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Alameda County
Environmental Health

Antea USA, Inc.
312 Piercy Road
San Jose, California 95138 USA
www.anteagroup.com

November 15, 2012

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

Re: **Report Submittal**
Semi-Annual Monitoring Report – Third 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,

A handwritten signature in blue ink that reads "Douglas K. Umland".

Douglas K. Umland
Senior Project Manager
Doug.Umland@anteagroup.com
Antea Group

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

Semi-Annual Monitoring Report, Third Quarter 2012

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

*Alameda County Environmental Health,
Case No. R00000356*

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

Prepared for:

Dilan Roe

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

Prepared by:

Antea™Group

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Appendix C	Certified Laboratory Analytical Reports and Data Validation Forms
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Semi-Annual Monitoring Report

Third 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, Third 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 August 31, 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 Second and Third Quarter 2012

1. Antea Group submitted the *Semi-Annual Monitoring Report – First Quarter 2012* to ACEH on May 15, 2012.
2. Antea Group submitted the *Site Investigation & Pilot Test Report* to ACEH on June 29, 2012.
3. Subcontractor Blaine Tech Services, Inc. (Blaine Tech) conducted the third quarter 2012 groundwater monitoring event on August 31, 2012.
4. Blaine Tech conducted a pilot test performance evaluation sampling event on September 27, 2012 using wells MW-4, MW-9, MW-11, EX-1 and EX-2. During this event, MW-4 was resampled to confirm results from the August 31, 2012 event.

1.2 Work Proposed for the Fourth Quarter 2012 and First Quarter 2013

1. Antea Group will submit the *Semi-Annual Monitoring Report, Third Quarter 2012* (contained herein) to ACEH by November 15, 2012.
2. Antea Group will prepare and submit a *Pilot Test Evaluation Report* during the fourth quarter 2012.
3. Antea Group will prepare and submit an *Additional Investigation Work Plan* during the fourth quarter 2012 to replace well MW-4 and further delineate the plume.
4. Blaine Tech will conduct the semi-annual groundwater monitoring and sampling event scheduled for the first quarter 2013.

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 Appendix A)
Current remediation technique	Pilot Testing of Regenesis Plume Stop™

2.1 Regulatory Correspondence

No correspondence was sent or received by Antea Group during the second and third quarters 2012.

2.2 Remediation Activities

On April 27, May 29, June 27, 2012 and September 27, 2012 Antea Group oversaw the third phase of the *Remedial Investigation Work Plan Addendum*. This scope of work included monitoring groundwater in select wells at 30 days, 60 days, 90 days and 120 days following the injection pilot test. Antea Group will submit and discuss pilot test related data in a Pilot Test Evaluation Report.

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

2.3 Groundwater Monitoring

During the third quarter 2012 groundwater monitoring event, Blaine Tech gauged 11 wells and, purged and sampled 7 wells per their standard sampling protocol. **Table 1** contains soil boring and well construction details. **Appendix B** 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:	August 31, 2012
Wells gauged:	MW-1, MW-3, MW-4, MW-6 through MW-11, EX-1, EX-2
Wells sampled:	MW-4, MW-7, MW-9 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 B):	Temperature, pH, Conductivity, Oxidation-reduction potential (ORP), Turbidity, Dissolved Oxygen (DO)
Wells with measurable LNAPL:	None

2.3.1 Groundwater Flow Gradient and Directional Trends

Currently, eleven site wells are gauged on a semi-annual basis. In the current quarter, groundwater flow direction and gradient appeared to be variable (Figure 3). Historically, groundwater flow has generally been directed to the northeast at an average gradient of 0.015 feet per foot. A rose diagram displaying historical groundwater flow directions is included on Figure 3. The previous monitoring and sampling event (February 2012) also reported variable groundwater flow and an indeterminate gradient.

2.3.2 Groundwater Quality Data

Blaine Tech submitted the groundwater samples collected during the third quarter 2012 under chain-of-custody protocol to KIFF Analytical LLC. (KIFF), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 08263CA). The complete analytical reports are included in Appendix C. 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 and 2a (current), and Tables 3 and 3a (historical). The following table presents the ranges of contaminant concentrations reported above the laboratory’s respective minimum reporting limits in groundwater samples collected during third quarter sampling event:

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	3 of 7	1,800 (MW-11)	230,000 (MW-4)
Benzene	2 of 7	1,600 (EX-1)	2,800 (MW-4)
Toluene	3 of 7	2.3 (MW-11)	600 (MW-4)
Ethylbenzene	3 of 7	40 (MW-11)	6,100 (MW-4)
Total Xylenes	3 of 7	46 (MW-11)	17,000 (MW-4)
MTBE	6 of 7	0.58 (MW-11)	240 (MW-4)
TBA	3 of 7	5.1 (MW-11)	1,800 (MW-4)

Explanations:

µg/L = Micrograms per liter ND = No Detection above LRL LRL = Laboratory reporting limit

In addition to the regular groundwater samples taken on August 31, 2012, Antea Group acquired a pre-purge and post-purge sample from well MW-4 on September 27, 2012 to verify GRO concentrations reported during the August 2012 event. During the September 2012 resampling of MW-4, Antea Group noted sheen on the pre-purge sample and Blaine Tech noted sheen on the post-purge sample. Results of the resampling are included in **Tables 2** and **3**. The following table compares analytical data for GRO, benzene, and MTBE reported for well MW-4 from the third quarter 2012 sampling event and the September 2012 resampling event:

MW-4 Analytical Data			
Sample Date	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)
August 31, 2012	230,000	2,800	240
September 27, 2012 (Pre-purge)	28,000	2,300	150
September 27, 2012 (Post-purge)	58,000	2,600	160

Explanations:
µg/L = Micrograms per liter

The MW-4 samples collected on September 27, 2012 were analyzed by Calscience Environmental Laboratories (Calscience), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 03220CA). Calscience inadvertently analyzed for a full volatile organic compound (VOC) scan by EPA Method 8260B on the pre-purge sample from MW-4 which is not required for this site. Several compounds were reported above the respective laboratory reporting limits (LRLs) and the results are included in the Calscience laboratory report (Work Order Number 12-09-1802) provided in **Appendix C**. Of these additional compounds reported above LRLs, naphthalene was reported at a concentration of 390 µg/L. Additionally, Antea Group does not typically request analyses of pre-purge groundwater samples. As such, there is no historical data to compare to directly. The purpose of the pre-purge sample was solely for comparing concentrations with the post-purge sample to determine if a submerged screen may be biasing groundwater concentrations. The contaminants that are normally analyzed are noted in **Table 2** and **Table 3** for the September 27, 2012 groundwater monitoring event of MW-4.

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 D** includes concentration versus time graphs for GRO, benzene, MTBE, and TBA in selected wells.

- Reported concentrations of benzene, MTBE, and GRO in MW-4 are generally consistent with a recent increasing trend observed since the third quarter 2011, and overall consistent with the historical range of concentrations. Antea Group considers that the fluctuations (one to two orders of magnitude between sampling events) reported in concentrations in well MW-4 may be attributed to a submerged screen. The presence of sheen periodically noted in MW-4 suggests contaminant concentrations may be highest on the top of the water column.



- Well EX-1 reported decreases in GRO, benzene, and MTBE since the last sampling event. There was a reported increase in TBA this sampling event. Ground water elevation remains higher than average from previous years in this location.
- MTBE continues to be the only analyte reported in well EX-2. The current concentration is an increase from the previous event, but remains within a historical range.
- Conditions reported in wells MW-10 and MW-11 are consistent with those reported in the first quarter 2012, and are within a historical range.
- Overall, GRO, benzene, MTBE and TBA concentration trends show relatively steady or decreasing concentrations. Recent apparent concentration increases remain within a historical range of concentrations.

Dissolved GRO, benzene, and TBA plumes continue to be limited to the southeastern half of the site. The dissolved MTBE plume continues to extend 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 third quarter 2012.

