan for soil and water investigation to delineate the vertical extent of contamination in the southern portion of the site was submitted to ACEH in October 2006.

2007 Soil and Groundwater Investigation: In April 2007, Stratus Environmental, Inc. (Stratus) advanced cone penetrometer test (CPT) borings in three locations onsite (CPT-1 through CPT-3) to maximum depths of 60 feet bgs. CPT-1 was advanced southwest of the dispenser islands and southeast of monitoring well MW-1; CPT-2 was advanced south of the dispenser islands and southwest of monitoring well MW-4; CPT-3 was advanced in the eastern corner of the side as requested by the ACEH. An Ultraviolet Induced Fluorescence (UVIF) module was used at each CPT boring location, analyzing the vertical extent of petroleum hydrocarbons in addition to providing soil profiling data. Groundwater samples were collected from multiple depths at each boring locations; physical soil samples were not collected during this investigation.

- GRO was detected above laboratory reporting limits in five of the seven groundwater samples, ranging from 170 µg/L (CPT-3-28-32') to 170,000 µg/L (CPT-1-37-41').
- Benzene was detected above laboratory reporting limits in four of the seven groundwater samples, ranging from 0.51 µg/L (CPT-3-23-27') to 7,700 µg/L (CPT-2-37-41').
- Toluene was detected above laboratory reporting limits in three of the seven groundwater samples, ranging from 57 µg/L (CPT-1-30-34') to 670 µg/L (CPT-2-28-32').

- Ethylbenzene was detected above laboratory reporting limits in four of the seven groundwater samples, ranging from 530 µg/L (CPT-2-37-41') to 2,600 µg/L (CPT-1-37-41').
- Total xylenes were detected above laboratory reporting limits in four of the seven groundwater samples, ranging from 290 µg/L (CPT-2-37-41') to 9,600 µg/L (CPT-1-37-41').
- MTBE was detected above laboratory reporting limits in five of the seven groundwater samples, ranging from 4.4 µg/L (CPT-3-56-60') to 6,500 µg/L (CPT-2-37-41').
- TBA was detected above laboratory reporting limits in groundwater sample CPT-2-37-41' at 2,400 µg/L.

2007-2008 DPE System Installation: Construction of the DPE system was started by Broadbent & Associates, Inc (BAI) and Stratus in late 2007. The system consists of a thermal/catalytic oxidizer with a 25 horsepower liquid ring blower designed to extract water and vapor from six on-site extraction wells. Extracted vapor were to be treated by thermal/catalytic oxidation and discharged to the atmosphere under the oversight of the Bay Area Air Quality Management District. Extracted groundwater was to be treated by a sediment filter and three 1,000 pounds carbon vessels before being discharged into the City of Oakland sanitary sewer system. DPE wells DPE-1 through DPE-5 were installed at the site to total depths ranging from 35 feet to 40 feet bgs. Well MW-2 was overdrilled and destroyed to allow DPE-4 to be installed in the same borehole. The system is currently connected to six wells (DPE-1 through DPE-5 and EX-1) (BAI, 2008a).

As of the end of the fourth quarter 2008 the system had not been started. BAI and Stratus were still coordinating with Pacific Gas & Electric (PG&E) to install electrical service to the system. Natural gas was completed to the site and system in third quarter 2008 (BAI, 2008a).

During DPE construction activities, on-site groundwater monitoring well MW-11 was installed to a total depth of 40 feet bgs on the southern corner of the site. Soil samples collected at 20 feet and 30 feet bgs reported maximum concentrations of 1.9 mg/kg GRO and 0.0089 mg/kg benzene. MTBE was not reported above the LRL in either of the soil samples (BAI, 2008a).

2009-2011 DPE System Startup Efforts: In 2009, Antea Group (formerly Delta Consultants) began coordinating with the neighboring Eastmont Mall to allow trenching for the 3-phase power across the parking lot from behind the AutoZone. The total cost for installation efforts was estimated at approximately \$70,000, which did not include Antea Group's efforts for oversight or extensive negotiations of an access agreement with the mall's property management firm. Additionally, the cost of providing power from this distance would have been significantly increased due to line loss. Total utility cost to run the system was estimated at approximately \$4,000 a month. Additionally, groundwater discharge fees were estimated at approximately \$4,000 to \$5,000 a month.

Due to the significant cost associated with running power lines through the mall parking lot, Antea Group also explored the possibility of having 3-phase power being provided for a transformer near the neighboring Burger King restaurant. This transformer provided 208V/200A power, and the system would have needed modifications due to the 230A/240V design requirements. The total cost of the installation efforts was estimated at \$75,000. Additionally, the system would have still required an approximate \$9,000 to \$10,000 a month in utility and discharge costs.

Antea Group also explored another alternative for the startup of the DPE system, which included reconfiguring the current system for single phase power. Single phase power is available at an underutilized transformer south of the site

across 73rd Avenue. Trenching would be required to install single phase power across the street and then across the site to the compound. A digital three phase converter would be required to convert single phase power to three phase power. PG&E would require a complete engineering evaluation to determine if our equipment will meet their specifications for single phase power (i.e., digital phase converter). The total cost of single phase power conversion and installation was estimated to be in excess of \$110,000, and would have still required an approximate \$9,000 to \$10,000 a month in utility and discharge costs.

2011 Remedial Action Site Investigation: Antea Group submitted the *Remedial Action Investigation Work Plan*, dated August 03, 2011 to the ACEH. The ACEH approved the proposed scope of work in an agency letter to Antea Group dated September 1, 2011. Antea Group submitted a *Remedial Investigation Work Plan Addendum*, dated December 13, 2011 which proposes a postponement of the AS/SVE pilot test described in the August 3, 2011 *Remedial Action Investigation Work Plan* to utilize a new remedial strategy. Field activities are currently being performed as of the first quarter 2012.

FREE PRODUCT RECOVERY DURING GROUNDWATER MONITORING EVENTS

Free product was observed in groundwater monitoring well MW-2 between the 1993 and 1998, at thicknesses ranging from 2.60 feet (3/30/1994) to less than 0.01 feet (10/2/1997 to 7/21/1998). When free product was observed in the well, it was removed by bailer. Between 1993 and 1998, a cumulative total of 24.90 gallons of free product had been removed from the well (Alisto, 1998).

Free product was also observed in well MW-4 during the third quarter 2001 (0.03 inches), fourth quarter 2006 (0.11 inches), first quarter 2008 (0.01 inches), and third quarter 2008 (0.05 inches); and in EX-2 during the second quarter 2007 (0.01 inch). With the exception of 1.5 gallons of a free product/water mixture recovered from MW-4 during the third quarter 2008 (BAI, 2008b), free product was not recovered from these wells when observed.

SENSITIVE RECEPTORS

2000 Potential Receptor Survey, Expanded Site Plan and Well Search: In October 2000, Alisto completed a potential receptor survey, prepared an expanded site plan with neighboring property parcel information and underground utilities mapped, and identified wells in the vicinity of the site. A review of the files of the California Department of Water Resources (DWR) was performed to identify all known wells within one-half mile radius of the site. The results of the well search revealed that there were 17 wells other than the on-site monitoring wells. Of these, 11 were offsite monitoring wells; four were cathodic protection wells, one an industrial well, and one an irrigation well for a nearby cemetery. No domestic/municipal water supply wells were identified from review of the DWR files (Alisto, 2000).

2010 Sensitive Receptor Survey: Delta Consultants (Delta) submitted a *Sensitive Receptor Survey* in October 2010. As part of that receptor survey, Delta conducted a records review (environmental database search), a well radius search, and a search for other sensitive receptors which have the potential to be affected by the petroleum hydrocarbon release at the site. Delta's review of the historical aerial photographs indicated that the site in 1939 was primarily used for agricultural purposes with small family residences. In general, the site was developed to the current conditions with the station building in 1974. The historical topographic maps support the indication of residential houses and agriculture in the site region as early as 1915 to 1948. The well search indicated that 10 wells were within a one-mile radius of the site. DWR indicated the presence of 7 wells within a one-mile radius of the site. However, no records were found for the status

of these wells as being active or abandoned. The main surface water bodies were Lake Merritt located northwest of the site and San Leandro Bay located west of the site. Several churches, schools and day care centers were located within a one-mile radius of the site. Based on the above identified receptors' distances from the site, directions from the site, and extent of hydrocarbon impact at the site, they were not anticipated to be affected by the petroleum hydrocarbon release at the site.

*Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117*



Appendix B

Agency Correspondence

From: Nicole Persaud
To: ["Dilan.Roe@acgov.org"](mailto:Dilan.Roe@acgov.org)
Cc: [Doug Umland](#)
Subject: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA - Status Update
Date: Thursday, April 12, 2012 11:16:00 AM

Hi Dilan,

As discussed during our April 10, 2012 phone call, remediation pilot testing activities conducted by Antea Group and its subcontractors, to date, are as follows:

- Soil and groundwater investigation per our August 3, 2011 *Remedial Action Investigation Work Plan* was completed in October 2011.
- ISCO treatability study per the *Remedial Action Investigation Work Plan* was completed in December 2011.
- Phase 1 (HPT, baseline sampling MW-4, and groundwater grab sampling) of our *Remedial Investigation Work Plan Addendum* (dated December 13, 2011) was completed March 6, 7, & 13.
- Phase 2 (Plume-Stop injections) of the *Remedial Investigation Work Plan Addendum* was completed during March 26-30, 2012.

Phase 3, post-injection performance monitoring, is in progress with the first (30-day) groundwater sampling event of MW-4 scheduled for April 27, 2012. We will collect a groundwater sample each month during the 3 month performance monitoring period.

Antea Group will prepare and submit a RAP investigation report summarizing the above listed activities including the April 27, 2012 post-injection monitoring data by June 30, 2012.

Please contact me with any further questions or information.

Thank you,

Nicole Persaud, EIT | Project Manager

Antea™ Group

Mobile +1 407 758 3428 | USA Toll Free 800 477 7411 | Fax +1 925 886 8830

Skype: nicole.persaud | GMT – 7:00

nicole.persaud@anteagroup.com | www.anteagroup.com



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From: Roe, Dilan, Env. Health [<mailto:Dilan.Roe@acgov.org>]
Sent: Friday, April 06, 2012 2:25 PM
To: Nicole Persaud
Cc: Doug Umland; shannon.couch@bp.com; bill.borgh@conocophillips.com
Subject: RE: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA - NOTIFICATION

Hi Nicole:

I have recently been assigned as the primary case worker for this site. I understand you have been corresponding with Karel Detterman regarding the status of ACEH's review of the following items:

- (1) Technical Report Extension Request Letter**, dated September 29, 2011, and received by ACEH on September 30, 2011. This letter requests a revision to the due date for submittal of the Soil and Water Investigation & Pilot Testing Report from December 2, 2011, as established in the ACEH letter dated September 1, 2011, to February 3, 2012. Antea Group requests the extension in order to allow a for a complete evaluation of the in-situ chemical oxidation bench-scale test results, soil and groundwater analytical results, and air sparge/soil vapor (AS/SVE) pilot testing results to develop a remedial path forward for the site;

- (2) Remedial Investigation Work Plan Addendum Submittal**, dated Dec. 13, 2011, and received by ACEH on Dec. 16, 2011. This document proposes changes to the original Remedial Action Work Investigation Work Plan dated August 3, 2011, and approved by ACEH in a letter dated September 1, 2011, including:
 - a postponement of the AS/SVE pilot test;
 - a change in remediation strategy to allow pilot testing and a field study of Plume Stop technology by Regensis; and
 - a further postponement of the Soil and Water Investigation & Pilot Testing Report due date from December 2, 2011 to April 9, 2012

I further understand from your email correspondence with Karel that Antea Group intends to proceed with collection of pre-application data to support the final injection design layout for the Plume Stop treatment as described in Phase 1 of the proposed Work Plan Addendum including:

- Conducting a hydraulic profiling test using direct push technology to determine the hydraulic properties of the site subsurface
- Collection of two grab groundwater samples from the HPT locations to aid in evaluation of the vertical distribution of dissolved phase contaminants
- Conducting a baseline sampling event of existing monitoring well MW-4

Please note that should you continue to proceed with the fieldwork, you would be doing so without concurrence from ACEH. If no comments arise from the review of the work plan addendum, then proceeding with the fieldwork would not appear to have any significant repercussions. However, if comments to the work plan addendum are identified, modifications to

the fieldwork may be necessary, which may require additional mobilizations and /or additional sample analyses, etc. Please note that the UST Cleanup Fund typically reimburses costs for a scope of work that has been approved by a regulatory agency. If the scope of work is implemented prior to regulatory approval, the UST Cleanup Fund may not fully reimburse all costs associated with the proposed scope of work. Please contact the UST Cleanup Fund to address cost reimbursement concerns.

Please give me a status update on the Phase 1 activities including your schedule for obtaining any necessary boring installation permits, conducting the proposed activities, and evaluation of the field, lithological, and contaminant data. Also please include your proposed schedule for the conducting the proposed work described in Phase 2 - Plume Stop Application Phase and Phase 3 – Post Injection Monitoring. This information will help me in my review of the case files and in preparing responses to the Work Plan Addendum and your request for an extension for submittal of the Soil and Water Investigation Report.

Also, please send me the email of the RPs so that they may be copied on all future correspondence. My records indicate that there are two other RPs in addition to Shannon Couch and Bill Borgh, including Diane Clark and Jim Givens.

I look forward to working with you on this project.

Dilan Roe, P.E.

Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
510.567.6767; Ext. 36767
QIC: 30440
dilan.roe@acgov.org

PDF copies of case files can be reviewed/downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Nicole Persaud [<mailto:Nicole.Persaud@anteagroup.com>]

Sent: Wednesday, March 07, 2012 10:39 AM

To: Detterman, Karel, Env. Health

Cc: Doug Umland

Subject: RE: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA - NOTIFICATION

Hi Karel,

Attached is the available background information. You will not have luck searching for information regarding Plume Stop™ on Regensis' web site as the product is still in the commercialization stage and details regarding this product are confidential and proprietary. However, the concept is essentially similar to Trap & Treat BOS 200® (<http://www.trapandtreat.com/products/bos-200/>). If Plume Stop™ is evaluated as not being an effective

technology to reduce hydrocarbon concentrations at this site, we will proceed with pilot testing air sparge and soil vapor extraction.

Please let me know if you have any additional questions.

Thank you,

Nicole Persaud, EIT | Project Manager

Antea™ Group

Mobile +1 407 758 3428 | USA Toll Free 800 477 7411 | Fax +1 925 886 8830

Skype: nicole.persaud | GMT – 7:00

nicole.persaud@anteagroup.com | www.anteagroup.com



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From: Detterman, Karel, Env. Health [<mailto:Karel.Detterman@acgov.org>]

Sent: Friday, March 02, 2012 5:10 PM

To: Nicole Persaud

Subject: RE: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA - NOTIFICATION

Hi Nicole: I am attempting to look at the WP Addendum – please, can you send me background information on the “Plume Stop” product? I searched the Regenesys web site and didn’t see any case studies or other information about the product.

Thanks,

Karel Detterman
Hazardous Materials Specialist, PG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708
Fax: 510.337.9335
Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Nicole Persaud [<mailto:Nicole.Persaud@anteagroup.com>]

Sent: Thursday, March 01, 2012 1:28 PM

To: Detterman, Karel, Env. Health

Cc: Doug Umland
Subject: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA - NOTIFICATION
Importance: High

Good afternoon Karel,

I have left you email and several voicemail messages requesting the review statuses of our request for extension (dated September 29, 2011) and remediation work plan (dated December 13, 2011). Unfortunately, I have not received a response from you addressing when your review of the above documents will be completed. We realize that this site was recently been transitioned to you, however, it has been more than 60 days that Alameda County Environmental Health (ACEH) has had to review our documents and respond. We are now at risk of losing an opportunity with our subcontractor, Regenesys, to pilot-test a remediation technology that may reduce hydrocarbon impacts at this site. Since ACEH has had over 60 days to review our work plan and we have not received a response or timeline of when we can expect a response, we will be proceeding with the Phase 1 of our proposed *Remedial Investigation Work Plan Addendum* submitted on December 13, 2011, which consists of subsurface hydraulic testing using a direct-push Hydraulic Profiling Tool (HPT) and conducting baseline groundwater sampling. We intend to conduct both the baseline groundwater sampling and the HPT test this month.

Please contact myself (407-758-3428) or the senior project manager, Douglas Umland (408-826-1874) to discuss any questions or concerns you may have.