2.3.4 Monitored Natural Attenuation Parameters

Blaine Tech conducted sampling events (discussed above) for monitoring natural attenuation parameters. Antea Group will discuss and present this data in an upcoming report specifically regarding the pilot test results. Antea Group may analyze for these parameters in future sampling events as necessary.

2.3.5 Waste Disposal Summary

A total of approximately 283 gallons of wastewater was generated during well purging, well sampling, and equipment cleaning conducted in the August and September 2012 third quarter events. The wastewater was transported to Seaport Environmental in Redwood City, California for disposal. **Appendix E** includes copies of non-hazardous waste manifests generated during periodic remediation related sampling events which occurred in the first and second quarters of 2012. Copies of the August and September event waste manifests will be included in the next monitoring 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 KIFF and Calscience Environmental Laboratory (Calscience) analytical results for the August and September 2012 sampling events. **Appendix C** includes Antea Group’s laboratory data validation checklist and laboratory reports.

Trip Blank (TB1_20120831):	No contaminants reported
Laboratory QA/QC Performed:	Yes (validated by Antea Group)
Laboratory Data Qualifiers:	Yes – description below
Are the data valid for their intended purpose?	Yes, the data are valid

KIFF Analytical reported that the Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-4_20120831. Repeat analysis by EPA Method 8260B yielded inconsistent results for sample MW-4_20120831. The concentrations appear to vary between the bottles. The highest concentration results are reported.

In Calscience Lab Report No. 12-09-1803, several analytes within the MS/MSD were out of the range of control; however the LCS and LCSD were within the range of control, so data was reported without further clarification.

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 AND RECOMMENDATIONS

Contaminant concentrations continue to be reported above the laboratory reporting limit, primarily at wells along the southeastern property line.

This site does not require monitoring and sampling for all VOCs reported in the full scan by EPA Method 8260B inadvertently run by Calscience on the MW-4 pre-purge sample collected in September 2012. Due to the detection of naphthalene reported in the full scan analyses and since the site historically and currently stores diesel fuel, future soil samples will be analyzed for naphthalene in accordance with State Water Resources Control Board *Low-Threat Underground Storage Tank Case Closure Policy*.

Antea Group is currently conducting field activities per the scope of work described in the *Remedial Investigation Work Plan Addendum* dated December 13, 2011. 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.

Antea Group believes that analyte concentration fluctuations in MW-4 may be due to the well's submerged screen. Antea Group will prepare a work plan to replace the well with an appropriate screen interval. The work plan will additionally propose activities for further site characterization including cone penetrometer test (CPT) borings with ultra violet optical screening tool (UVOST).

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:



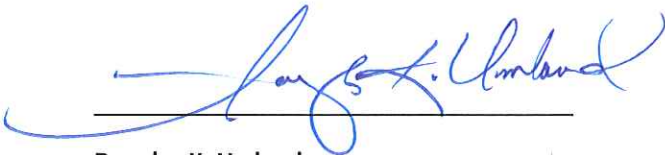
Steve Morden
Staff Professional
Antea Group



for **Nicole Persaud**
Project Manager
Antea Group

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:



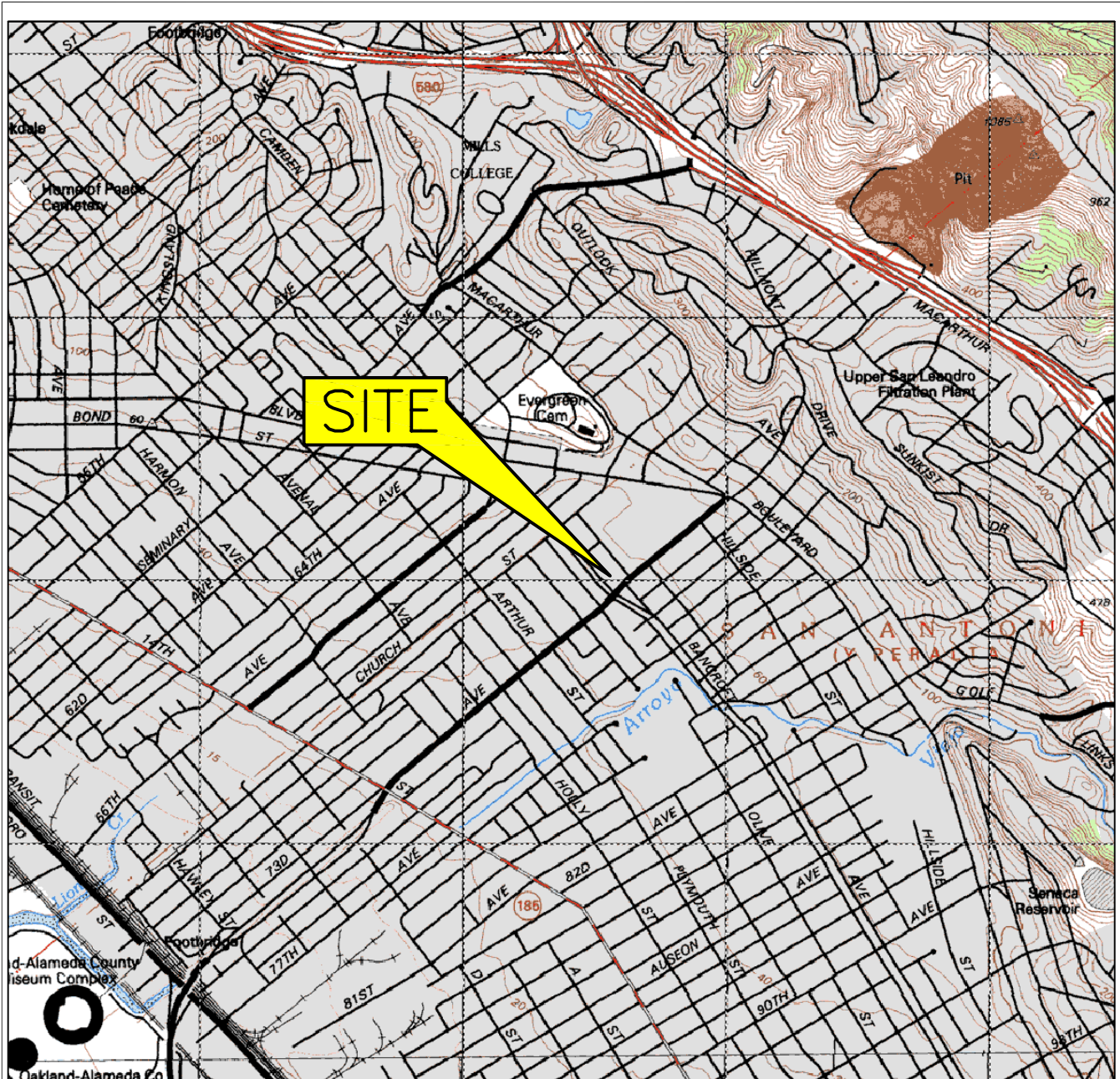
Douglas K. Umland
Senior Project Manager
California Registered Professional Geologist No. 6159
Antea Group



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 August 31, 2012
Figure 4	Dissolved-Phase GRO Isoconcentration Map – August 31, 2012
Figure 5	Dissolved-Phase Benzene Isoconcentration Map – August 31, 2012
Figure 6	Dissolved-Phase MTBE Isoconcentration Map – August 31, 2012
Figure 7	Dissolved-Phase TBA Isoconcentration Map – August 31, 2012



0 2000 FT



SCALE 1:24,000



QUADRANGLE LOCATION

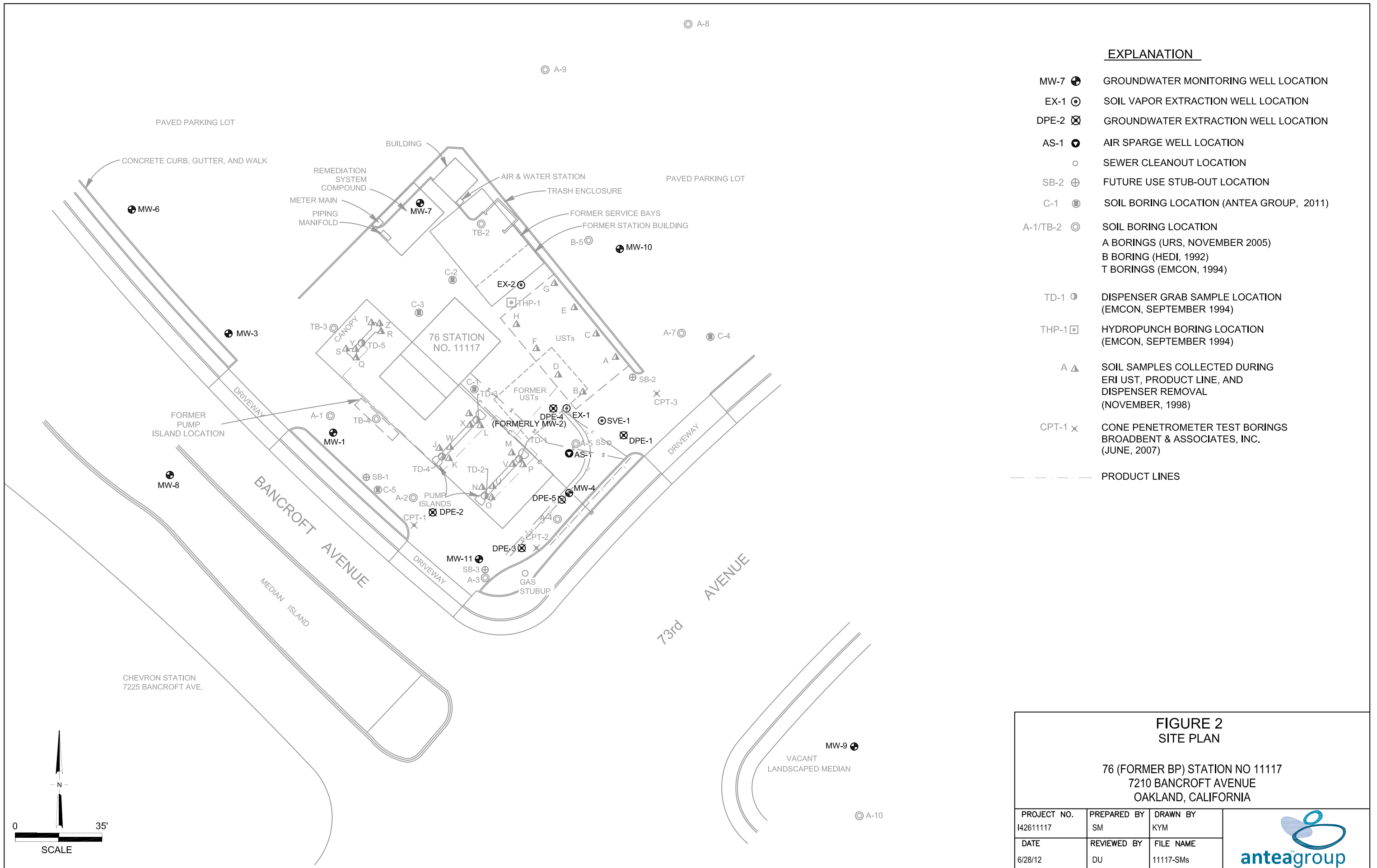
FIGURE 1
SITE LOCATION MAP

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

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

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
- 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

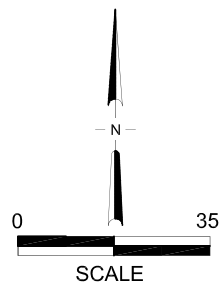
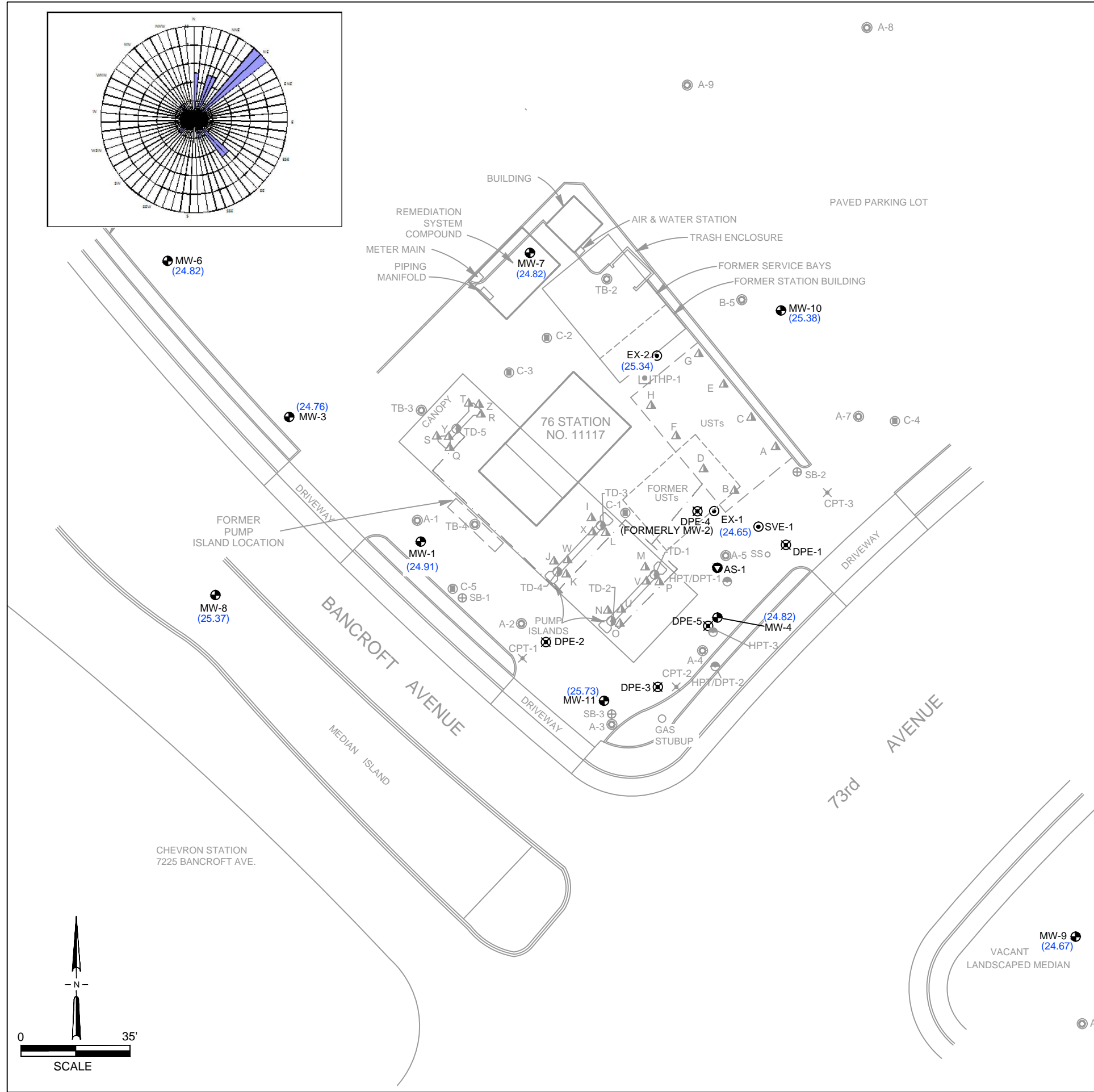
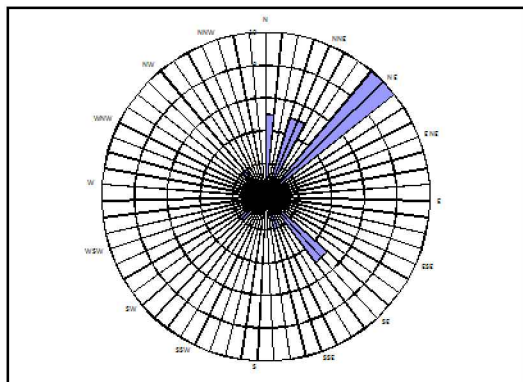


FIGURE 2 SITE PLAN			
76 (FORMER BP) STATION NO 11117 7210 BANCROFT AVENUE OAKLAND, CALIFORNIA			
PROJECT NO. 142611117	PREPARED BY SM	DRAWN BY KYM	
DATE 6/28/12	REVIEWED BY DU	FILE NAME 11117-SMs	



- 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
 - HPT-3 ⊙ HPT BORING LOCATION
 - SB-2 ⊕ FUTURE USE STUB-OUT LOCATION
 - SEWER CLEANOUT LOCATION
 - C-1 ⊙ SOIL BORING LOCATION (ANTEA GROUP, 2011)
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T BORINGS (EMCON, 1994)
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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
 - (25.38) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (ft/msl)
 - GROUNDWATER FLOW DIRECTION AND GRADIENT ARE INDETERMINANT.