Thank you,

Nicole Persaud, EIT | Project Manager
Antea™ Group

Mobile +1 407 758 3428 | USA Toll Free 800 477 7411 | Fax +1 925 886 8830

Skype: nicole.persaud | GMT – 7:00

nicole.persaud@anteagroup.com | www.anteagroup.com



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From: "Detterman, Karel, Env. Health" <Karel.Detterman@acgov.org>

Date: Fri, 17 Feb 2012 09:41:09 -0800

To: 'Nicole Persaud' <Nicole.Persaud@anteagroup.com>

Subject: RE: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA

Hi Nicole: Thank you for the reminder and yes, your assessment is correct - I haven't had a chance to review the documents, but your list will serve as a reminder – just keep pestering me as per the saying “the squeaky wheel....”

Karel Detterman
Hazardous Materials Specialist, PG

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6708
Fax: 510.337.9335
Email: karel.detterman@acgov.org

PDF copies of case files can be downloaded at:

<http://www.acgov.org/aceh/lop/ust.htm>

From: Nicole Persaud [<mailto:Nicole.Persaud@anteagroup.com>]
Sent: Thursday, February 16, 2012 3:36 PM
To: Detterman, Karel, Env. Health
Subject: RE: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA
Importance: High

Hi Karel,

I know you have plenty of facilities in your workload but I just wanted to follow-up and see if you've had a chance to review this site and our requests?

Thank you,

Nicole Persaud, EIT | Project Manager

Antea™ Group

Mobile +1 407 758 3428 | USA Toll Free 800 477 7411 | Fax +1 925 886 8830

Skype: nicole.persaud | GMT – 7:00

nicole.persaud@anteagroup.com | www.anteagroup.com



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From: Nicole Persaud
Sent: Friday, February 03, 2012 5:26 PM
To: 'karel.detterman@acgov.org'
Cc: Doug Umland
Subject: Case No. RO0000356: Former BP Station No. 11117 - 7210 Bancroft Ave, Oakland, CA
Importance: High

Hi Karel,

It was a pleasure speaking with you today. As discussed, we have not received a response from ACEH with regard to:

1) a request submitted to ACEH dated September 29, 2011 for an extension to submit a soil/water investigation

and pilot test report. We request that ACEH extend the technical report due date to February 3, 2012.
2) a remediation work plan dated December 13, 2011 which proposed postponement of an AS/SVE pilot test and pilot test an injection remediation strategy using a Regensis-brand product known as Plume-Stop.

Since we had not received responses to either the extension letter request or the work plan, we have not been able to proceed with our proposed strategy. We realize you will be out of the office from February 6 to 9, 2012, but would like to set up a time when you return to discuss our proposed path forward for this site and revised reporting due dates.

Our remediation contractor is able to start the first phase of the proposed injection remediation strategy as soon as the first week of March. The first phase would be conducting a hydraulic subsurface testing using the Hydraulic Profiling Tool (HPT) described in our December 13, 2011 work plan.

Please advise when you would be able to meet to discuss the site status and our proposed remediation strategy.

Thank you,

Nicole Persaud, EIT | Project Manager

Antea™ Group

Mobile +1 407 758 3428 | USA Toll Free 800 477 7411 | Fax +1 925 886 8830

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*Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117*



Appendix C

Blaine Tech Services Groundwater Sampling Field Data Sheets

Well-Head Inspection & Well Gauging Form

Antea Group Project No: 2611117 Site Address: 7210 Bancroft Ave, Oakland CA
 Field Technician: Daniel Allen, BTS Date: 2/20/12 Weather: Overcast
(Print Full Name & Company*)

Well Condition														
Sample Order	Field Point	Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time Gauged	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Comments
7	MW-1	G	C	G	G	G	N	2	0845	17.10	38.50			
4	MW-3	G	G	G	G	G	N	2	0827	17.41	40.61			
11	MW-4	G	G	G	G	G	N	2	0905	17.94	39.20			Vault
6	MW-6	G	G	G	G	G	N	2	0839	17.83	39.50			
2	MW-7	G	G	G	G	G	N	2	0816	18.48	44.21			
1	MW-8	G	G	G	G	G	N	2	0810	17.50	39.54			
8	MW-9	G	G	G	G	G	Y	2	0921	18.88	38.84			
5	MW-10	G	G	G	G	G	N	2	0833	20.00	35.33			
10	MW-11	G	G	G	G	G	N	4	0857	16.24	37.00			
9	EX-1	G	G	G	G	G	N	4	0851	18.27	37.43			Vault
3	EX-2	G	G	G	G	G	N	4	0821	19.10	35.10			

Notes: MW-9 gauged out of order due to access issues
Located with metal detector.

** All well caps opened at least 15 minutes or longer before gauging wells:
CIRCLE ONE: YES or NO**



*Form provided by Antea Group

Note: Use G=good and P=poor for well condition

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-1	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	17.10	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	38.50	Water Column Height (ft):	21.40

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>21.40</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>3.6</u>
Casing Volume (gal): <u>3.6</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>10.8</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 12:42 Stop Time: 12:48

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1243	18.56	7.09	618	196.3	71000	3.92	1.8	
1244	18.60	6.91	506	67.6	71000	0.60	3.6	
1245	18.71	6.92	509	20.9	74000	0.31	5.4	
1246	18.77	6.95	504	-11.4	406	0.24	7.2	
1247	18.81	6.95	503	-11.7	206	0.21	9.0	
1248	18.83	6.95	503	-12.4	111	0.21	10.8	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 10.8

Other Comments: * 80% = 21.38 DTW = 17.50 * purged through flow cell

Sample Info:

Sample ID:	MW-1 - 20120229	Sample Date and Time:	2/20/12 @ 1300
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) Danrel Allen, an employee of Blaine Tech Services, Inc.

Signature: Danrel Allen Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address: <u>7210 Bancroft Ave, Oakland</u>	
Project No: <u>261117</u>	Field Technician: <u>DW</u>
Field Point: <u>MW-3</u>	Date: <u>2/20/12</u>
Depth to Water (DTW) (ft bgs): <u>17.41</u>	Well Diameter (in): <u>②</u> 4 6 8 <u> </u>
Depth to LNAPL (ft bgs): <u> </u>	Thickness of LNAPL (ft): <u> </u>
Total Depth of Well (ft bgs): <u>40.61</u>	Water Column Height (ft): <u>23.20</u>

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>23.20</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>3.9</u> Casing Volume (gal): <u>3.9</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>11.7</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 11:00 Stop Time: 11:15

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1110	18.96	6.68	350	108.6	71000	2.87	2.0	
1111	18.97	6.68	355	103.6	392	1.99	4.0	
1112	18.98	6.71	357	92.1	172	1.75	6.0	
1113	19.02	6.74	359	82.3	80	1.58	8.0	
1114	19.05	6.76	361	79.8	57	1.54	10.0	
1115	19.07	6.77	361	79.0	42	1.49	12.0	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 12.0

Other Comments: 80% = 22.05 * purged through flow cell
DTW = 17.58

Sample Info:

Sample ID: <u>MW-3 - 20120229</u>	Sample Date and Time: <u>2/20/12 @ 1125</u>
Selected Analysis: <u>SEE COC</u>	

This form was provided by Antea Group and completed by: (Print Full Name) Daniel Allen, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-4	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	17.94	Well Diameter (in):	4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	39.20	Water Column Height (ft):	21.26

Purging Info and Calculations

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailor <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <u>Disposable Bailor</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>21.26</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>3.6</u>
Casing Volume (gal): <u>3.6</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>10.8</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 1356 Stop Time: 1404

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1358	20.92	6.65	1042	-51.0	46	0.94	1.8	
1359	21.10	6.65	1041	-54.5	17	1.00	3.6	
1400	21.19	6.64	1045	-57.1	11	1.15	5.4	
1402	21.27	6.64	1052	-61.2	14	1.22	7.2	
1403	21.30	6.64	1059	-63.2	15	1.23	9.0	
1404	21.29	6.64	1061	-64.8	15	1.26	10.8	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 10.8

Other Comments: 80% = 25.78 * purged through flow cell DTW @ sample 17.95 EPI 20120229 @ 1420

Sample Info:

Sample ID:	MW-4 - 20120229	Sample Date and Time:	2/20/12 @ 1415
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) Shawn Lane, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-6	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	17.83	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	89.50	Water Column Height (ft):	21.67

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>21.67</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>3.7</u> Casing Volume (gal): <u>3.7</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>11.1</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge Start Time: 12:11 Stop Time: 12:17

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1212	19.00	6.83	683	215.6	71000	2.51	1.9	
1213	20.19	6.79	662	209.3	71000	0.64	3.8	
1214	20.47	6.84	661	199.6	71000	0.49	5.7	
1215	20.63	6.84	664	190.0	245	0.40	7.6	
1216	20.69	6.83	667	187.4	142	0.37	9.5	
1217	20.73	6.83	670	185.7	90	0.35	11.4	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 11.4

Other Comments: 80% = 22.16 DTW = 18.22 * purged through flow cell

Sample Info:

Sample ID:	MW-6-20120229	Sample Date and Time:	2/20/12 @ 1225
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) Daniel Allen, an employee of Blaine Tech Services, Inc.

Signature: Daniel Allen Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-7	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	18.48	Well Diameter (in):	2 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	24.21	Water Column Height (ft):	25.73

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>25.73</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>4.21</u>
Casing Volume (gal): <u>4.4</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>13.2</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: _____ Start Time: 10:28 Stop Time: 1:34

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1028	16.32	7.58	519	-81.7	63	0.75	2.2	
1029	19.87	7.48	329	-61.1	43	0.46	4.4	
1031	20.43	7.51	313	-49.5	11	0.38	6.6	
1032	20.86	7.48	314	-47.3	18	0.25	8.8	
1033	20.96	7.46	321	-46.7	26	0.23	11.0	
1034	21.07	7.44	330	-45.8	19	0.23	13.2	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 13.2

Other Comments: 80% = 23.63 DTW = 18.36 * purged through flow cell

Sample Info:

Sample ID: MW-7-20120229 Sample Date and Time: 2/20/12 @ 1310

Selected Analysis: SEE COC

This form was provided by Antea Group and completed by: (Print Full Name) Daniel Allen, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-8	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	17.50	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	39.54	Water Column Height (ft):	22.04

Purging Info and Calculations:

Purge Method: <input checked="" type="checkbox"/> Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: <input checked="" type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible <input type="checkbox"/> Peristaltic Pump <input type="checkbox"/> Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Disposable Tubing Other: _____
Water Column Height (ft): <u>22.04</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>3.7</u> Casing Volume (gal): <u>3.7</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>11.1</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Time	Start Time:		Stop Time:						Water Level (for Low-Flow only)
	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)		
Pre-Purge									
0945	14.9	6.97	356.0	155	89	1.57	3.7		
0947	15.3	6.66	349.7	159	78	1.41	7.4		
0950	15.8	6.61	347.5	162	73	1.45	11.1		
Post-Purge									
Did Well dewater?	Yes	<input checked="" type="radio"/> No	Total Purge volume (gal): <u>11.1</u>						

Other Comments: 80% = 21.90 DTW = 17.92 * Hand bailed due to access issues *MS/MSD collected

Sample Info:	
Sample ID: MW-8 - 20120229	Sample Date and Time: 2/20/12 @ 1000
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) Denrel Allen, an employee of Blaine Tech Services, Inc.

Signature: Denrel Allen Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-9	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	18.88	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	38.84	Water Column Height (ft):	19.96

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> casing volumes Other: _____	Purge Equipment: <input checked="" type="checkbox"/> Disposable Bailor <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailor <input checked="" type="checkbox"/> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 19.96	X Conversion Factor (gal/ft): 0.17	= Casing Volume (gal): 3.2
Casing Volume (gal): 3.2	X Specified Volumes: 3	= Calculated Purge (gal): 9.6
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge:	Start Time:	Stop Time:	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge										
	1203		18.8	7.60	621	44	323	1.15	3.2	
	1206		18.5	7.23	560	37	>1000	0.89	6.4	
	1209		18.3	7.19	536	36	>1000	0.81	9.6	
Post-Purge										

Did Well dewater? Yes No

Total Purge volume (gal): 9.6

Other Comments: 80% = 22.87 DTW @ Sample 19.82 * Hand Bailed due to access issues

Sample Info:

Sample ID: MW-9 - 20120229 Sample Date and Time: 2/20/12 @ 1215

Selected Analysis: SEE COC

This form was provided by Antea Group and completed by: (Print Full Name) Shawn Lane, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 2/20/12

LNAPL = light non-aqueous phase liquids
gal = gallon/s
bgs = below ground surface
temp = temperature
ORP = Oxidation-Reduction Potential
NTU = Nephelometric Turbidity Units
D.O. = dissolved oxygen
mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-10	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	20.00	Well Diameter (in):	<u>2</u> 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	35.33	Water Column Height (ft):	15.33

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: <u>Disposable Bailer</u> <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>15.33</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>2.6</u>
Casing Volume (gal): <u>2.6</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>7.8</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 11:47 Stop Time: 11:53

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1148	17.22	6.93	675	198.8	71000	1.73	1.3	
1149	20.01	6.74	711	198.7	71000	0.98	2.6	
1150	20.63	6.72	715	196.0	573	0.78	3.9	
1151	21.03	6.71	737	190.3	184	0.71	5.2	
1152	21.38	6.70	752	188.7	117	0.68	6.5	
1153	21.59	6.68	743	185.3	82	0.64	7.8	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 7.8

Other Comments: 80% = 23.07 * purge through flow cell
DTW = 22.56

Sample Info:	
Sample ID: MW-10_20120229	Sample Date and Time: 2/20/12 @ 1200
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) Daniel Allen, an employee of Blaine Tech Services, Inc.

Signature: Daniel Allen Date: 2/20/12



LNAPL = light non-aqueous phase liquids
bgs = below ground surface
ORP = Oxidation-Reduction Potential
D.O. = dissolved oxygen

gal = gallon/s
temp = temperature
NTU = Nephelometric Turbidity Units
mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	MW-11	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	16.24	Well Diameter (in):	2 <u>4</u> 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	37.00	Water Column Height (ft):	20.76

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>20.76</u> X Conversion Factor (gal/ft): <u>0.66</u> = Casing Volume (gal): <u>13.7</u> Casing Volume (gal): <u>13.7</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>41.1</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: _____ Start Time: 13:21 Stop Time: 13:57

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1324	20.31	6.95	466	-73.6	25	0.72	7	
1327	20.29	6.95	464	-78.9	83	0.67	13.7	
1329	20.29	6.96	460	-83.5	144	0.67	21	
1332	20.25	6.96	458	-86.5	79	0.65	27.4	
1334	20.28	6.96	455	-88.6	213	0.65	35	
1337	20.28	6.97	454	-90.0	145	0.65	41.1	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 41.1

Other Comments: 80% = 20.39 DTW @ Sample 20.20 *purged through flow cell

Sample Info:

Sample ID: MW-11 - 20120229 Sample Date and Time: 2/20/12 @ 1345

Selected Analysis: SEE COC

This form was provided by Antea Group and completed by: (Print Full Name) Shawn Lane, an employee of Blaine Tech Services, Inc.

Signature: SLW Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	EX-1	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	18.27	Well Diameter (in):	2 (4) 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	37.43	Water Column Height (ft):	19.16

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>19.16</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>12.6</u>
Casing Volume (gal): <u>12.6</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>37.8</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge Start Time: 1307 Stop Time: 1435

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)	
Pre-Purge									
1307	20.87	6.38	374	21.9	27	1.43	12.6 6.3		
1309	20.87	6.47	377	-2.4	26	1.92	25.2 12.6		
1312	21.25	6.62	615	-14.0	13	2.15	37.8 18.9		
	Well dewatered @ 19 gpd						DTW = 24.78		
1435	19.86	6.77	654	-7.8	17	1.77	Grab		
Post-Purge									

Did Well dewater? Yes No Total Purge volume (gal): 19.0

Other Comments: 80% = 22.10 DTW = 21.89 *purged through flow cell

Sample Info:

Sample ID:	EX-1 - 20120229	Sample Date and Time:	2/20/12 @ 1435
Selected Analysis:	SEE COC		

This form was provided by Antea Group and completed by: (Print Full Name) S. Lane, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen
 gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave, Oakland		
Project No:	261117	Field Technician:	DW
Field Point:	EX-2	Date:	2/20/12
Depth to Water (DTW) (ft bgs):	19.10	Well Diameter (in):	2 (4) 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	35.10	Water Column Height (ft):	16.00

Purging Info and Calculations

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailor Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailor Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>16.00</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>10.5</u>
Casing Volume (gal): <u>10.5</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>31.5</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 10:46 Stop Time: 10:58

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1046	19.97	6.89	198	50.1	68	1.79	5.3	
1048	20.01	6.78	198	57.1	45	1.77	10.6	
1051	19.98	6.66	200	61.6	31	1.71	15.9	
1053	20.31	6.63	196	58.6	8	1.67	21.2	
1056	20.48	6.62	196	58.0	12	1.65	26.5	
1058	20.63	6.61	197	57.6	44	1.61	31.8	
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 31.8

Other Comments: 80% = 22.30 DTW = 19.25 * purged through flow cell

Sample Info:	
Sample ID: EX-2_20120229	Sample Date and Time: 2/20/12 @ 1330
Selected Analysis: SEE COC	

This form was provided by Antea Group and completed by: (Print Full Name) Dannel Allen, an employee of Blaine Tech Services, Inc.