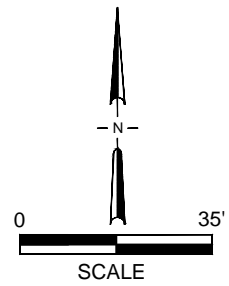

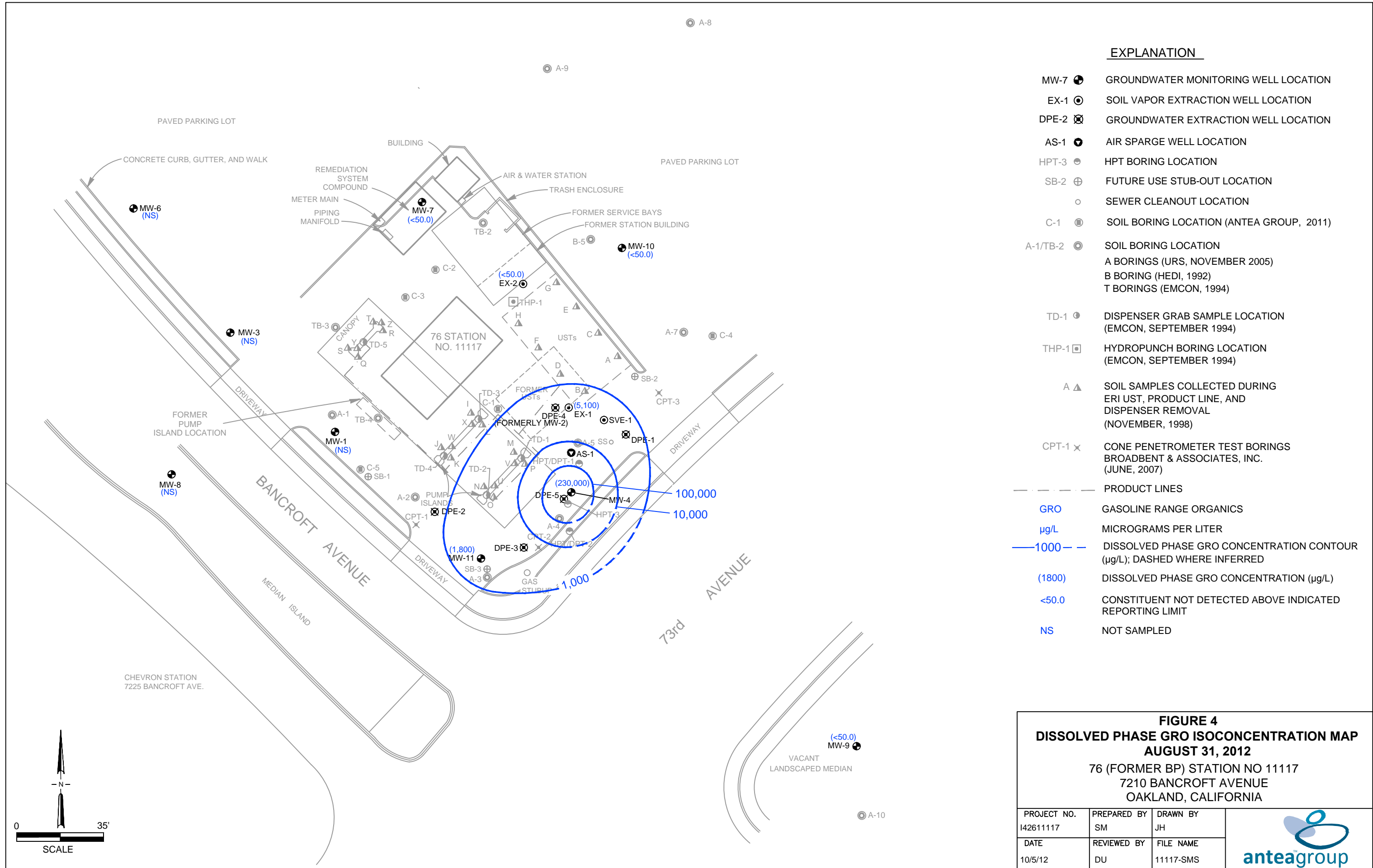


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
AUGUST 31, 2012

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

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH
DATE 11/15/12	REVIEWED BY RB	FILE NAME 11117-SMS