Signature: Dannel Allen Date: 2/20/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen
 gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Well-Head Inspection & Well Gauging Form

Antea Group Project No: 2611117 Site Address: 7210 Bancroft Ave Oakland
 Field Technician: Ben Panell Blaine Tech Services Date: 3-7-12 Weather: clear/sunny
(Print Full Name & Company*)

Well Condition														
Sample Order	Field Point	Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time Gauged	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Comments
	MW-4	G	P	G	P	P	N	Z	0815	17.75	39.20	—	—	vapor being no cap or lock w/ well

Notes: Removed vapor nosing before gauging allowed 15 minutes for water to equilibrate.

** All well caps opened at least 15 minutes or longer before gauging wells:
CIRCLE ONE: YES or NO**



*Form provided by Antea Group

Note: Use G=good and P=poor for well condition

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave Oakland		
Project No:	261117	Field Technician:	BP
Field Point:	MW-4	Date:	3-7-12
Depth to Water (DTW) (ft bgs):	17.75	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	39.20	Water Column Height (ft):	21.45

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer Extraction Port Dedicated Tubing <u>Disposable Tubing</u> Other: _____
Water Column Height (ft): <u>21.45</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>3.6</u> Casing Volume (gal): <u>3.6</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>10.8</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge:	Start Time: <u>0833</u>	Stop Time: <u>0900</u>						
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
0839	16.28	6.61	1211	4.1	79	2.40	750	17.76
0842	18.01	6.62	1100	-17.9	49	2.18	1500	17.76
0845	18.59	6.62	1083	-20.2	45	2.69	2250	17.76
0848	18.96	6.63	1073	-31.1	48	2.73	3000	17.76
0851	19.40	6.62	1065	-29.2	37	2.72	3750	17.76
0854	19.83	6.64	1058	-32.5	35	2.66	4500	17.76
Post-Purge								
Did Well dewater?		Yes <input type="radio"/> No <input checked="" type="radio"/>	Total Purge volume (gal): <u>4500 mL</u>					

Other Comments: purge rate: 250 mL/min
sketch (SD) Pump Depth @ 30'

Sample Info:	
Sample ID: <u>MW-4</u>	Sample Date and Time: <u>3/7/12 0900</u>
Selected Analysis: <u>SEE COC</u>	

This form was provided by Antea Group and completed by: (Print Full Name) Brian Pane II, an employee of Blaine Tech Services, Inc.

Signature: [Signature] Date: 3/7/12



LNAPL = light non-aqueous phase liquids
 bgs = below ground surface
 ORP = Oxidation-Reduction Potential
 D.O. = dissolved oxygen

gal = gallon/s
 temp = temperature
 NTU = Nephelometric Turbidity Units
 mV = millivolts

Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



Appendix D

Groundwater Flow and Gradient Data (Rose Diagram)

GROUNDWATER GRADIENT AND FLOW DIRECTION DATA
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

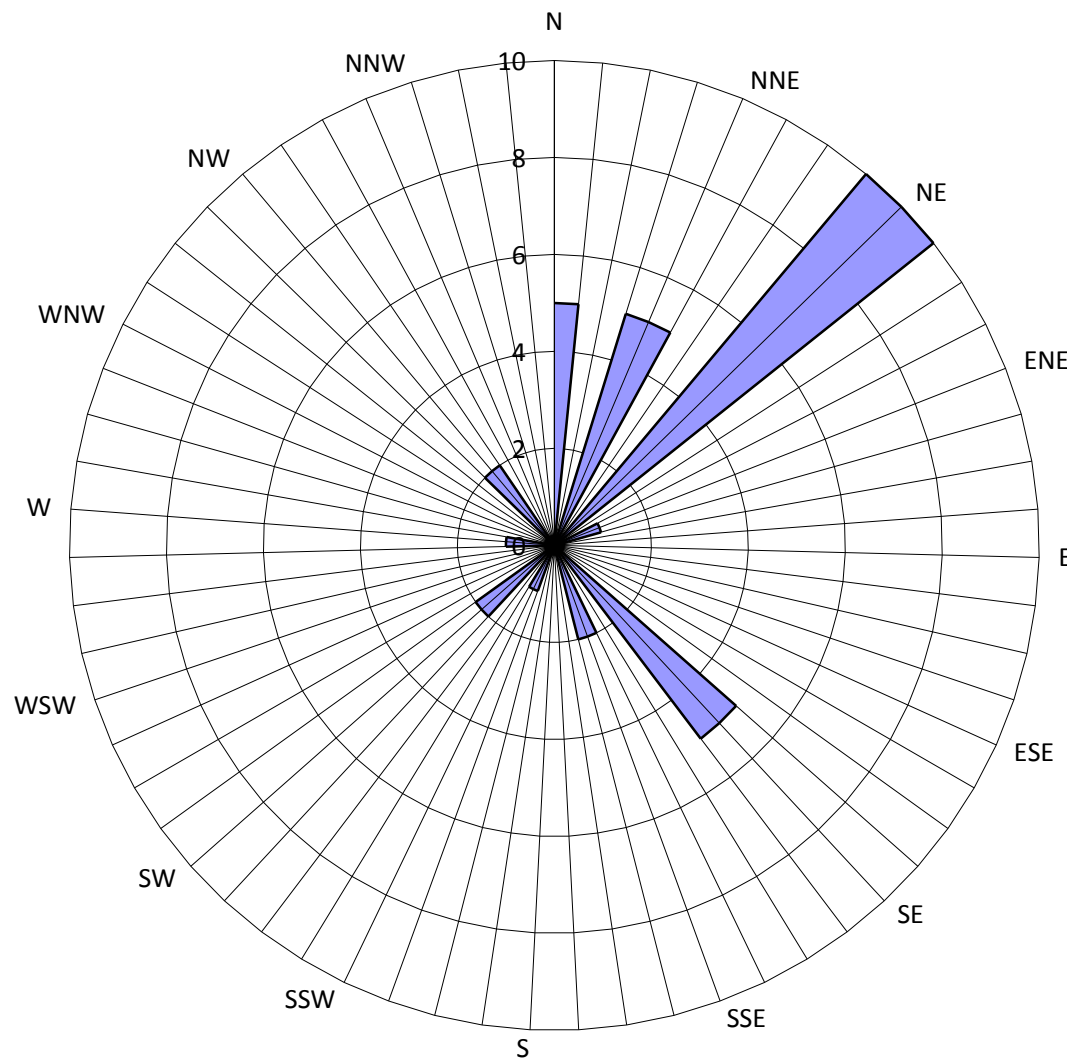


Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction																
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
11117	9/12/2002	0.03	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12/12/2002	0.02	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3/10/2003	0.03	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5/12/2003	0.055	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8/27/2003	0.036	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11/10/2003	0.012	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2/3/2004	0.013	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5/4/2004	0.015	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8/31/2004	0.01	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11/23/2004	0.04	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1/18/2005	0.02	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6/29/2005	0.003	V*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6/29/2005	0.006	V*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9/1/2005	0.03		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11/3/2005	0.008		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2/14/2006	0.02		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5/30/2006	0.03		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8/29/2006	0.006		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	11/29/2006	0.002	*	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	11/29/2006	0.001	*	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	2/20/2007	0.004		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	5/25/2007	0.005		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8/9/2007	0.002		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	11/9/2007	0.02		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12/14/2007	0.005	*	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
	12/14/2007	0.003	*	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	2/11/2008	0.02		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	5/22/2008	0.02		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	8/25/2008	0.003		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	12/17/2008	0.005		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
	2/25/2009	0.006		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	5/21/2009	0.004		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8/14/2009	0.006	*	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
	8/14/2009	0.004	*	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	2/10/2010	0.011	*	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	2/10/2010	0.040	*	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
	8/20/2010	0.022	*	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	8/20/2010	0.032	*	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
	2/7/2011		V*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8/15/2011		V*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2/20/2012		V*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0.015	Average	5	5	10	1	0	0	5	2	0	1	2	0	1	0	2	0

Explanation

V = Groundwater flow direction variable for reported event.
 * = Multiple groundwater flow directions and gradients reported for date.
 Number of Events with determined flow direction : 34

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Legend
Concentric Circles represent Quarterly
Monitoring Events

Third Quarter 2002 through First
Quarter 2012

34 Data Points Shown

■ Groundwater Flow Direction

*Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117*



Appendix E

Certified Laboratory Analytical Reports and Data Validation Forms

March 07, 2012

Doug Umland
Antea USA
312 Piercy Rd
San Jose, CA 95138

RE: Project: 2611117
Pace Project No.: 2510932

Dear Doug Umland:

Enclosed are the analytical results for sample(s) received by the laboratory on February 21, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Regina SteMarie

regina.stemarie@pacelabs.com
Project Manager

Enclosures

cc: Tara Bosch, Antea USA
Dennis Dettloff, Antea USA
Jonathon Fillingame, Antea USA
Lia Holden, Antea USA
Dan Keltner, Antea USA
Josh Mahoney, Antea USA
Tony Perini, Antea USA
Nicole Persaud, Antea USA
Don Pinkerton, Antea USA
Ed Weyrens, Antea USA



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 2611117
Pace Project No.: 2510932

Washington Certification IDs

940 South Harney Street, Seattle, WA 98108
Alaska CS Certification #: UST-025
Arizona Certification #: AZ0770
California Certification #: 01153CA

Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C555

SAMPLE ANALYTE COUNT

Project: 2611117
Pace Project No.: 2510932

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2510932001	EX-1_20120229	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	CC	2	PASI-S
2510932002	EX-2_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LNH	16	PASI-S
2510932003	MW-1_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932004	MW-10_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932005	MW-11_20120229	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	CC	2	PASI-S
2510932006	MW-3_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932007	MW-4_20120229	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	CC	2	PASI-S
2510932008	MW-6_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932009	MW-7_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932010	MW-8_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S
2510932011	MW-9_20120229	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	CC	2	PASI-S
2510932012	FD1_20120229	EPA 5030B/8260	LPM	16	PASI-S
		CA LUFT	CC	2	PASI-S
2510932013	TB1_20120229	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LPM	16	PASI-S

REPORT OF LABORATORY ANALYSIS

HITS ONLY

Project: 2611117

Pace Project No.: 2510932

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
2510932001	EX-1_20120229					
EPA 5030B/8260	tert-Amylmethyl ether	12.9	ug/L	2.5	03/02/12 20:55	
EPA 5030B/8260	Benzene	1810	ug/L	2.5	03/02/12 20:55	
EPA 5030B/8260	tert-Butyl Alcohol	481	ug/L	25.0	03/02/12 20:55	
EPA 5030B/8260	1,2-Dichloroethane	44.1	ug/L	5.0	03/02/12 20:55	
EPA 5030B/8260	Ethylbenzene	350	ug/L	2.5	03/02/12 20:55	
EPA 5030B/8260	Methyl-tert-butyl ether	312	ug/L	2.5	03/02/12 20:55	
EPA 5030B/8260	Toluene	586	ug/L	2.5	03/02/12 20:55	
EPA 5030B/8260	Xylene (Total)	712	ug/L	7.5	03/02/12 20:55	
CA LUFT	TPH-Gasoline (C05-C12)	10300	ug/L	250	03/05/12 21:39	
2510932004	MW-10_20120229					
EPA 5030B/8260	tert-Butyl Alcohol	5.3	ug/L	5.0	03/02/12 17:08	
EPA 5030B/8260	Methyl-tert-butyl ether	65.1	ug/L	0.50	03/02/12 17:08	
2510932005	MW-11_20120229					
EPA 5030B/8260	Benzene	0.65	ug/L	0.50	03/02/12 17:24	
EPA 5030B/8260	Ethylbenzene	48.9	ug/L	0.50	03/02/12 17:24	
EPA 5030B/8260	Methyl-tert-butyl ether	0.73	ug/L	0.50	03/02/12 17:24	
EPA 5030B/8260	Toluene	3.5	ug/L	0.50	03/02/12 17:24	
EPA 5030B/8260	Xylene (Total)	70.6	ug/L	1.5	03/02/12 17:24	
CA LUFT	TPH-Gasoline (C05-C12)	2180	ug/L	50.0	03/05/12 21:02	
2510932007	MW-4_20120229					
EPA 5030B/8260	Benzene	4870	ug/L	25.0	03/02/12 21:14	
EPA 5030B/8260	tert-Butyl Alcohol	4700	ug/L	250	03/02/12 21:14	
EPA 5030B/8260	1,2-Dichloroethane	115	ug/L	50.0	03/02/12 21:14	
EPA 5030B/8260	Ethylbenzene	7080	ug/L	25.0	03/02/12 21:14	
EPA 5030B/8260	Methyl-tert-butyl ether	228	ug/L	25.0	03/02/12 21:14	
EPA 5030B/8260	Toluene	505	ug/L	25.0	03/02/12 21:14	
EPA 5030B/8260	Xylene (Total)	29800	ug/L	75.0	03/02/12 21:14	
CA LUFT	TPH-Gasoline (C05-C12)	692000	ug/L	5000	03/05/12 22:34	
2510932008	MW-6_20120229					
EPA 5030B/8260	Methyl-tert-butyl ether	0.66	ug/L	0.50	03/02/12 17:58	
2510932009	MW-7_20120229					
EPA 5030B/8260	Methyl-tert-butyl ether	9.6	ug/L	0.50	03/02/12 18:14	
2510932011	MW-9_20120229					
EPA 5030B/8260	Benzene	43.2	ug/L	0.50	03/03/12 04:45	
EPA 5030B/8260	tert-Butyl Alcohol	59.1	ug/L	5.0	03/03/12 04:45	
CA LUFT	TPH-Gasoline (C05-C12)	204	ug/L	50.0	03/05/12 20:43	
2510932012	FD1_20120229					
EPA 5030B/8260	Benzene	2690	ug/L	25.0	03/03/12 04:12	
EPA 5030B/8260	tert-Butyl Alcohol	1240	ug/L	250	03/03/12 04:12	
EPA 5030B/8260	Ethylbenzene	2470	ug/L	25.0	03/03/12 04:12	
EPA 5030B/8260	Methyl-tert-butyl ether	111	ug/L	25.0	03/03/12 04:12	
EPA 5030B/8260	Toluene	183	ug/L	25.0	03/03/12 04:12	
EPA 5030B/8260	Xylene (Total)	9780	ug/L	75.0	03/03/12 04:12	

REPORT OF LABORATORY ANALYSIS

HITS ONLY

Project: 2611117
Pace Project No.: 2510932

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2510932012	FD1_20120229					
CA LUFT	TPH-Gasoline (C05-C12)	420000	ug/L	2500	03/05/12 22:16	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project: 261117
Pace Project No.: 2510932

Sample: EX-1_20120229		Lab ID: 2510932001	Collected: 02/20/12 14:35	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	12.9 ug/L		2.5	5		03/02/12 20:55	994-05-8	
Benzene	1810 ug/L		2.5	5		03/02/12 20:55	71-43-2	
tert-Butyl Alcohol	481 ug/L		25.0	5		03/02/12 20:55	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		5.0	5		03/02/12 20:55	106-93-4	
1,2-Dichloroethane	44.1 ug/L		5.0	5		03/02/12 20:55	107-06-2	
Diisopropyl ether	ND ug/L		2.5	5		03/02/12 20:55	108-20-3	
Ethanol	ND ug/L		1250	5		03/02/12 20:55	64-17-5	
Ethylbenzene	350 ug/L		2.5	5		03/02/12 20:55	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		2.5	5		03/02/12 20:55	637-92-3	
Methyl-tert-butyl ether	312 ug/L		2.5	5		03/02/12 20:55	1634-04-4	
Toluene	586 ug/L		2.5	5		03/02/12 20:55	108-88-3	
Xylene (Total)	712 ug/L		7.5	5		03/02/12 20:55	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	107 %		79-121	5		03/02/12 20:55	460-00-4	
Dibromofluoromethane (S)	79 %		81-119	5		03/02/12 20:55	1868-53-7	S5
1,2-Dichloroethane-d4 (S)	72 %		72-127	5		03/02/12 20:55	17060-07-0	
Toluene-d8 (S)	103 %		77-120	5		03/02/12 20:55	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	10300 ug/L		250	5		03/05/12 21:39		
Surrogates								
4-Bromofluorobenzene (S)	89 %		76-121	5		03/05/12 21:39	460-00-4	