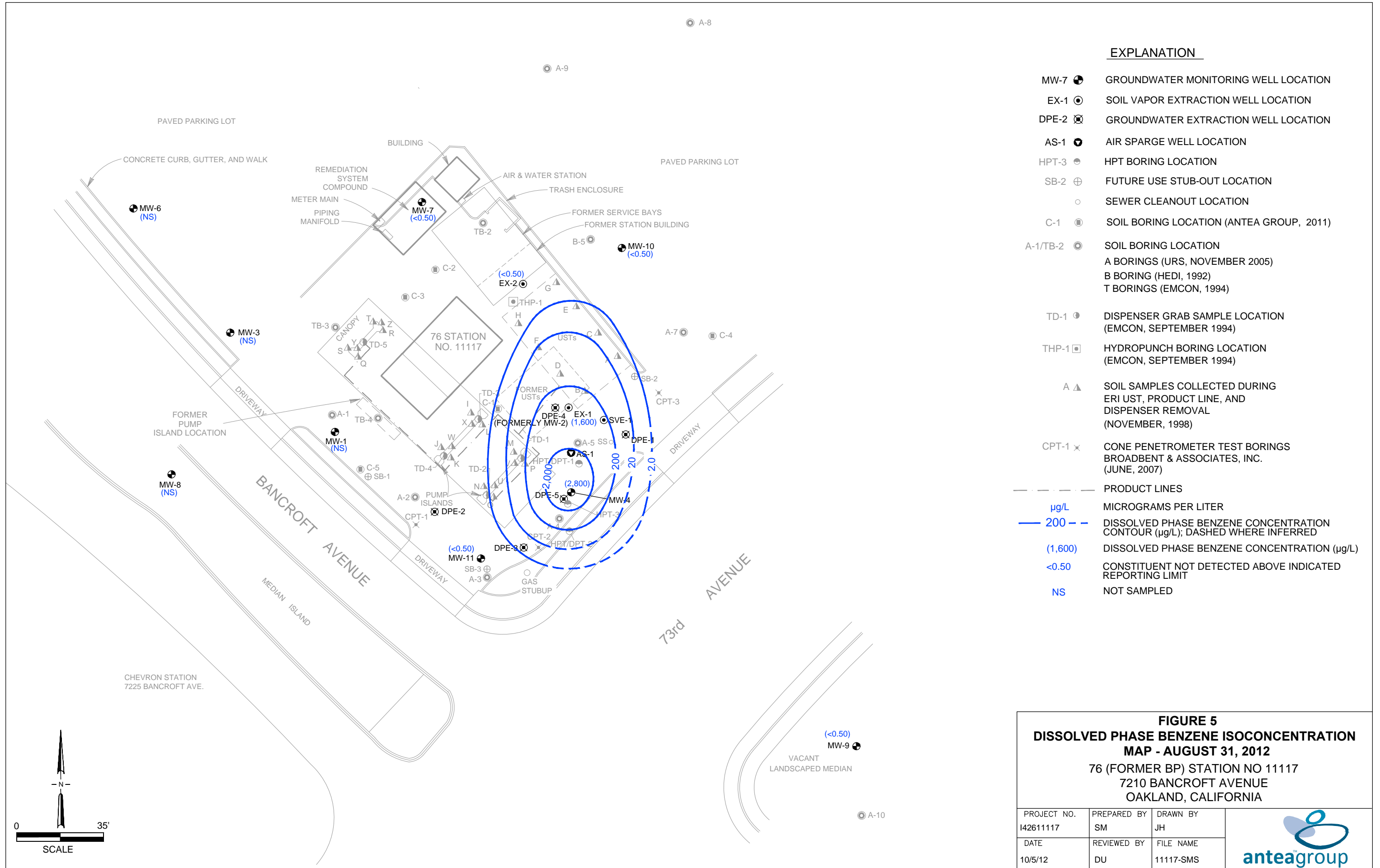


EXPLANATION

- MW-7 ● GROUNDWATER MONITORING WELL LOCATION
- EX-1 ⊙ SOIL VAPOR EXTRACTION WELL LOCATION
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- 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
- 1000— DISSOLVED PHASE GRO CONCENTRATION CONTOUR (µg/L); DASHED WHERE INFERRED
- (1800) DISSOLVED PHASE GRO CONCENTRATION (µg/L)
- <50.0 CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- NS NOT SAMPLED

FIGURE 4
DISSOLVED PHASE GRO ISOCONCENTRATION MAP
AUGUST 31, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH	
DATE 10/5/12	REVIEWED BY DU	FILE NAME 11117-SMS	

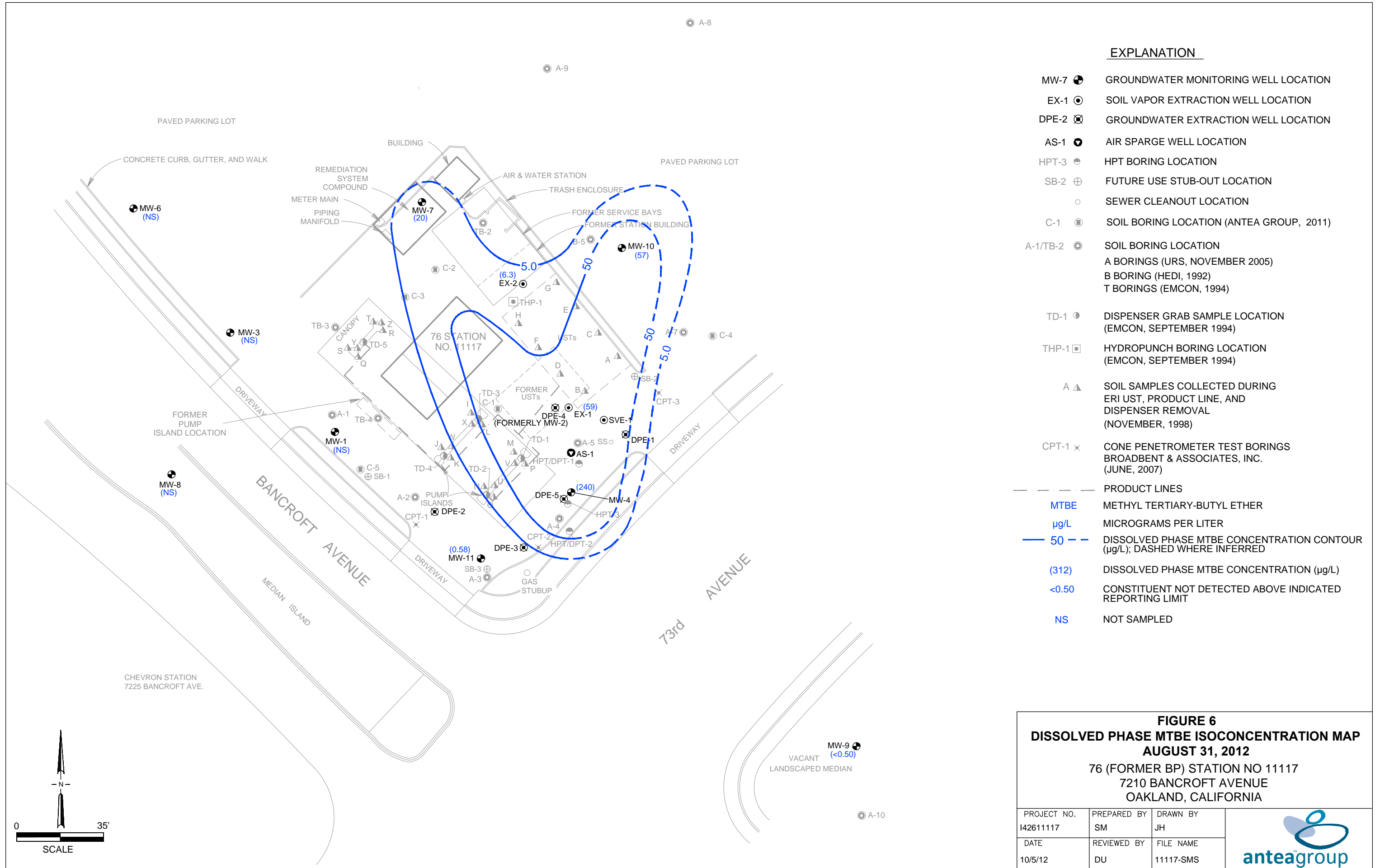


EXPLANATION

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- AS-1 ● AIR SPARGE WELL LOCATION
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- CPT-1 × CONE PENETROMETER TEST BORINGS BROADBENT & ASSOCIATES, INC. (JUNE, 2007)
- PRODUCT LINES
- μg/L MICROGRAMS PER LITER
- 200 — DISSOLVED PHASE BENZENE CONCENTRATION CONTOUR (μg/L); DASHED WHERE INFERRED
- (1,600) DISSOLVED PHASE BENZENE CONCENTRATION (μg/L)
- <math><0.50</math> CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- NS NOT SAMPLED

FIGURE 5
DISSOLVED PHASE BENZENE ISOCONCENTRATION
MAP - AUGUST 31, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH	
DATE 10/5/12	REVIEWED BY DU	FILE NAME 11117-SMS	