Sample: EX-2_20120229		Lab ID: 2510932002	Collected: 02/20/12 13:30	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 19:52		
Surrogates								
4-Bromofluorobenzene (S)	94 %		40-142	1		02/28/12 19:52	460-00-4	
a,a,a-Trifluorotoluene (S)	95 %		65-145	1		02/28/12 19:52	98-08-8	
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		0.50	1		02/29/12 15:47	994-05-8	
Benzene	ND ug/L		0.50	1		02/29/12 15:47	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		02/29/12 15:47	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		02/29/12 15:47	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		02/29/12 15:47	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		02/29/12 15:47	108-20-3	
Ethanol	ND ug/L		250	1		02/29/12 15:47	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		02/29/12 15:47	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		02/29/12 15:47	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		02/29/12 15:47	1634-04-4	
Toluene	ND ug/L		0.50	1		02/29/12 15:47	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		02/29/12 15:47	1330-20-7	

Date: 03/07/2012 01:10 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2611117

Pace Project No.: 2510932

Sample: EX-2_20120229		Lab ID: 2510932002	Collected: 02/20/12 13:30	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Surrogates								
4-Bromofluorobenzene (S)	106 %		79-121	1		02/29/12 15:47	460-00-4	
Dibromofluoromethane (S)	112 %		81-119	1		02/29/12 15:47	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		72-127	1		02/29/12 15:47	17060-07-0	
Toluene-d8 (S)	100 %		77-120	1		02/29/12 15:47	2037-26-5	

Sample: MW-1_20120229		Lab ID: 2510932003	Collected: 02/20/12 13:00	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 20:16		
Surrogates								
4-Bromofluorobenzene (S)	90 %		40-142	1		02/28/12 20:16	460-00-4	
a,a,a-Trifluorotoluene (S)	97 %		65-145	1		02/28/12 20:16	98-08-8	

8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		0.50	1		03/02/12 16:51	994-05-8	
Benzene	ND ug/L		0.50	1		03/02/12 16:51	71-43-2	CL
tert-Butyl Alcohol	ND ug/L		5.0	1		03/02/12 16:51	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/02/12 16:51	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/02/12 16:51	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/02/12 16:51	108-20-3	
Ethanol	ND ug/L		250	1		03/02/12 16:51	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/02/12 16:51	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/02/12 16:51	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/02/12 16:51	1634-04-4	
Toluene	ND ug/L		0.50	1		03/02/12 16:51	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/02/12 16:51	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	116 %		79-121	1		03/02/12 16:51	460-00-4	
Dibromofluoromethane (S)	99 %		81-119	1		03/02/12 16:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	95 %		72-127	1		03/02/12 16:51	17060-07-0	
Toluene-d8 (S)	100 %		77-120	1		03/02/12 16:51	2037-26-5	

Sample: MW-10_20120229		Lab ID: 2510932004	Collected: 02/20/12 12:00	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 20:40		
Surrogates								
4-Bromofluorobenzene (S)	93 %		40-142	1		02/28/12 20:40	460-00-4	
a,a,a-Trifluorotoluene (S)	100 %		65-145	1		02/28/12 20:40	98-08-8	

Date: 03/07/2012 01:10 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2611117

Pace Project No.: 2510932

Sample: MW-10_20120229		Lab ID: 2510932004	Collected: 02/20/12 12:00	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND	ug/L	0.50	1		03/02/12 17:08	994-05-8	
Benzene	ND	ug/L	0.50	1		03/02/12 17:08	71-43-2	
tert-Butyl Alcohol	5.3	ug/L	5.0	1		03/02/12 17:08	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/12 17:08	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/02/12 17:08	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		03/02/12 17:08	108-20-3	
Ethanol	ND	ug/L	250	1		03/02/12 17:08	64-17-5	
Ethylbenzene	ND	ug/L	0.50	1		03/02/12 17:08	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		03/02/12 17:08	637-92-3	
Methyl-tert-butyl ether	65.1	ug/L	0.50	1		03/02/12 17:08	1634-04-4	
Toluene	ND	ug/L	0.50	1		03/02/12 17:08	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		03/02/12 17:08	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	117 %		79-121	1		03/02/12 17:08	460-00-4	
Dibromofluoromethane (S)	99 %		81-119	1		03/02/12 17:08	1868-53-7	
1,2-Dichloroethane-d4 (S)	94 %		72-127	1		03/02/12 17:08	17060-07-0	
Toluene-d8 (S)	101 %		77-120	1		03/02/12 17:08	2037-26-5	

Sample: MW-11_20120229		Lab ID: 2510932005	Collected: 02/20/12 13:45	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND	ug/L	0.50	1		03/02/12 17:24	994-05-8	
Benzene	0.65	ug/L	0.50	1		03/02/12 17:24	71-43-2	
tert-Butyl Alcohol	ND	ug/L	5.0	1		03/02/12 17:24	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/12 17:24	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/02/12 17:24	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		03/02/12 17:24	108-20-3	
Ethanol	ND	ug/L	250	1		03/02/12 17:24	64-17-5	
Ethylbenzene	48.9	ug/L	0.50	1		03/02/12 17:24	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		03/02/12 17:24	637-92-3	
Methyl-tert-butyl ether	0.73	ug/L	0.50	1		03/02/12 17:24	1634-04-4	
Toluene	3.5	ug/L	0.50	1		03/02/12 17:24	108-88-3	
Xylene (Total)	70.6	ug/L	1.5	1		03/02/12 17:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104 %		79-121	1		03/02/12 17:24	460-00-4	
Dibromofluoromethane (S)	95 %		81-119	1		03/02/12 17:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	90 %		72-127	1		03/02/12 17:24	17060-07-0	
Toluene-d8 (S)	105 %		77-120	1		03/02/12 17:24	2037-26-5	

Sample: CA LUFT MSV GRO		Lab ID: 2510932005	Collected: 02/20/12 13:45	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	2180	ug/L	50.0	1		03/05/12 21:02		
Surrogates								
4-Bromofluorobenzene (S)	91 %		76-121	1		03/05/12 21:02	460-00-4	

ANALYTICAL RESULTS

Project: 261117
Pace Project No.: 2510932

Sample: MW-3_20120229		Lab ID: 2510932006	Collected: 02/20/12 11:25	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 21:04		
Surrogates								
4-Bromofluorobenzene (S)	91 %		40-142	1		02/28/12 21:04	460-00-4	
a,a,a-Trifluorotoluene (S)	95 %		65-145	1		02/28/12 21:04	98-08-8	
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		0.50	1		03/02/12 17:41	994-05-8	
Benzene	ND ug/L		0.50	1		03/02/12 17:41	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		03/02/12 17:41	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/02/12 17:41	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/02/12 17:41	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/02/12 17:41	108-20-3	
Ethanol	ND ug/L		250	1		03/02/12 17:41	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/02/12 17:41	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/02/12 17:41	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/02/12 17:41	1634-04-4	
Toluene	ND ug/L		0.50	1		03/02/12 17:41	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/02/12 17:41	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	114 %		79-121	1		03/02/12 17:41	460-00-4	
Dibromofluoromethane (S)	98 %		81-119	1		03/02/12 17:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	93 %		72-127	1		03/02/12 17:41	17060-07-0	
Toluene-d8 (S)	102 %		77-120	1		03/02/12 17:41	2037-26-5	

Sample: MW-4_20120229		Lab ID: 2510932007	Collected: 02/20/12 14:15	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		25.0	50		03/02/12 21:14	994-05-8	
Benzene	4870 ug/L		25.0	50		03/02/12 21:14	71-43-2	
tert-Butyl Alcohol	4700 ug/L		250	50		03/02/12 21:14	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		50.0	50		03/02/12 21:14	106-93-4	
1,2-Dichloroethane	115 ug/L		50.0	50		03/02/12 21:14	107-06-2	
Diisopropyl ether	ND ug/L		25.0	50		03/02/12 21:14	108-20-3	
Ethanol	ND ug/L		12500	50		03/02/12 21:14	64-17-5	
Ethylbenzene	7080 ug/L		25.0	50		03/02/12 21:14	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		25.0	50		03/02/12 21:14	637-92-3	
Methyl-tert-butyl ether	228 ug/L		25.0	50		03/02/12 21:14	1634-04-4	
Toluene	505 ug/L		25.0	50		03/02/12 21:14	108-88-3	
Xylene (Total)	29800 ug/L		75.0	50		03/02/12 21:14	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	93 %		79-121	50		03/02/12 21:14	460-00-4	
Dibromofluoromethane (S)	85 %		81-119	50		03/02/12 21:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	89 %		72-127	50		03/02/12 21:14	17060-07-0	
Toluene-d8 (S)	107 %		77-120	50		03/02/12 21:14	2037-26-5	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2611117

Pace Project No.: 2510932

Sample: MW-4_20120229		Lab ID: 2510932007	Collected: 02/20/12 14:15	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	692000	ug/L	5000	100		03/05/12 22:34		
Surrogates								
4-Bromofluorobenzene (S)	90 %		76-121	100		03/05/12 22:34	460-00-4	

Sample: MW-6_20120229		Lab ID: 2510932008	Collected: 02/20/12 12:25	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND	ug/L	50.0	1		02/28/12 21:27		
Surrogates								
4-Bromofluorobenzene (S)	106 %		40-142	1		02/28/12 21:27	460-00-4	
a,a,a-Trifluorotoluene (S)	122 %		65-145	1		02/28/12 21:27	98-08-8	

Sample: MW-7_20120229		Lab ID: 2510932009	Collected: 02/20/12 13:10	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND	ug/L	0.50	1		03/02/12 17:58	994-05-8	
Benzene	ND	ug/L	0.50	1		03/02/12 17:58	71-43-2	
tert-Butyl Alcohol	ND	ug/L	5.0	1		03/02/12 17:58	75-65-0	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		03/02/12 17:58	106-93-4	
1,2-Dichloroethane	ND	ug/L	1.0	1		03/02/12 17:58	107-06-2	
Diisopropyl ether	ND	ug/L	0.50	1		03/02/12 17:58	108-20-3	
Ethanol	ND	ug/L	250	1		03/02/12 17:58	64-17-5	
Ethylbenzene	ND	ug/L	0.50	1		03/02/12 17:58	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	0.50	1		03/02/12 17:58	637-92-3	
Methyl-tert-butyl ether	0.66	ug/L	0.50	1		03/02/12 17:58	1634-04-4	
Toluene	ND	ug/L	0.50	1		03/02/12 17:58	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		03/02/12 17:58	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	114 %		79-121	1		03/02/12 17:58	460-00-4	
Dibromofluoromethane (S)	100 %		81-119	1		03/02/12 17:58	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %		72-127	1		03/02/12 17:58	17060-07-0	
Toluene-d8 (S)	101 %		77-120	1		03/02/12 17:58	2037-26-5	

Sample: MW-7_20120229		Lab ID: 2510932009	Collected: 02/20/12 13:10	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND	ug/L	50.0	1		02/28/12 21:51		
Surrogates								
4-Bromofluorobenzene (S)	104 %		40-142	1		02/28/12 21:51	460-00-4	
a,a,a-Trifluorotoluene (S)	123 %		65-145	1		02/28/12 21:51	98-08-8	

Sample: MW-7_20120229		Lab ID: 2510932009	Collected: 02/20/12 13:10	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND	ug/L	0.50	1		03/02/12 18:14	994-05-8	

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ANALYTICAL RESULTS

Project: 2611117

Pace Project No.: 2510932

Sample: MW-7_20120229		Lab ID: 2510932009	Collected: 02/20/12 13:10	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		03/02/12 18:14	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		03/02/12 18:14	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/02/12 18:14	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/02/12 18:14	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/02/12 18:14	108-20-3	
Ethanol	ND ug/L		250	1		03/02/12 18:14	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/02/12 18:14	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/02/12 18:14	637-92-3	
Methyl-tert-butyl ether	9.6 ug/L		0.50	1		03/02/12 18:14	1634-04-4	
Toluene	ND ug/L		0.50	1		03/02/12 18:14	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/02/12 18:14	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	118 %		79-121	1		03/02/12 18:14	460-00-4	
Dibromofluoromethane (S)	99 %		81-119	1		03/02/12 18:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		72-127	1		03/02/12 18:14	17060-07-0	
Toluene-d8 (S)	101 %		77-120	1		03/02/12 18:14	2037-26-5	

Sample: MW-8_20120229		Lab ID: 2510932010	Collected: 02/20/12 10:00	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 22:15		
Surrogates								
4-Bromofluorobenzene (S)	103 %		40-142	1		02/28/12 22:15	460-00-4	
a,a,a-Trifluorotoluene (S)	121 %		65-145	1		02/28/12 22:15	98-08-8	
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		0.50	1		03/03/12 04:28	994-05-8	
Benzene	ND ug/L		0.50	1		03/03/12 04:28	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		03/03/12 04:28	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/03/12 04:28	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/03/12 04:28	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/03/12 04:28	108-20-3	
Ethanol	ND ug/L		250	1		03/03/12 04:28	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/03/12 04:28	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 04:28	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 04:28	1634-04-4	
Toluene	ND ug/L		0.50	1		03/03/12 04:28	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/03/12 04:28	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	112 %		79-121	1		03/03/12 04:28	460-00-4	
Dibromofluoromethane (S)	97 %		81-119	1		03/03/12 04:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	88 %		72-127	1		03/03/12 04:28	17060-07-0	
Toluene-d8 (S)	98 %		77-120	1		03/03/12 04:28	2037-26-5	

ANALYTICAL RESULTS

Project: 2611117

Pace Project No.: 2510932

Sample: MW-9_20120229		Lab ID: 2510932011	Collected: 02/20/12 12:15	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		0.50	1		03/03/12 04:45	994-05-8	
Benzene	43.2 ug/L		0.50	1		03/03/12 04:45	71-43-2	
tert-Butyl Alcohol	59.1 ug/L		5.0	1		03/03/12 04:45	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/03/12 04:45	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/03/12 04:45	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/03/12 04:45	108-20-3	
Ethanol	ND ug/L		250	1		03/03/12 04:45	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/03/12 04:45	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 04:45	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 04:45	1634-04-4	
Toluene	ND ug/L		0.50	1		03/03/12 04:45	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/03/12 04:45	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	111 %		79-121	1		03/03/12 04:45	460-00-4	
Dibromofluoromethane (S)	95 %		81-119	1		03/03/12 04:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	87 %		72-127	1		03/03/12 04:45	17060-07-0	
Toluene-d8 (S)	102 %		77-120	1		03/03/12 04:45	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	204 ug/L		50.0	1		03/05/12 20:43		
Surrogates								
4-Bromofluorobenzene (S)	97 %		76-121	1		03/05/12 20:43	460-00-4	

Sample: FD1_20120229		Lab ID: 2510932012	Collected: 02/20/12 14:20	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	ND ug/L		25.0	50		03/03/12 04:12	994-05-8	
Benzene	2690 ug/L		25.0	50		03/03/12 04:12	71-43-2	
tert-Butyl Alcohol	1240 ug/L		250	50		03/03/12 04:12	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		50.0	50		03/03/12 04:12	106-93-4	
1,2-Dichloroethane	ND ug/L		50.0	50		03/03/12 04:12	107-06-2	
Diisopropyl ether	ND ug/L		25.0	50		03/03/12 04:12	108-20-3	
Ethanol	ND ug/L		12500	50		03/03/12 04:12	64-17-5	
Ethylbenzene	2470 ug/L		25.0	50		03/03/12 04:12	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		25.0	50		03/03/12 04:12	637-92-3	
Methyl-tert-butyl ether	111 ug/L		25.0	50		03/03/12 04:12	1634-04-4	
Toluene	183 ug/L		25.0	50		03/03/12 04:12	108-88-3	
Xylene (Total)	9780 ug/L		75.0	50		03/03/12 04:12	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106 %		79-121	50		03/03/12 04:12	460-00-4	
Dibromofluoromethane (S)	94 %		81-119	50		03/03/12 04:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	87 %		72-127	50		03/03/12 04:12	17060-07-0	
Toluene-d8 (S)	99 %		77-120	50		03/03/12 04:12	2037-26-5	