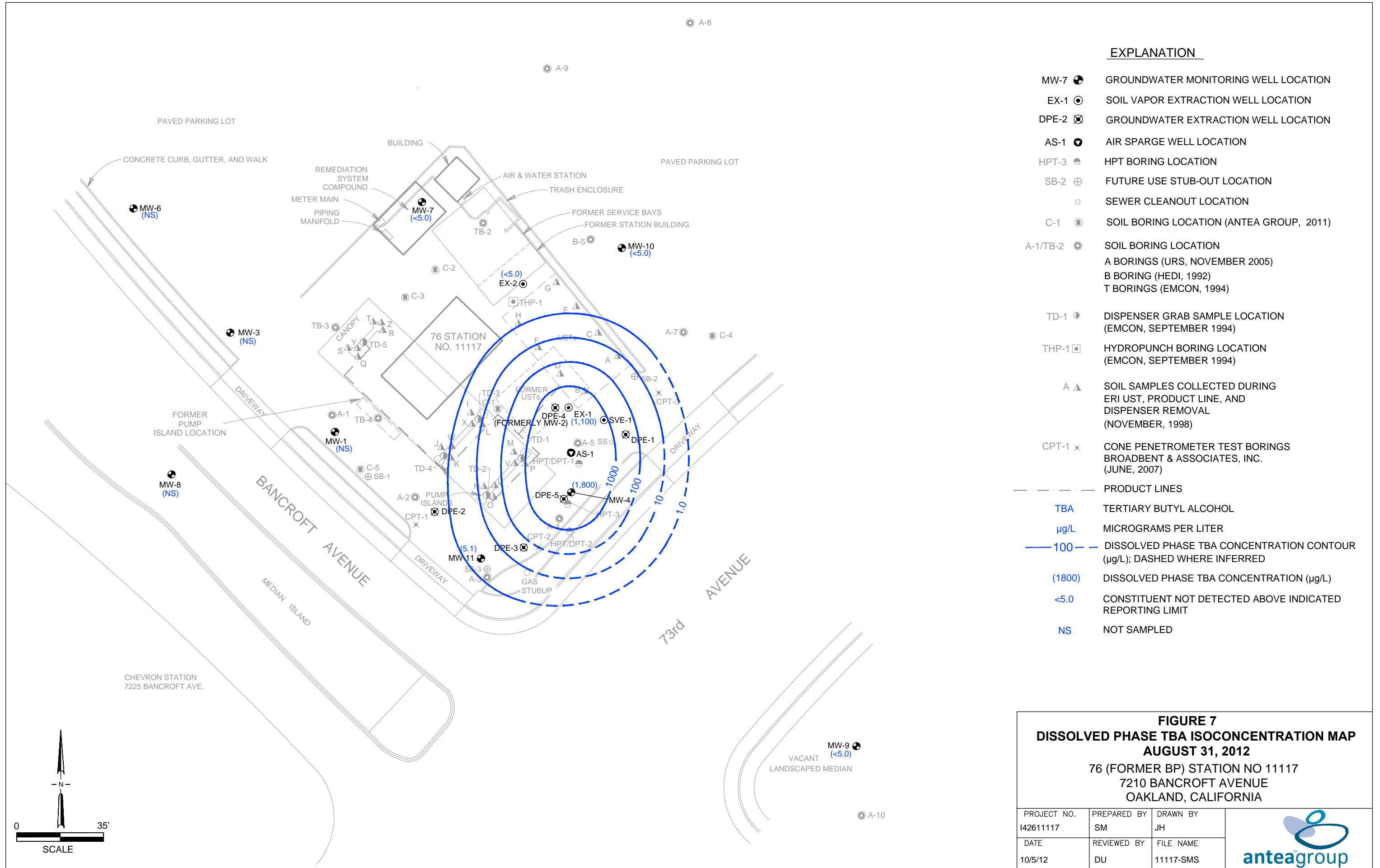
EXPLANATION

- 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
- HPT-3 ● HPT BORING LOCATION
- SB-2 ⊕ FUTURE USE STUB-OUT LOCATION
- SEWER CLEANOUT 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)
- <0.50 CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- NS NOT SAMPLED

FIGURE 6
DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
AUGUST 31, 2012

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

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH	
DATE 10/5/12	REVIEWED BY DU	FILE NAME 11117-SMS	


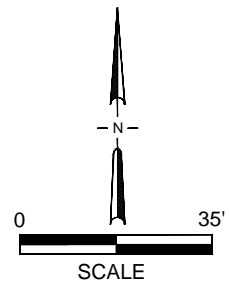


EXPLANATION

- 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
- HPT-3 ● HPT BORING LOCATION
- SB-2 ⊕ FUTURE USE STUB-OUT LOCATION
- SEWER CLEANOUT 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
- (1800) DISSOLVED PHASE TBA CONCENTRATION (µg/L)
- <5.0 CONSTITUENT NOT DETECTED ABOVE INDICATED REPORTING LIMIT
- NS NOT SAMPLED

FIGURE 7
DISSOLVED PHASE TBA ISOCONCENTRATION MAP
AUGUST 31, 2012
 76 (FORMER BP) STATION NO 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

PROJECT NO. I42611117	PREPARED BY SM	DRAWN BY JH
DATE 10/5/12	REVIEWED BY DU	FILE NAME 11117-SMS

Tables

Table 1	Soil Boring and Monitoring Well Construction Details
Table 2	Current Groundwater Gauging and Analytical Data
Table 2a	Additional Current Groundwater 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	
HPT-1	Mar-12	NA	40.55	1.75	NA	NA	NA	NA	NA to NA	0.0 to 40.55	NA to NA	NA to NA	
HPT-2	Mar-12	NA	40.15	1.75	NA	NA	NA	NA	NA to NA	0.0 to 40.2	NA to NA	NA to NA	
HPT-3	Mar-12	NA	40.75	1.75	NA	NA	NA	NA	NA to NA	0.0 to 40.8	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
- in = inches
- TOC = Top of Casing
- bgs = below ground surface
- NA = not applicable
- PVC = polyvinyl chloride
- SS = stainless steel
- B and C = soil boring
- A = hydropunch boring
- CPT = cone penetrometer boring
- MW = monitoring well
- EX = extraction well
- DPE = extraction well
- 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 (FORMERLY BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA										
		TOC Elevation (ft amsl)	Depth to Water (ft btoc)	LNAPL Thickness (ft)	Water Elevation* (ft amsl)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Ethanol (µg/L)
EX-1	8/31/2012	44.20	19.55	NP	24.65	5100	1600	40	53	150	59	<3.0	<3.0	<3.0	1100	<30
EX-1	9/27/2012	44.20	19.62	NP	24.58	--	--	--	--	--	--	--	--	--	--	--
EX-2	8/31/2012	45.33	19.99	NP	25.34	<50	<0.50	<0.50	<0.50	<0.50	6.3	<0.50	<0.50	<0.50	<5.0	<5.0
EX-2	9/27/2012	45.33	20.6	NP	24.73	--	--	--	--	--	--	--	--	--	--	--
MW-1	8/31/2012	43.14	18.23	NP	24.91	--	--	--	--	--	--	--	--	--	--	--
MW-3	8/31/2012	43.27	18.51	NP	24.76	--	--	--	--	--	--	--	--	--	--	--
MW-4	8/31/2012	43.64	18.82	NP	24.82	230000	2800	600	6100	17000	240	<25	<25	<25	1800	<300
MW-4 ¹	9/27/2012	43.64	19.30	NP	24.34	28000	2300	420	2000	6000	150	<40	<40	<40	3800	<2000
MW-4 ²	9/27/2012	43.64	19.30	NP	24.34	58000	2600	530	7700	15000	160	<100	<100	<100	2400	<5000
MW-6	8/31/2012	43.64	18.82	NP	24.82	--	--	--	--	--	--	--	--	--	--	--
MW-7	8/31/2012	44.21	19.39	NP	24.82	<50	<0.50	<0.50	<0.50	<0.50	20	<0.50	<0.50	<0.50	<5.0	<5.0
MW-8	8/31/2012	44.18	18.81	NP	25.37	--	--	--	--	--	--	--	--	--	--	--
MW-9	8/31/2012	44.35	19.68	NP	24.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-9	9/27/2012	44.35	20.25	NP	24.1	--	--	--	--	--	--	--	--	--	--	--
MW-10	8/31/2012	46.17	20.79	NP	25.38	<50	<0.50	<0.50	<0.50	<0.50	57	<0.50	<0.50	<0.50	<5.0	<5.0
MW-11	8/31/2012	43.34	17.61	NP	25.73	1800	<0.50	2.3	40	46	0.58	<0.50	<0.50	<0.50	5.1	<5.0
MW-11	9/27/2012	43.34	18.45	NP	24.89	--	--	--	--	--	--	--	--	--	--	--

Gauging Notes:

TOC - Top of Casing
Well Screen Interval - Top of Screen to Bottom of Screen
ft - Feet
NP - LNAPL not present
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available
ft bgs - Feet below ground surface
ft amsl - Feet above mean sea level
ft btoc - Feet below top of casing
ft bgs - Feet below ground surface
ft amsl - Feet above mean sea level
ft btoc - Feet below top of casing
¹ - Sample taken pre-purge
² - Sample taken post-purge

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit
µg/L - micrograms/liter
GRO - Gasoline range organics
GC/MS - Gas Chromatograph/Mass Spectrometer
MTBE - Methyl tert-butyl ether
DIPE - Di-isopropyl ether
ETBE - Ethyl tert-butyl ether
TAME - Tert-amyl methyl ether
TBA - Tert-butyl alcohol

TABLE 2a
ADDITIONAL CURRENT GROUNDWATER ANALYTICAL DATA
76 (FORMERLY BP) SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA				
		Iron (mg/L)	Iron, Ferrous (ug/L)	Methane (ug/L)	Nitrate as N (mg/L)	Sulfate E300.0 (mg/L)
EX-1	8/31/2012	--	--	--	--	--
	9/27/2012	0.77	<100	1670	<0.10	<0.50
EX-2	8/31/2012	--	--	--	--	--
	9/27/2012	<0.10	<100	<1.00	43	28
MW-1	8/31/2012	--	--	--	--	--
MW-3	8/31/2012	--	--	--	--	--
MW-4	8/31/2012	--	--	--	--	--
	9/27/2012	4.89	2230	5020	<0.10	13
MW-6	8/31/2012	--	--	--	--	--
MW-7	8/31/2012	--	--	--	--	--
MW-8	8/31/2012	--	--	--	--	--
MW-9	8/31/2012	--	--	--	--	--
	9/27/2012	<0.10	<100	38.6	3.0	38
MW-10	8/31/2012	--	--	--	--	--
MW-11	8/31/2012	--	--	--	--	--
	9/27/2012	1.6	1800	1770	<0.10	11

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit

mg/L - milligrams per liter

µg/L - micrograms/liter

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	51.07	17.42	NP	33.65	--	120000	13900	18800	3030	19600	--	--	--	--	--	--	--	--
	6/28/2002	51.07	17.04	NP	34.03	--	3700	190	23.3	139	287	--	--	--	--	--	--	--	--
	9/12/2002	51.07	19.52	NP	31.55	--	100000	13000	22000	3600	20000	--	--	--	--	--	--	--	--
	12/12/2002	51.07	21.08	NP	29.99	--	120000	13000	21000	4400	25000	--	--	--	--	--	--	--	--
	3/10/2003	51.07	17.84	NP	33.23	--	100000	17000	21000	3400	20000	--	--	--	--	--	--	--	--
	5/12/2003	51.07	16.66	NP	34.41	--	150000	16000	24000	3500	22000	--	--	--	--	--	--	--	--
	8/27/2003	51.07	19.65	NP	31.42	--	120000	14000	12000	3900	20000	--	<120	<120	140	<5000	<25000	--	--
	11/10/2003	51.07	20.80	NP	30.27	--	97000	12000	9500	3600	15000	--	<250	<250	<250	<10000	<50000	--	--
	2/3/2004	51.07	16.82	NP	34.25	--	130000	14000	19000	3400	20000	--	--	--	--	--	--	--	--
	5/4/2004	51.07	16.19	NP	34.88	--	120000	12000	16000	3700	22000	--	<250	<250	<250	<10000	<50000	<250	<250
	8/31/2004	51.07	19.50	NP	31.57	--	99000	10000	13000	3700	18000	--	--	--	--	--	--	--	--
	11/23/2004	51.07	18.20	NP	32.87	--	110000	8200	17000	4000	23000	--	<250	<250	<250	<10000	<50000	<250	<250
	1/18/2005	51.07	14.91	NP	36.16	--	96000	6500	14000	3500	21000	--	<100	<100	<100	<4000	<20000	<100	<100
	6/29/2005	51.07	13.98	NP	37.09	--	54000	6200	4900	3300	12000	--	--	--	--	--	--	--	--
	9/1/2005	51.07	17.00	NP	34.07	--	58000	6300	6000	3300	15000	--	<100	<100	100	<4000	<20000	<100	<100
	11/3/2005	51.07	20.25	NP	30.82	--	63000	7400	3700	3300	10000	--	<100	<100	100	<4000	<20000	<100	<100
	2/14/2006	51.07	13.72	NP	37.35	--	97000	7500	11000	4300	16000	--	<100	<100	<100	<4000	<60000	<100	<100
	5/30/2006	51.07	13.50	NP	37.57	--	28000	5200	2500	1500	3300	--	<100	<100	<100	<4000	<60000	<100	<100
	8/29/2006	51.07	18.16	NP	32.91	--	65000	7200	4500	3200	11000	--	<100	<100	100	<4000	<60000	<100	<100
11/29/2006	51.07	20.06	NP	31.01	--	46000	8500	4600	3300	10000	--	<120	<120	120	<5000	<75000	<120	<120	
2/20/2007	51.07	16.43	NP	34.64	--	78000	9700	12000	4100	16000	--	<100	<100	<100	<4000	<60000	<100	<100	
5/25/2007	51.07	16.80	NP	34.27	--	62000	7400	9500	4100	15000	--	<200	<200	<200	<8000	<120000	<200	<200	
8/9/2007	51.07	19.55	NP	31.52	--	58000	7400	5000	3800	12000	--	<100	<100	<100	<4000	<60000	<100	<100	
11/9/2007	51.07	21.53	NP	29.54	--	49000	6300	3300	2900	8300	--	<100	<100	<100	<4000	<60000	<100	<100	
MW-3	1/5/1992	49.95	33.69	NP	16.26	4000	7400	790	23	210	40	--	--	--	--	--	--	--	
	1/10/1992	49.95	33.74	NP	16.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/5/1992	49.95	29.65	NP	20.30	--	0	130	5.3	93	20	--	--	--	--	--	--	--	
	7/24/1992	49.95	30.14	NP	19.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	7/27/1992	49.95	30.14	NP	19.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/15/1992	49.95	31.07	NP	18.88	<50	450	55	3.1	34	7.1	--	--	--	--	--	--	--	
	12/15/1992	49.95	31.93	NP	18.02	710	12000	940	<50	310	120	--	--	--	--	--	--	--	
	3/15/1993	49.95	25.71	NP	24.24	60	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	6/7/1993	49.95	25.80	NP	24.15	<50	150	3.6	<0.5	0.9	1.3	--	--	--	--	--	--	--	
	9/23/1993	49.95	29.18	NP	20.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/24/1993	49.95	NG	NG	NG	<50	160	8.4	<0.5	3.7	1.3	--	--	--	--	--	--	--	
	12/27/1993	49.95	29.25	NP	20.70	--	9400	1100	48	530	120	--	--	--	--	--	--	--	
	4/5/1994	49.95	26.84	NP	23.11	--	7000	860	19	330	52	--	--	--	--	--	--	--	
	7/22/1994	49.95	26.90	NP	23.05	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	10/13/1994	49.95	27.83	NP	22.12	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	1/25/1995	49.95	21.65	NP	28.30	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	4/19/1995	49.95	19.33	NP	30.62	--	2400	170	8	130	27	--	--	--	--	--	--	--	
	7/5/1995	49.95	20.27	NP	29.68	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	10/5/1995	49.95	23.73	NP	26.22	--	2300	210	3.1	10	5.1	--	--	--	--	--	--	--	
	1/12/1996	49.95	24.84	NP	25.11	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
4/22/1996	49.95	18.60	NP	31.35	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
7/2/1996	49.95	18.88	NP	31.07	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
11/8/1996	49.95	19.14	NP	30.81	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
1/3/1997	49.95	18.72	NP	31.23	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
4/28/1997	49.95	19.38	NP	30.57	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
7/1/1997	49.95	21.65	NP	28.30	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
10/2/1997	49.95	23.45	NP	26.50	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
1/9/1998	49.95	20.10	NP	29.85	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
5/6/1998	49.95	15.57	NP	34.38	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--		
7/21/1998	49.95	15.88	NP	34.07	--	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	49.95	20.30	NP	29.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/1999	49.95	19.75	NP	30.20	--	<50	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	5/10/1999	49.95	16.17	NP	33.78	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	49.95	22.05	NP	27.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/23/1999	49.95	22.55	NP	27.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	49.95	16.40	NP	33.55	--	350	22	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/22/2000	49.95	9.49	NP	40.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	49.95	13.02	NP	36.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/11/2000	49.95	13.30	NP	36.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	49.95	16.49	NP	33.46	--	1000	66.4	0.597	6.96	<1.5	--	--	--	--	--	--	--	--
	6/19/2001	49.95	18.82	NP	31.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	49.95	21.59	NP	28.36	--	230	<0.5	0.593	<0.5	<1.5	--	--	--	--	--	--	--	--
	12/27/2001	49.95	17.37	NP	32.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/2002	49.95	15.81	NP	34.14	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	6/28/2002	49.95	17.09	NP	32.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/12/2002	49.95	18.80	NP	31.15	--	52	3.3	8.6	1.7	12	--	--	--	--	--	--	--	--
	12/12/2002	49.95	20.57	NP	29.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/10/2003	49.95	16.68	NP	33.27	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/12/2003	49.95	14.72	NP	35.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/27/2003	49.95	18.50	NP	31.45	--	<50	<0.5	<0.5	<0.5	0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	11/10/2003	49.95	19.66	NP	30.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/2004	49.95	15.33	NP	34.62	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	8/31/2004	49.95	18.13	NP	31.82	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	11/23/2004	49.95	16.48	NP	33.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2005	49.95	13.06	NP	36.89	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	6/29/2005	49.95	13.00	NP	36.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/1/2005	49.95	16.00	NP	33.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/3/2005	49.95	18.91	NP	31.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/2006	49.95	12.90	NP	37.05	--	86	<0.5	<0.5	<0.5	0.55	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/30/2006	49.95	12.55	NP	37.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/2006	49.95	16.68	NP	33.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/29/2006	49.95	19.10	NP	30.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/2007	49.95	15.29	NP	34.66	--	56	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/25/2007	49.95	15.94	NP	34.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
8/9/2007	49.95	18.70	NP	31.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
11/9/2007	49.95	20.27	NP	29.68	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	
8/31/2012	43.27	18.51	NP	24.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	7/24/1992	50.76	30.02	NP	20.74	--	42000	3200	3600	1400	4100	--	--	--	--	--	--	--	
	7/27/1992	50.76	30.02	NP	20.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/15/1992	50.76	31.14	NP	19.62	1700	55000	7600	13000	2800	9500	--	--	--	--	--	--	--	