ANALYTICAL RESULTS

Project: 2611117
Pace Project No.: 2510932

Sample: FD1_20120229		Lab ID: 2510932012	Collected: 02/20/12 14:20	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

CA LUFT MSV GRO

Analytical Method: CA LUFT

TPH-Gasoline (C05-C12)	420000 ug/L		2500	50		03/05/12 22:16		
Surrogates								
4-Bromofluorobenzene (S)	90 %		76-121	50		03/05/12 22:16	460-00-4	

Sample: TB1_20120229		Lab ID: 2510932013	Collected: 02/20/12 08:00	Received: 02/21/12 10:07	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

Gasoline Range Organics

Analytical Method: EPA 5030B/8015B

CA TPH-GRO (C5-C12)	ND ug/L		50.0	1		02/28/12 19:28		
Surrogates								
4-Bromofluorobenzene (S)	97 %		40-142	1		02/28/12 19:28	460-00-4	
a,a,a-Trifluorotoluene (S)	98 %		65-145	1		02/28/12 19:28	98-08-8	

8260 MSV

Analytical Method: EPA 5030B/8260

tert-Amylmethyl ether	ND ug/L		0.50	1		03/03/12 03:21	994-05-8	
Benzene	ND ug/L		0.50	1		03/03/12 03:21	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		03/03/12 03:21	75-65-0	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/03/12 03:21	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/03/12 03:21	107-06-2	
Diisopropyl ether	ND ug/L		0.50	1		03/03/12 03:21	108-20-3	
Ethanol	ND ug/L		250	1		03/03/12 03:21	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/03/12 03:21	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 03:21	637-92-3	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/03/12 03:21	1634-04-4	
Toluene	ND ug/L		0.50	1		03/03/12 03:21	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/03/12 03:21	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	115 %		79-121	1		03/03/12 03:21	460-00-4	
Dibromofluoromethane (S)	96 %		81-119	1		03/03/12 03:21	1868-53-7	
1,2-Dichloroethane-d4 (S)	87 %		72-127	1		03/03/12 03:21	17060-07-0	
Toluene-d8 (S)	101 %		77-120	1		03/03/12 03:21	2037-26-5	

QUALITY CONTROL DATA

Project: 2611117
Pace Project No.: 2510932

QC Batch: GCV/2694 Analysis Method: EPA 5030B/8015B
QC Batch Method: EPA 5030B/8015B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 2510932002, 2510932003, 2510932004, 2510932006, 2510932008, 2510932009, 2510932010, 2510932013

METHOD BLANK: 104485 Matrix: Water
Associated Lab Samples: 2510932002, 2510932003, 2510932004, 2510932006, 2510932008, 2510932009, 2510932010, 2510932013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	ND	50.0	02/28/12 19:04	
4-Bromofluorobenzene (S)	%	108	40-142	02/28/12 19:04	
a,a,a-Trifluorotoluene (S)	%	123	65-145	02/28/12 19:04	

LABORATORY CONTROL SAMPLE: 104486

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	250	249	100	65-120	
4-Bromofluorobenzene (S)	%			99	40-142	
a,a,a-Trifluorotoluene (S)	%			112	65-145	

MATRIX SPIKE SAMPLE: 105110

Parameter	Units	2510932010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	ND	250	258	98	40-124	
4-Bromofluorobenzene (S)	%				108	40-142	
a,a,a-Trifluorotoluene (S)	%				123	65-145	

SAMPLE DUPLICATE: 105111

Parameter	Units	2510932010 Result	Dup Result	RPD	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	ND	ND		
4-Bromofluorobenzene (S)	%	103	104	1	
a,a,a-Trifluorotoluene (S)	%	121	122	.9	

QUALITY CONTROL DATA

Project: 2611117
Pace Project No.: 2510932

QC Batch: MSV/6472 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2510932002

METHOD BLANK: 104579 Matrix: Water
Associated Lab Samples: 2510932002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	02/29/12 15:13	
1,2-Dichloroethane	ug/L	ND	1.0	02/29/12 15:13	
Benzene	ug/L	ND	0.50	02/29/12 15:13	
Diisopropyl ether	ug/L	ND	0.50	02/29/12 15:13	
Ethanol	ug/L	ND	250	02/29/12 15:13	
Ethyl-tert-butyl ether	ug/L	ND	0.50	02/29/12 15:13	
Ethylbenzene	ug/L	ND	0.50	02/29/12 15:13	
Methyl-tert-butyl ether	ug/L	ND	0.50	02/29/12 15:13	
tert-Amylmethyl ether	ug/L	ND	0.50	02/29/12 15:13	
tert-Butyl Alcohol	ug/L	ND	5.0	02/29/12 15:13	
Toluene	ug/L	ND	0.50	02/29/12 15:13	
Xylene (Total)	ug/L	ND	1.5	02/29/12 15:13	
1,2-Dichloroethane-d4 (S)	%	97	72-127	02/29/12 15:13	
4-Bromofluorobenzene (S)	%	103	79-121	02/29/12 15:13	
Dibromofluoromethane (S)	%	113	81-119	02/29/12 15:13	
Toluene-d8 (S)	%	99	77-120	02/29/12 15:13	

LABORATORY CONTROL SAMPLE: 104580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	18.0	90	65-123	
1,2-Dichloroethane	ug/L	20	16.7	83	63-131	
Benzene	ug/L	20	17.2	86	66-123	
Diisopropyl ether	ug/L	20	17.9	90	70-136	
Ethanol	ug/L	800	730	91	40-160	
Ethyl-tert-butyl ether	ug/L	20	18.6	93	65-135	
Ethylbenzene	ug/L	20	18.0	90	67-122	
Methyl-tert-butyl ether	ug/L	20	17.9	90	65-138	
tert-Amylmethyl ether	ug/L	20	18.2	91	68-138	
tert-Butyl Alcohol	ug/L	100	81.5	82	57-153	
Toluene	ug/L	20	17.4	87	64-118	
Xylene (Total)	ug/L	60	54.9	92	68-122	
1,2-Dichloroethane-d4 (S)	%			92	72-127	
4-Bromofluorobenzene (S)	%			99	79-121	
Dibromofluoromethane (S)	%			112	81-119	
Toluene-d8 (S)	%			100	77-120	

QUALITY CONTROL DATA

Project: 2611117
Pace Project No.: 2510932

Parameter	Units	2510932002		MS		MSD		MS		MSD		% Rec	Limits	RPD	Qual	
		Result	Conc.	Spike	Conc.	Result	Result	% Rec	% Rec							
MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			104600													
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20.7	19.8	103	99	61-127	4						
1,2-Dichloroethane	ug/L	ND	20	20	20.2	19.5	101	98	60-138	4						
Benzene	ug/L	ND	20	20	21.2	20.3	106	101	63-138	4						
Diisopropyl ether	ug/L	ND	20	20	21.3	20.1	106	100	68-146	6						
Ethanol	ug/L	ND	800	800	760	796	95	99	40-160	5						
Ethyl-tert-butyl ether	ug/L	ND	20	20	21.5	20.6	108	103	63-138	4						
Ethylbenzene	ug/L	ND	20	20	22.7	21.2	113	105	65-135	7						
Methyl-tert-butyl ether	ug/L	ND	20	20	19.6	19.0	97	94	59-143	3						
tert-Amylmethyl ether	ug/L	ND	20	20	20.6	19.8	103	99	62-142	4						
tert-Butyl Alcohol	ug/L	ND	100	100	88.3	88.3	86	86	46-156	.02						
Toluene	ug/L	ND	20	20	21.9	20.3	109	101	64-128	8						
Xylene (Total)	ug/L	ND	60	60	69.3	64.0	115	106	65-133	8						
1,2-Dichloroethane-d4 (S)	%						95	96	72-127							
4-Bromofluorobenzene (S)	%						97	98	79-121							
Dibromofluoromethane (S)	%						114	115	81-119							
Toluene-d8 (S)	%						102	101	77-120							

QUALITY CONTROL DATA

Project: 2611117

Pace Project No.: 2510932

QC Batch: MSV/6495 Analysis Method: EPA 5030B/8260
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
 Associated Lab Samples: 2510932001, 2510932003, 2510932004, 2510932005, 2510932006, 2510932007, 2510932008, 2510932009

METHOD BLANK: 104936 Matrix: Water

Associated Lab Samples: 2510932001, 2510932003, 2510932004, 2510932005, 2510932006, 2510932007, 2510932008, 2510932009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/02/12 15:10	
1,2-Dichloroethane	ug/L	ND	1.0	03/02/12 15:10	
Benzene	ug/L	ND	0.50	03/02/12 15:10	
Diisopropyl ether	ug/L	ND	0.50	03/02/12 15:10	
Ethanol	ug/L	ND	250	03/02/12 15:10	
Ethyl-tert-butyl ether	ug/L	ND	0.50	03/02/12 15:10	
Ethylbenzene	ug/L	ND	0.50	03/02/12 15:10	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/02/12 15:10	
tert-Amylmethyl ether	ug/L	ND	0.50	03/02/12 15:10	
tert-Butyl Alcohol	ug/L	ND	5.0	03/02/12 15:10	
Toluene	ug/L	ND	0.50	03/02/12 15:10	
Xylene (Total)	ug/L	ND	1.5	03/02/12 15:10	
1,2-Dichloroethane-d4 (S)	%	95	72-127	03/02/12 15:10	
4-Bromofluorobenzene (S)	%	112	79-121	03/02/12 15:10	
Dibromofluoromethane (S)	%	98	81-119	03/02/12 15:10	
Toluene-d8 (S)	%	99	77-120	03/02/12 15:10	

LABORATORY CONTROL SAMPLE: 104937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	17.2	86	65-123	
1,2-Dichloroethane	ug/L	20	16.7	84	63-131	
Benzene	ug/L	20	17.3	86	66-123	
Diisopropyl ether	ug/L	20	19.7	98	70-136	
Ethanol	ug/L	800	675	84	40-160	
Ethyl-tert-butyl ether	ug/L	20	19.7	98	65-135	
Ethylbenzene	ug/L	20	17.8	89	67-122	
Methyl-tert-butyl ether	ug/L	20	19.0	95	65-138	
tert-Amylmethyl ether	ug/L	20	18.7	93	68-138	
tert-Butyl Alcohol	ug/L	100	75.9	76	57-153	
Toluene	ug/L	20	18.5	93	64-118	
Xylene (Total)	ug/L	60	53.7	90	68-122	
1,2-Dichloroethane-d4 (S)	%			89	72-127	
4-Bromofluorobenzene (S)	%			101	79-121	
Dibromofluoromethane (S)	%			97	81-119	
Toluene-d8 (S)	%			101	77-120	

QUALITY CONTROL DATA

Project: 2611117
Pace Project No.: 2510932

Parameter	Units	2510932009		MS		MSD		MS		MSD		% Rec	Limits	RPD	Qual
		Result	Conc.	Spike	Conc.	Result	Result	% Rec	% Rec						
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20	16.5	20.0	83	100	61-127	19				
1,2-Dichloroethane	ug/L	ND	20	20	20	16.5	19.4	83	97	60-138	16				
Benzene	ug/L	ND	20	20	20	19.3	21.1	96	105	63-138	9				
Diisopropyl ether	ug/L	ND	20	20	20	19.9	22.8	99	114	68-146	14				
Ethanol	ug/L	ND	800	800	800	612	727	77	91	40-160	17				
Ethyl-tert-butyl ether	ug/L	ND	20	20	20	18.8	22.6	94	113	63-138	18				
Ethylbenzene	ug/L	ND	20	20	20	20.4	21.8	102	109	65-135	7				
Methyl-tert-butyl ether	ug/L	9.6	20	20	20	26.3	30.9	84	107	59-143	16				
tert-Amylmethyl ether	ug/L	ND	20	20	20	17.1	21.4	85	107	62-142	22				
tert-Butyl Alcohol	ug/L	ND	100	100	100	64.0	90.6	62	89	46-156	34	D6			
Toluene	ug/L	ND	20	20	20	21.6	22.9	108	114	64-128	6				
Xylene (Total)	ug/L	ND	60	60	60	61.2	65.7	102	109	65-133	7				
1,2-Dichloroethane-d4 (S)	%							82	87	72-127					
4-Bromofluorobenzene (S)	%							104	101	79-121					
Dibromofluoromethane (S)	%							94	96	81-119					
Toluene-d8 (S)	%							104	102	77-120					

QUALITY CONTROL DATA

Project: 2611117

Pace Project No.: 2510932

QC Batch: MSV/6497 Analysis Method: EPA 5030B/8260
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
 Associated Lab Samples: 2510932010, 2510932011, 2510932012, 2510932013

METHOD BLANK: 104948 Matrix: Water
 Associated Lab Samples: 2510932010, 2510932011, 2510932012, 2510932013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/03/12 03:05	
1,2-Dichloroethane	ug/L	ND	1.0	03/03/12 03:05	
Benzene	ug/L	ND	0.50	03/03/12 03:05	
Diisopropyl ether	ug/L	ND	0.50	03/03/12 03:05	
Ethanol	ug/L	ND	250	03/03/12 03:05	
Ethyl-tert-butyl ether	ug/L	ND	0.50	03/03/12 03:05	
Ethylbenzene	ug/L	ND	0.50	03/03/12 03:05	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/03/12 03:05	
tert-Amylmethyl ether	ug/L	ND	0.50	03/03/12 03:05	
tert-Butyl Alcohol	ug/L	ND	5.0	03/03/12 03:05	
Toluene	ug/L	ND	0.50	03/03/12 03:05	
Xylene (Total)	ug/L	ND	1.5	03/03/12 03:05	
1,2-Dichloroethane-d4 (S)	%	85	72-127	03/03/12 03:05	
4-Bromofluorobenzene (S)	%	114	79-121	03/03/12 03:05	
Dibromofluoromethane (S)	%	95	81-119	03/03/12 03:05	
Toluene-d8 (S)	%	100	77-120	03/03/12 03:05	

LABORATORY CONTROL SAMPLE: 104949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	19.3	96	65-123	
1,2-Dichloroethane	ug/L	20	18.3	91	63-131	
Benzene	ug/L	20	19.8	99	66-123	
Diisopropyl ether	ug/L	20	21.9	109	70-136	
Ethanol	ug/L	800	771	96	40-160	
Ethyl-tert-butyl ether	ug/L	20	22.0	110	65-135	
Ethylbenzene	ug/L	20	20.3	101	67-122	
Methyl-tert-butyl ether	ug/L	20	19.3	97	65-138	
tert-Amylmethyl ether	ug/L	20	20.7	103	68-138	
tert-Butyl Alcohol	ug/L	100	82.3	82	57-153	
Toluene	ug/L	20	20.8	104	64-118	
Xylene (Total)	ug/L	60	61.9	103	68-122	
1,2-Dichloroethane-d4 (S)	%			83	72-127	
4-Bromofluorobenzene (S)	%			101	79-121	
Dibromofluoromethane (S)	%			94	81-119	
Toluene-d8 (S)	%			100	77-120	

QUALITY CONTROL DATA

Project: 2611117

Pace Project No.: 2510932

Parameter	Units	2510932012		MS		MSD		MS		MSD		% Rec	Limits	RPD	Qual
		Result	Conc.	Spike	Conc.	Result	Conc.	Result	Conc.	% Rec	% Rec				
1,2-Dibromoethane (EDB)	ug/L	ND	1000	1000	1000	788	887	79	89	61-127	12				
1,2-Dichloroethane	ug/L	ND	1000	1000	1000	822	875	82	88	60-138	6				
Benzene	ug/L	2690	1000	1000	1000	3350	3350	65	65	63-138	.05				
Diisopropyl ether	ug/L	ND	1000	1000	1000	897	978	90	98	68-146	9				
Ethanol	ug/L	ND	40000	40000	40000	30000	33500	75	84	40-160	11				
Ethyl-tert-butyl ether	ug/L	ND	1000	1000	1000	895	983	90	98	63-138	9				
Ethylbenzene	ug/L	2470	1000	1000	1000	3270	3350	80	88	65-135	2				
Methyl-tert-butyl ether	ug/L	111	1000	1000	1000	895	961	78	85	59-143	7				
tert-Amylmethyl ether	ug/L	ND	1000	1000	1000	862	960	86	96	62-142	11				
tert-Butyl Alcohol	ug/L	1240	5000	5000	5000	4480	4780	65	71	46-156	7				
Toluene	ug/L	183	1000	1000	1000	1070	1160	89	98	64-128	8				
Xylene (Total)	ug/L	9780	3000	3000	3000	12500	12700	92	97	65-133	1				
1,2-Dichloroethane-d4 (S)	%							83	83	72-127					
4-Bromofluorobenzene (S)	%							97	97	79-121					
Dibromofluoromethane (S)	%							92	92	81-119					
Toluene-d8 (S)	%							100	101	77-120					

QUALITY CONTROL DATA

Project: 2611117

Pace Project No.: 2510932

QC Batch: MSV/6544 Analysis Method: CA LUFT
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
 Associated Lab Samples: 2510932001, 2510932005, 2510932007, 2510932011, 2510932012

METHOD BLANK: 105487 Matrix: Water
 Associated Lab Samples: 2510932001, 2510932005, 2510932007, 2510932011, 2510932012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	03/05/12 19:48	
4-Bromofluorobenzene (S)	%	102	76-121	03/05/12 19:48	

LABORATORY CONTROL SAMPLE: 105467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	605	121	57-139	
4-Bromofluorobenzene (S)	%			96	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 105485 105486

Parameter	Units	2511121001 Result	MS		MSD		% Rec		% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
TPH-Gasoline (C05-C12)	ug/L	ND	500	663	631	126	120	40-150	5		
4-Bromofluorobenzene (S)	%					96	96	76-121			

QUALIFIERS

Project: 2611117

Pace Project No.: 2510932

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-S Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

CL The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2611117
Pace Project No.: 2510932

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2510932002	EX-2_20120229	EPA 5030B/8015B	GCV/2694		
2510932003	MW-1_20120229	EPA 5030B/8015B	GCV/2694		
2510932004	MW-10_20120229	EPA 5030B/8015B	GCV/2694		
2510932006	MW-3_20120229	EPA 5030B/8015B	GCV/2694		
2510932008	MW-6_20120229	EPA 5030B/8015B	GCV/2694		
2510932009	MW-7_20120229	EPA 5030B/8015B	GCV/2694		
2510932010	MW-8_20120229	EPA 5030B/8015B	GCV/2694		
2510932013	TB1_20120229	EPA 5030B/8015B	GCV/2694		
2510932001	EX-1_20120229	EPA 5030B/8260	MSV/6495		
2510932002	EX-2_20120229	EPA 5030B/8260	MSV/6472		
2510932003	MW-1_20120229	EPA 5030B/8260	MSV/6495		
2510932004	MW-10_20120229	EPA 5030B/8260	MSV/6495		
2510932005	MW-11_20120229	EPA 5030B/8260	MSV/6495		
2510932006	MW-3_20120229	EPA 5030B/8260	MSV/6495		
2510932007	MW-4_20120229	EPA 5030B/8260	MSV/6495		
2510932008	MW-6_20120229	EPA 5030B/8260	MSV/6495		
2510932009	MW-7_20120229	EPA 5030B/8260	MSV/6495		
2510932010	MW-8_20120229	EPA 5030B/8260	MSV/6497		
2510932011	MW-9_20120229	EPA 5030B/8260	MSV/6497		
2510932012	FD1_20120229	EPA 5030B/8260	MSV/6497		
2510932013	TB1_20120229	EPA 5030B/8260	MSV/6497		
2510932001	EX-1_20120229	CA LUFT	MSV/6544		
2510932005	MW-11_20120229	CA LUFT	MSV/6544		
2510932007	MW-4_20120229	CA LUFT	MSV/6544		
2510932011	MW-9_20120229	CA LUFT	MSV/6544		
2510932012	FD1_20120229	CA LUFT	MSV/6544		



COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

2510932

Page: 1 of 1
Cooler # _____ of _____

1Q12 GW Event

Required Lab Information:

Required Project Information:

Required Invoice Information:

Lab Name: Pace-Seattle	Site ID #: 2611117	Task: WG_Q_201202	Send Invoice to: Tara Bosch
Address: 940 S. Hamey Street Seattle WA 98108	AnteaGrp proj#: 7210 BANCROFT AVE	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411
Lab PM: Regina Ste. Marie	City: OAKLAND	State: CA 94605	Reimbursement project? Non-reimbursement project? Y Mark one
Phone/Fax: P: 206-957-2433 F: 206-767-5063	AG PM Name: Doug Umland	Send EDD to: copeitdata@intelligentehs.com	MA MCP Cert? CT RCP Cert? Mark One
Lab PM email: Regina.SteMarie@pacelabs.com	Phone/Fax: P: 1-800-477-7411 F: 408-225-8506	CC Hardcopy report to: dan.keltner@anteagroup.com	Lab Project ID (lab use)
Applicable Lab Quote #:	AG PM Email: doug.umland@anteagroup.com	CC Hardcopy report to:	Requested Analyses

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / . -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINKING WATER WP GROUND WATER WG WASTE WATER WW FREE PRODUCT LF SOIL SO OIL OL WIPE SW AMBIENT AIR AA EVE AIR AE SOIL GAS GS	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses	Comments/Lab Sample I.D.
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	8015TPHIGRO	828096boxMTBE70VCA		
1	EX-1_20120229		WG	G	2/20/12	1435	6	N					X				X	X		
2	EX-2_20120229		WG	G		1330	6	N					X				X	X		7 Oxy's = DIPE, TBA, TAME, ETBE, 1,2DCA, EDB, and Ethanol
3	MW-1_20120229		WG	G		1300	6	N					X				X	X		
4	MW-10_20120229		WG	G		1200	6	N					X				X	X		
5	MW-11_20120229		WG	G		1345	6	N					X				X	X		
6	MW-3_20120229		WG	G		1125	6	N					X				X	X		
7	MW-4_20120229		WG	G		1415	6	N					X				X	X		
8	MW-6_20120229		WG	G		1225	6	N					X				X	X		
9	MW-7_20120229		WG	G		1310	6	N					X				X	X		
10	MW-8_20120229		WG	G		1000	6	N					X				X	X		
11	MW-9_20120229		WG	G		1215	6	N					X				X	X		
12	FD1_20120229		W	G		1420	6	N					X				X	X		
13	TB1_20120229		W	G		0800	4	N					X				X	X		

Additional Comments/Special Instructions: Global ID: T0600100201	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	Sample Receipt Conditions				
	Daniel Allen FED EX		2/21/12	1645	Colto Umland / PACE		022112	1007	3.8	Y/N	Y/N	Y/N	
										Y/N	Y/N	Y/N	
										Y/N	Y/N	Y/N	
										Y/N	Y/N	Y/N	
SHIPPING METHOD: (mark as appropriate)					SAMPLER NAME AND SIGNATURE					Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
UPS COURIER FEDEX		PRINT Name of SAMPLER:			Daniel Allen								
US MAIL		SIGNATURE of SAMPLER:			DATE Signed		Time						



Sample Container Count

2510932



CLIENT: Antea

COC PAGE 1 of 1
 COC ID# _____

Trip Blank(s) Provided? <input checked="" type="radio"/> Y / <input type="radio"/> N

Sample Line Item	VG9H	AG1H	AG1U	BP1U	BP2U	BP3U	BP3N	BP3S	WGKU	WGFU	WG2U	DG9M	DG9B	VG9W	VSG	Comments
1	6															
2																
3																
4																
5																
6																
7																
8																
9	↓															
10	10															
11	6															
12	↓															

13 | 4 |

AG1H	1 liter HCL amber glass	BP2S	500mL H2SO4 plastic	JGFU	4 oz amber glass soil jar
AG1U	1liter unpreserved amber glass	BP2U	500mL unpreserved plastic	WGKU	8 oz clear glass soil jar
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	WGFU	4 oz clear glass soil jar
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	WG2U	2 oz clear glass soil jar
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	JGFM	4 oz amber glass soil jar with MeOH
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL clear vial pre-weighted with DI water
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate clear vial	VSG	Headspace septa vial
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber vial	VG9H	40mL HCL clear vial
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFU	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	VG9T	40mL Na Thio. clear vial
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial	ZPLC	Ziploc Bag
BP2O	500mL NaOH plastic	I	Wipe/Swab	U	Summa Can



Sample Condition Upon Receipt

Client Name: Antea

Project # 2510932

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 8989 0684 9614

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags None Other _____ Temp. Blank Yes _____ No

Thermometer Used 132013 or 101731962 or 226099 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 3.8c
Temp should be above freezing $\leq 6^{\circ}\text{C}$

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 02/12 CW

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Follow Up / Hold Analysis Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/Analysis Matrix: <u>WI</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blanks Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Creation Date: <u>122811, 01/2/12</u>		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: RSM

Date: 02/22/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

March 28, 2012

Doug Umland
Antea USA
312 Piercy Rd
San Jose, CA 95138

RE: Project: 2611117 7210 Bancroft Ave
Pace Project No.: 2511310

Dear Doug Umland:

Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Carolynne Trout_L25 for
Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Tara Bosch, Antea USA
Dennis Dettloff, Antea USA
Jonathon Fillingame, Antea USA
Lia Holden, Antea USA
Dan Keltner, Antea USA
Josh Mahoney, Antea USA
Tony Perini, Antea USA
Nicole Persaud, Antea USA
Don Pinkerton, Antea USA
Ed Weyrens, Antea USA



REPORT OF LABORATORY ANALYSIS

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Page 1 of 10

CERTIFICATIONS

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Washington Certification IDs

940 South Harney Street, Seattle, WA 98108

Alaska CS Certification #: UST-025

Arizona Certification #: AZ0770

California Certification #: 01153CA

Florida/NELAP Certification #: E87617

Oregon Certification #: WA200007

Washington Certification #: C555

REPORT OF LABORATORY ANALYSIS

Page 2 of 10

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SAMPLE ANALYTE COUNT

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2511310001	MW-4_20120319	EPA 5030B/8015B	CC	3	PASI-S
		EPA 5030B/8260	LNH	16	PASI-S

REPORT OF LABORATORY ANALYSIS

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HITS ONLY

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2511310001	MW-4_20120319					
EPA 5030B/8015B	CA TPH-GRO (C5-C12)	15200	ug/L	500	03/22/12 18:39	
EPA 5030B/8260	tert-Amylmethyl ether	6.0	ug/L	0.50	03/21/12 21:03	
EPA 5030B/8260	Benzene	4800	ug/L	12.5	03/28/12 11:30	1n,M1
EPA 5030B/8260	tert-Butyl Alcohol	25200	ug/L	250	03/28/12 12:45	M1
EPA 5030B/8260	Ethylbenzene	562	ug/L	12.5	03/28/12 11:30	M1
EPA 5030B/8260	Ethyl-tert-butyl ether	3.2	ug/L	0.50	03/21/12 21:03	
EPA 5030B/8260	Methyl-tert-butyl ether	768	ug/L	12.5	03/28/12 11:30	M1
EPA 5030B/8260	Toluene	125	ug/L	0.50	03/21/12 21:03	
EPA 5030B/8260	Xylene (Total)	512	ug/L	37.5	03/28/12 11:30	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Sample: MW-4_20120319	Lab ID: 2511310001	Collected: 03/19/12 11:51	Received: 03/21/12 09:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Gasoline Range Organics		Analytical Method: EPA 5030B/8015B						
CA TPH-GRO (C5-C12)	15200 ug/L		500	10		03/22/12 18:39		
Surrogates								
4-Bromofluorobenzene (S)	79 %		40-142	10		03/22/12 18:39	460-00-4	
a,a,a-Trifluorotoluene (S)	94 %		65-145	10		03/22/12 18:39	98-08-8	
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Amylmethyl ether	6.0 ug/L		0.50	1		03/21/12 21:03	994-05-8	
Benzene	4800 ug/L		12.5	25		03/28/12 11:30	71-43-2	1n,M1
tert-Butyl Alcohol	25200 ug/L		250	50		03/28/12 12:45	75-65-0	M1
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		03/21/12 21:03	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		03/21/12 21:03	107-06-2	M1
Diisopropyl ether	ND ug/L		0.50	1		03/21/12 21:03	108-20-3	
Ethanol	ND ug/L		250	1		03/21/12 21:03	64-17-5	
Ethylbenzene	562 ug/L		12.5	25		03/28/12 11:30	100-41-4	M1
Ethyl-tert-butyl ether	3.2 ug/L		0.50	1		03/21/12 21:03	637-92-3	
Methyl-tert-butyl ether	768 ug/L		12.5	25		03/28/12 11:30	1634-04-4	M1
Toluene	125 ug/L		0.50	1		03/21/12 21:03	108-88-3	
Xylene (Total)	512 ug/L		37.5	25		03/28/12 11:30	1330-20-7	M1
Surrogates								
4-Bromofluorobenzene (S)	92 %		79-121	1		03/21/12 21:03	460-00-4	
Dibromofluoromethane (S)	94 %		81-119	1		03/21/12 21:03	1868-53-7	
1,2-Dichloroethane-d4 (S)	86 %		72-127	1		03/21/12 21:03	17060-07-0	
Toluene-d8 (S)	106 %		77-120	1		03/21/12 21:03	2037-26-5	

QUALITY CONTROL DATA

Project: 2611117 7210 Bancroft Ave
Pace Project No.: 2511310

QC Batch: GCV/2722 Analysis Method: EPA 5030B/8015B
QC Batch Method: EPA 5030B/8015B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 2511310001

METHOD BLANK: 107437 Matrix: Water
Associated Lab Samples: 2511310001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	ND	50.0	03/22/12 11:57	
4-Bromofluorobenzene (S)	%	87	40-142	03/22/12 11:57	
a,a,a-Trifluorotoluene (S)	%	97	65-145	03/22/12 11:57	

LABORATORY CONTROL SAMPLE: 107438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	250	206	83	65-120	
4-Bromofluorobenzene (S)	%			88	40-142	
a,a,a-Trifluorotoluene (S)	%			99	65-145	

MATRIX SPIKE SAMPLE: 107507

Parameter	Units	2511232002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	6200	250	6660	183	40-124	M1
4-Bromofluorobenzene (S)	%				131	40-142	
a,a,a-Trifluorotoluene (S)	%				135	65-145	

SAMPLE DUPLICATE: 107508

Parameter	Units	2511232002 Result	Dup Result	RPD	Qualifiers
CA TPH-GRO (C5-C12)	ug/L	6200	6540	5	
4-Bromofluorobenzene (S)	%	118	122	3	
a,a,a-Trifluorotoluene (S)	%	135	132	2	

QUALITY CONTROL DATA

Project: 2611117 7210 Bancroft Ave
Pace Project No.: 2511310

QC Batch: MSV/6657 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511310001

METHOD BLANK: 107370 Matrix: Water
Associated Lab Samples: 2511310001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/21/12 20:12	
1,2-Dichloroethane	ug/L	ND	1.0	03/21/12 20:12	
Benzene	ug/L	0.58	0.50	03/21/12 20:12	
Diisopropyl ether	ug/L	ND	0.50	03/21/12 20:12	
Ethanol	ug/L	ND	250	03/21/12 20:12	
Ethyl-tert-butyl ether	ug/L	ND	0.50	03/21/12 20:12	
Ethylbenzene	ug/L	ND	0.50	03/21/12 20:12	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/21/12 20:12	
tert-Amylmethyl ether	ug/L	ND	0.50	03/21/12 20:12	
tert-Butyl Alcohol	ug/L	ND	5.0	03/21/12 20:12	
Toluene	ug/L	ND	0.50	03/21/12 20:12	
Xylene (Total)	ug/L	ND	1.5	03/21/12 20:12	
1,2-Dichloroethane-d4 (S)	%	92	72-127	03/21/12 20:12	
4-Bromofluorobenzene (S)	%	112	79-121	03/21/12 20:12	
Dibromofluoromethane (S)	%	96	81-119	03/21/12 20:12	
Toluene-d8 (S)	%	99	77-120	03/21/12 20:12	

LABORATORY CONTROL SAMPLE: 107371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	20.6	103	65-123	
1,2-Dichloroethane	ug/L	20	18.4	92	63-131	
Benzene	ug/L	20	16.4	82	66-123	
Diisopropyl ether	ug/L	20	20.4	102	70-136	
Ethanol	ug/L	800	752	94	40-160	
Ethyl-tert-butyl ether	ug/L	20	22.1	111	65-135	
Ethylbenzene	ug/L	20	19.5	97	67-122	
Methyl-tert-butyl ether	ug/L	20	20.9	104	65-138	
tert-Amylmethyl ether	ug/L	20	19.6	98	68-138	
tert-Butyl Alcohol	ug/L	100	104	104	57-153	
Toluene	ug/L	20	18.3	91	64-118	
Xylene (Total)	ug/L	60	55.9	93	68-122	
1,2-Dichloroethane-d4 (S)	%			93	72-127	
4-Bromofluorobenzene (S)	%			92	79-121	
Dibromofluoromethane (S)	%			96	81-119	
Toluene-d8 (S)	%			96	77-120	

QUALITY CONTROL DATA

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Parameter	Units	108219		108220		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		2511310001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	17.2	22.0	84	108	61-127	25		
1,2-Dichloroethane	ug/L	ND	20	20	54.0	54.7	270	274	60-138	1	M1	
Benzene	ug/L	4800	20	20	873	875	-19700	-19600	63-138	.2	E,M1	
Diisopropyl ether	ug/L	ND	20	20	17.7	21.4	88	107	68-146	19		
Ethanol	ug/L	ND	800	800	515	611	62	74	40-160	17		
Ethyl-tert-butyl ether	ug/L	3.2	20	20	22.1	27.5	95	122	63-138	22		
Ethylbenzene	ug/L	562	20	20	436	434	-629	-640	65-135	.5	E,M1	
Methyl-tert-butyl ether	ug/L	768	20	20	507	543	-1300	-1120	59-143	7	E,M1	
tert-Amylmethyl ether	ug/L	6.0	20	20	20.2	25.2	71	96	62-142	22		
tert-Butyl Alcohol	ug/L	25200	100	100	4280	5180	-20900	-20000	46-156	19	E,M1	
Toluene	ug/L	125	20	20	139	144	70	91	64-128	3		
Xylene (Total)	ug/L	512	60	60	490	502	-36	-16	65-133	2	E,M1	
1,2-Dichloroethane-d4 (S)	%						78	81	72-127			
4-Bromofluorobenzene (S)	%						92	90	79-121			
Dibromofluoromethane (S)	%						95	95	81-119			
Toluene-d8 (S)	%						103	104	77-120			

QUALIFIERS

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-S Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

1n Analyte was detected in the method blank. However, this sample had a concentration over ten times greater than the blank.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2611117 7210 Bancroft Ave

Pace Project No.: 2511310

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2511310001	MW-4_20120319	EPA 5030B/8015B	GCV/2722		
2511310001	MW-4_20120319	EPA 5030B/8260	MSV/6657		

Sample Container Count

2511310



CLIENT: Anka

COC PAGE 1 of 1

COC ID# _____

Trip Blank(s) Provided?
Y / N

Sample Line Item	VG9H	AG1H	AG1U	BP1U	BP2U	BP3U	BP3N	BP3S	WGKU	WGFU	WG2U	DG9M	DG9B	VG9W	VSG	Comments
1	12															
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

AG1H	1 liter HCL amber glass	BP2S	500mL H2SO4 plastic	JGFU	4 oz amber glass soil jar
AG1U	1 liter unpreserved amber glass	BP2U	500mL unpreserved plastic	WGKU	8 oz clear glass soil jar
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	WGFU	4 oz clear glass soil jar
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	WG2U	2 oz clear glass soil jar
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	JGFM	4 oz amber glass soil jar with MeOH
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL clear vial pre-weighted with DI water
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate clear vial	VSG	Headspace septa vial
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber vial	VG9H	40mL HCL clear vial
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFU	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	VG9T	40mL Na Thio. clear vial
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial	ZPLC	Ziploc Bag
BP2O	500mL NaOH plastic		Wipe/Swab	U	Summa Can



Sample Condition Upon Receipt

2511310

Client Name: Anlea

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 8989 0685 0719

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags None Other _____ Temp. Blank Yes No

Thermometer Used 132013 or 101731963 or 226099 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.1, 2.7, 3.9 Biological Tissue is Frozen: Yes No

Temp should be above freezing $\leq 6^{\circ}\text{C}$

Comments:

Date and Initials of person examining contents: MB 3/21/12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Follow Up / Hold Analysis Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/Analysis Matrix:	<u>Water</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> coliform, TOC, O&G	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blanks Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Creation Date:		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: UBKM

Date: 3/21/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Is the Data Valid?
 (circle)
 Yes / No

Preservation Temperature (if
 Known): 3.8 °C

Antea Group Lab Validation Sheet

Project/Client: Antea Group ELT
 Project #: I42611117
 Date of Validation: 3/13/12 Date of Analysis: 2/28-3/5/12 Sample Date: 2/20/12
 Completed By: M. Corley Signature: *[Signature]*
 Analytical Lab Used and Report # (if any): Pace #2510932

1. Was the analysis the one requested?
2. Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet?
3. Were samples prepared (extracted, filtered, etc.) within EPA holding times?
4. Once prepared/extracted, were the samples analyzed within the EPA holding times?
5. Were Laboratory blanks performed, if so, were they below non-detect?
6. Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m³, etc.)
7. Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample?
8. In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples?
9. Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approx 80-120% depending on analyte)?
10. Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?
11. Were Relative Percent Difference values within the acceptable range (i.e. ± 25%)?

If any answer is no, explain why and what corrective action was taken:

The laboratory noted the following qualifiers in the lab report:

CL The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low. Noted on benzene analysis for sample MW-1

Circle or Highlight Yes/No below
(Yes) / No
(Yes) / No
(Yes) / No
(Yes) / No
(Yes) / No
(Yes) / No
(Yes) / No
Yes / No
(Yes) / No
(Yes) / No
(Yes) / (No)

- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits. Noted on MS&MSD #105080 and #105081
- S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis). Noted for surrogate analysis for sample EX-1

Antea Group has provided additional explanation in the *First Quarter 2012 Quarterly Monitoring Report*

Is the Data Valid?

(circle)
Yes / No

Preservation Temperature (if
Known): 0.1, 2.7, 3.9 °C

Antea Group Lab Validation Sheet

Project/Client: Antea Group ELT

Project #: 142611117

Date of Validation: 4/9/12 Date of Analysis: 3/21-28/12 Sample Date: 3/19/12

Completed By: M. Corley Signature: 

Analytical Lab Used and Report # (if any): Pace #2511310

1. Was the analysis the one requested?
2. Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet?
3. Were samples prepared (extracted, filtered, etc.) within EPA holding times?
4. Once prepared/extracted, were the samples analyzed within the EPA holding times?
5. Were Laboratory blanks performed, if so, were they below non-detect?
6. Are the units correct? (i.e., soil samples in mg/kg or ug/g, water samples mg/L, ug/L, and air samples in volume mg/m³, etc.)
7. Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample?
8. In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples?
9. Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approx 80-120% depending on analyte)?
10. Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?
11. Were Relative Percent Difference values within the acceptable range (i.e. ± 25%)?

If any answer is no, explain why and what corrective action was taken:

The laboratory noted the following qualifiers in the lab report:

1n Analyte was detected in the method blank. However, this sample had a concentration over ten times greater than the blank. Reported for benzene analysis in MW-4.

Circle or
Highlight
Yes/No
below

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

- E Analyte concentration exceeded the calibration range. The reported result is estimated. Reported on MS&MSD sample #108219 and #108220 for benzene, ethylbenzene, MTBE, TBA and total xylenes.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. Reported on benzene, TBA, 1,2-DCE, ethylbenzene, MTBE and total xylenes analysis for MW-4.

Antea Group has provided additional explanation in the *First Quarter 2012 Quarterly Monitoring Report*

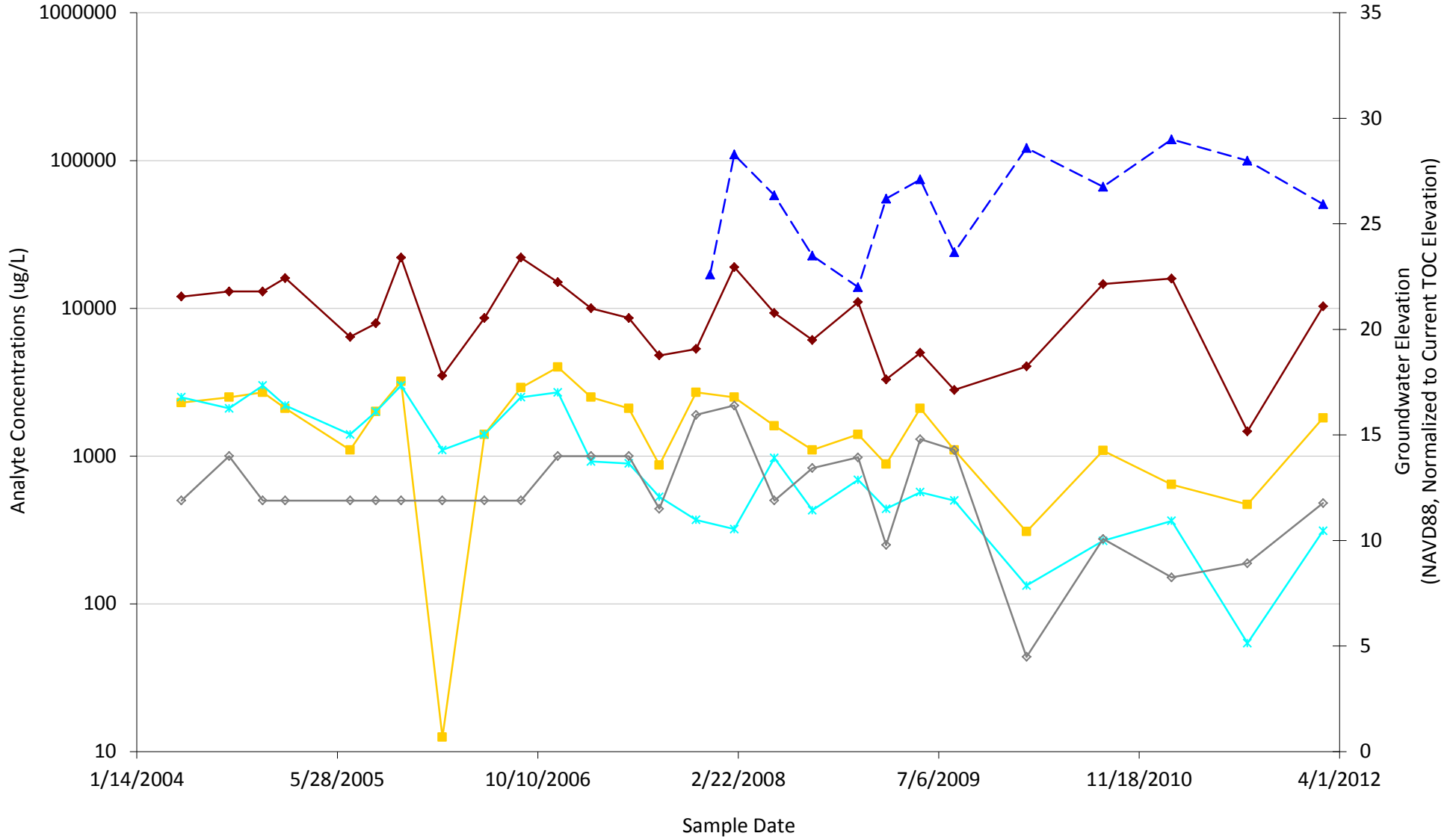
Semi-Annual Monitoring Report, First Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



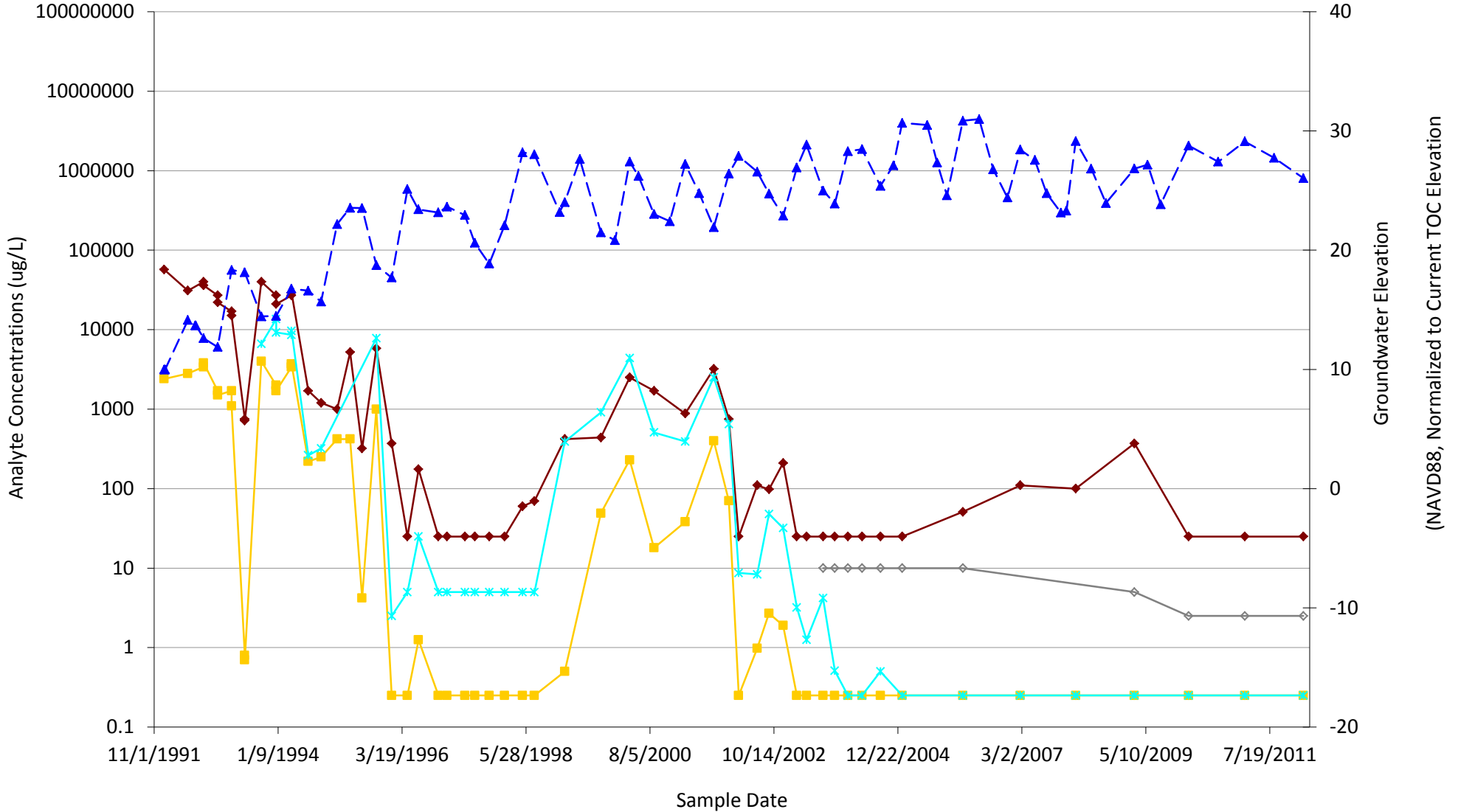
Appendix F

Time Series Graphs

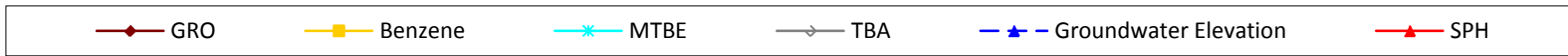
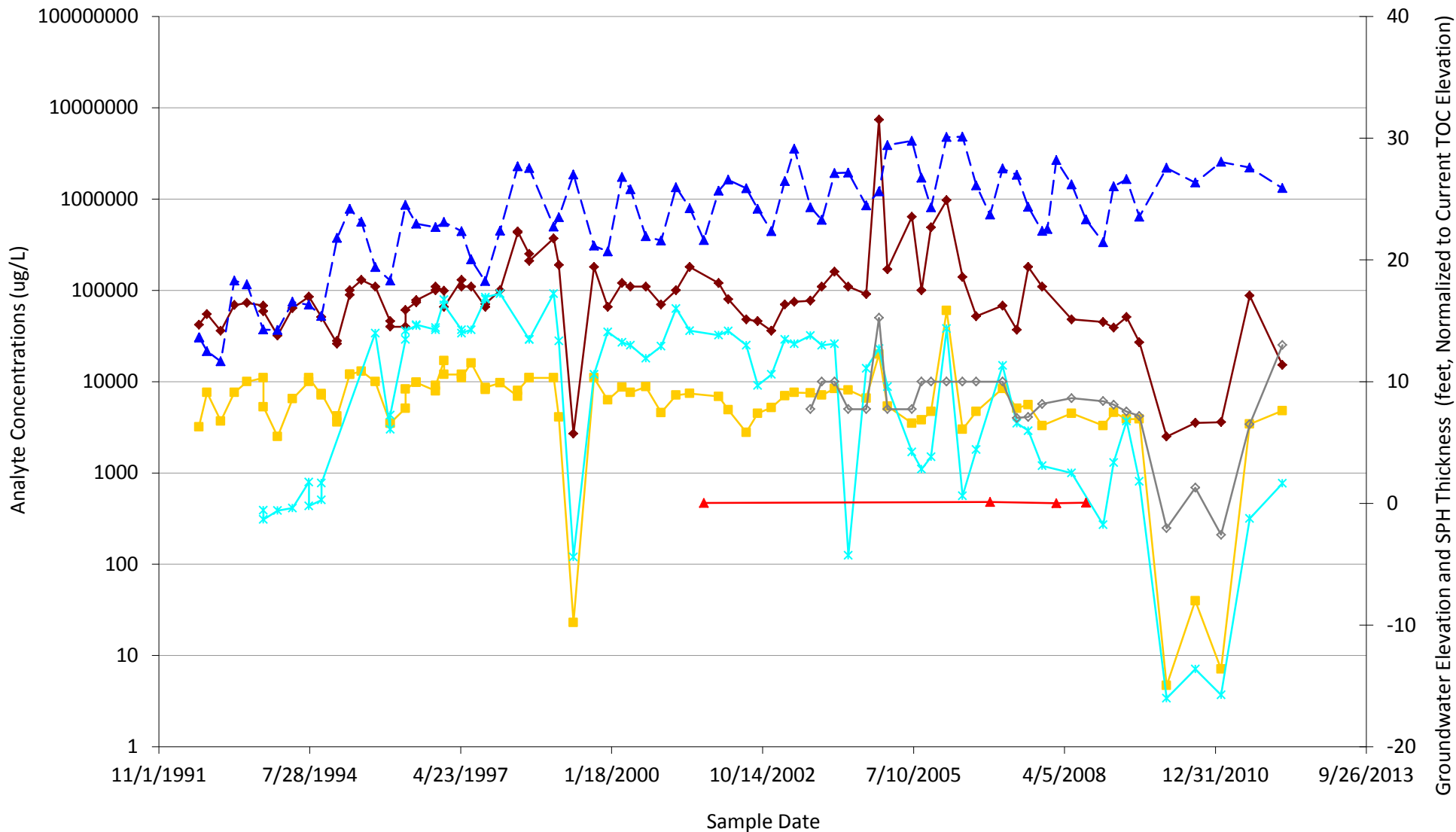
WELL EX-1
 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



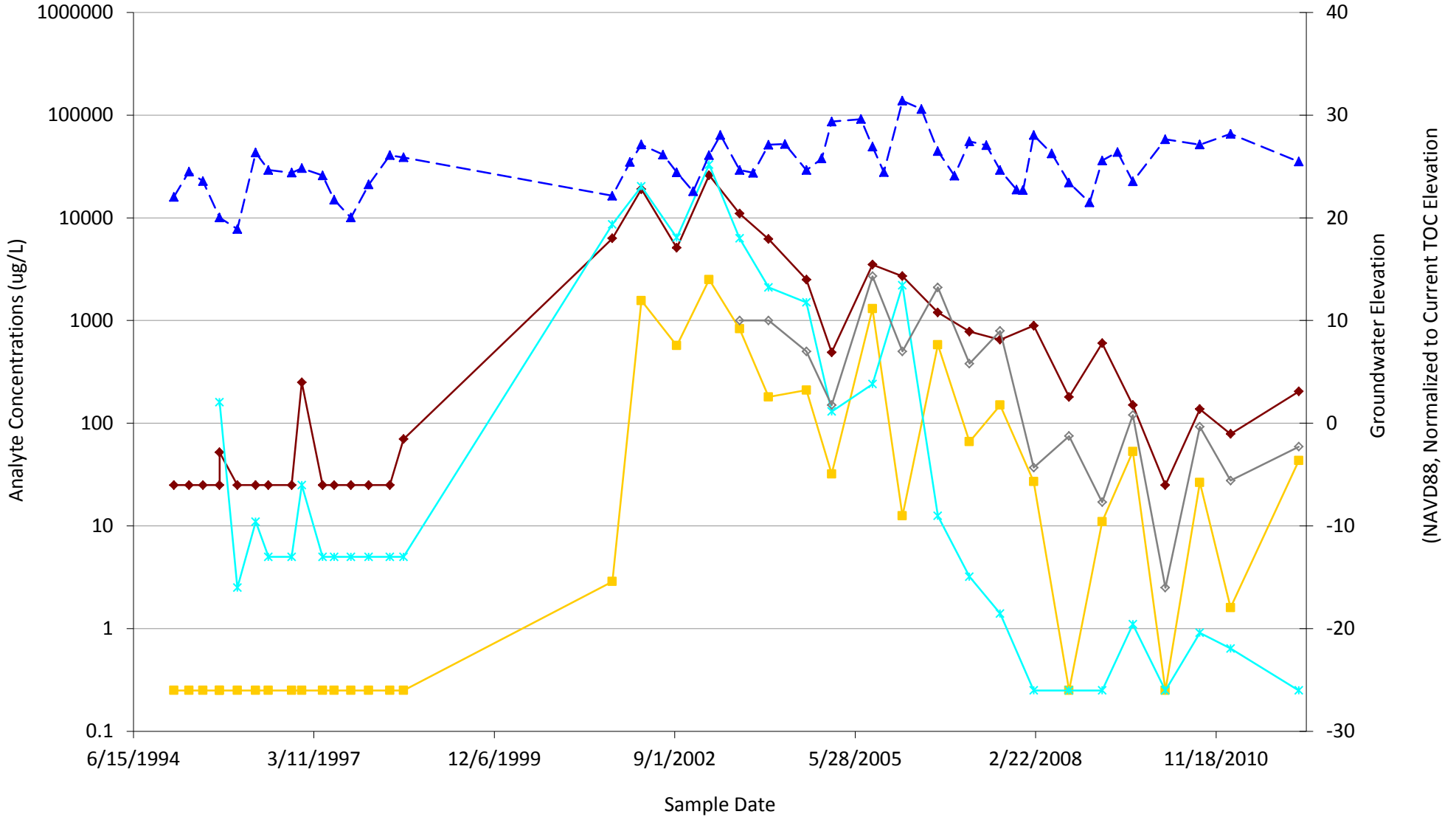
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 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



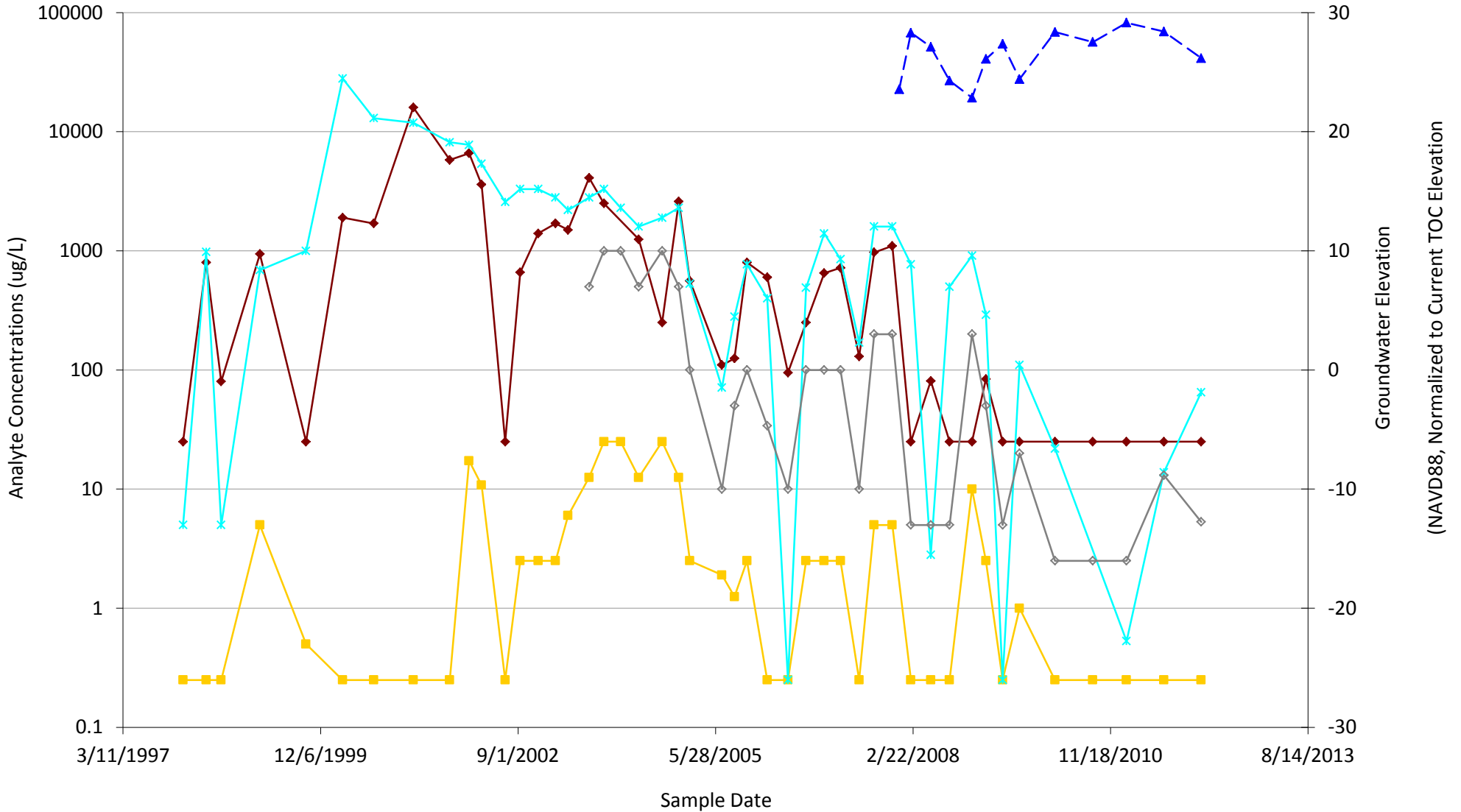
WELL MW-4
 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



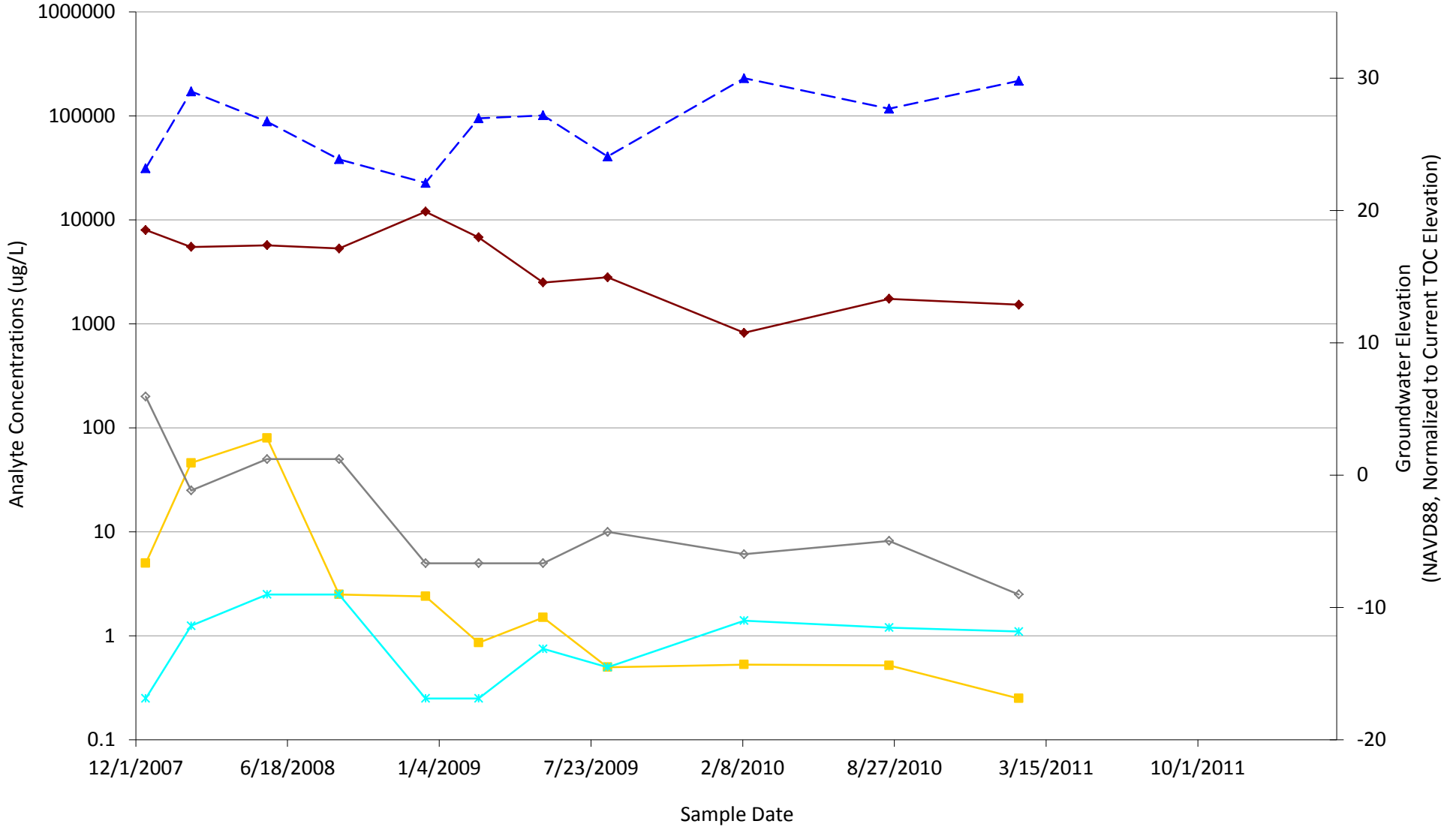
WELL MW-9
CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
76 (FORMER BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



WELL MW-10
 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



WELL MW-11
 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



◆ GRO
 ■ Benzene
 ✱ MTBE
 ◇ TBA
 ▲ Groundwater Elevation

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7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117*



Appendix G

Non-Hazardous Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. n/a		Manifest Document No. 2101117-0212		2. Page 1 of 1	
3. Generator's Name and Mailing Address		Tejindar Singh 7210 Bancroft Ave Oakland, CA 94605		Site # 2101117 7210 Bancroft Ave Oakland, CA 94605			
4. Generator's Phone (510) 553-0109		6. US EPA ID Number		A. State Transporter's ID			
5. Transporter 1 Company Name Plaine Tech Services		8. US EPA ID Number		B. Transporter 1 Phone 310-885-4455			
7. Transporter 2 Company Name		10. US EPA ID Number		C. State Transporter's ID			
9. Designated Facility Name and Site Address Seaport Environmental 700 Seaport Blvd. Redwood City, CA 94063		10. US EPA ID Number 000013572		D. Transporter 2 Phone		E. State Facility's ID	
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity		14. Unit Wt./Vol.	
a. Non hazardous waste liquid		1 No. Type TT		177		G	
b.							
c.							
d.							
G. Additional Descriptions for Materials Listed Above				H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information wear protective equipment while handling weights and volumes are approximate 24hr emergency phone No 510-553-0109 (810) 885-4455 APPAR No 500-1019 Disat Lill Blaine Tech							
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.							
Printed/Typed Name (Antea Group) on behalf of Jenilyn Mercedes Tejindar Singh						Date Month Day Year 1/19/12	
Signature Jenilyn Mercedes							
17. Transporter 1 Acknowledgement of Receipt of Materials				Date			
Printed/Typed Name Daniel Allen				Month Day Year 2/20/12			
Signature Daniel Allen							
18. Transporter 2 Acknowledgement of Receipt of Materials				Date			
Printed/Typed Name				Month Day Year			
Signature							
19. Discrepancy Indication Space							
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.							
Printed/Typed Name Jorge D. Canora						Date Month Day Year 03/06/12	
Signature Jorge D. Canora							

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER FACILITY