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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	50.76	31.98	NP	18.78	2200	36000	3700	4700	1200	4000	--	--	--	--	--	--	--	--
	3/15/1993	50.76	25.34	NP	25.42	1200	69000	7600	15000	2500	11000	--	--	--	--	--	--	--	--
	6/7/1993	50.76	25.67	NP	25.09	2500	73000	10000	19000	3400	14000	--	--	--	--	--	--	--	--
	9/23/1993	50.76	29.37	NP	21.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/1993	50.76	NG	NG	NG	5700	68000	11000	2100	8600	990	--	--	--	--	--	--	--	--
	12/27/1993	50.76	29.40	NP	21.36	--	32000	2500	4400	1300	4400	--	--	--	--	--	--	--	--
	4/5/1994	50.76	27.09	NP	23.67	--	64000	6500	14000	1900	9600	--	--	--	--	--	--	--	--
	7/22/1994	50.76	27.33	NP	23.43	--	85000	10000	20000	3200	13000	--	--	--	--	--	--	--	--
	10/13/1994	50.76	28.25	NP	22.51	--	51000	7100	13000	2100	8900	--	--	--	--	--	--	--	--
	1/25/1995	50.76	21.85	NP	28.91	--	26000	3600	9600	1200	6400	--	--	--	--	--	--	--	--
	4/19/1995	50.76	19.44	NP	31.32	--	89000	12000	24000	3500	18000	--	--	--	--	--	--	--	--
	7/5/1995	50.76	20.52	NP	30.24	--	130000	13000	29000	3300	25000	--	--	--	--	--	--	--	--
	10/5/1995	50.76	24.23	NP	26.53	--	110000	10000	23000	3600	17000	--	--	--	--	--	--	--	--
	1/12/1996	50.76	25.34	NP	25.42	--	46000	3500	8300	1100	8000	--	--	--	--	--	--	--	--
	4/22/1996	50.76	19.13	NP	31.63	--	40000	5100	9600	980	11800	--	--	--	--	--	--	--	--
	7/2/1996	50.76	20.67	NP	30.09	--	74000	9800	21000	2100	16600	--	--	--	--	--	--	--	--
	11/8/1996	50.76	20.95	NP	29.81	--	100000	7900	16000	2500	13700	--	--	--	--	--	--	--	--
	1/3/1997	50.76	20.54	NP	30.22	--	99000	17000	30000	4300	22700	--	--	--	--	--	--	--	--
	4/28/1997	50.76	21.28	NP	29.48	--	130000	12000	28000	3800	21000	--	--	--	--	--	--	--	--
	7/1/1997	50.76	23.61	NP	27.15	--	110000	16000	25000	4900	24400	--	--	--	--	--	--	--	--
	10/2/1997	50.76	25.39	NP	25.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/3/1997	50.76	NG	NG	NG	--	66000	8200	8600	2700	13400	--	--	--	--	--	--	--	--
	1/9/1998	50.76	21.25	NP	29.51	--	100000	9700	3200	1500	4700	--	--	--	--	--	--	--	--
	5/6/1998	50.76	15.96	NP	34.8	--	430000	6900	31000	11000	56000	--	--	--	--	--	--	--	--
	7/21/1998	50.76	16.10	NP	34.66	--	250000	11000	26000	5500	26900	--	--	--	--	--	--	--	--
	12/30/1998	50.76	20.91	NP	29.85	--	370000	11000	22000	8500	40000	92000	--	--	--	--	--	--	--
	2/2/1999	50.76	20.13	NP	30.63	--	190000	4100	19000	4800	32000	--	--	--	--	--	--	--	--
	5/10/1999	50.76	16.63	NP	34.13	--	2700	23	7.1	8.1	25	--	--	--	--	--	--	--	--
	9/23/1999	50.76	22.48	NP	28.28	--	180000	11000	29000	7000	38000	--	--	--	--	--	--	--	--
	12/23/1999	50.76	22.94	NP	27.82	--	66000	6300	5200	2200	7800	--	--	--	--	--	--	--	--
	3/27/2000	50.76	16.84	NP	33.92	--	120000	8700	12000	3800	16000	--	--	--	--	--	--	--	--
	5/22/2000	50.76	17.85	NP	32.91	--	110000	7600	16000	4400	20000	--	--	--	--	--	--	--	--
	8/31/2000	50.76	21.71	NP	29.05	--	110000	8800	7600	3400	14000	--	--	--	--	--	--	--	--
	12/11/2000	50.76	22.05	NP	28.71	--	70000	4580	3480	2550	9220	--	--	--	--	--	--	--	--
	3/20/2001	50.76	17.68	NP	33.08	--	100000	7100	4530	2540	9370	--	--	--	--	--	--	--	--
	6/19/2001	50.76	19.40	NP	31.36	--	180000	7430	14600	5400	25300	--	--	--	--	--	--	--	--
9/20/2001	50.76	22.01	0.03	28.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/27/2001	50.76	17.96	NP	32.8	--	120000	6880	9030	2840	14600	--	--	--	--	--	--	--	--	
2/28/2002	50.76	17.06	NP	33.7	--	80000	4920	5450	2220	12300	--	--	--	--	--	--	--	--	
6/28/2002	50.76	17.76	NP	33	--	48000	2780	2770	1530	6790	--	--	--	--	--	--	--	--	
9/12/2002	50.76	19.45	NP	31.31	--	46000	4500	6800	2600	10000	--	--	--	--	--	--	--	--	
12/12/2002	50.76	21.29	NP	29.47	--	36000	5200	3400	2000	6500	--	--	--	--	--	--	--	--	
3/10/2003	50.76	17.16	NP	33.6	--	70000	7000	4800	3300	13000	--	--	--	--	--	--	--	--	
5/12/2003	50.76	14.51	NP	36.25	--	75000	7600	3700	3400	13000	--	--	--	--	--	--	--	--	
8/27/2003	50.76	19.32	NP	31.44	--	77000	7500	1300	2100	4000	--	<250	<250	250	<10000	<50000	--	--	
11/10/2003	50.76	20.36	NP	30.4	--	110000	7100	3100	2100	5800	--	<500	<500	<500	<20000	<100000	--	--	
2/3/2004	50.76	16.51	NP	34.25	--	160000	8400	9700	5000	23000	--	<500	<500	<500	<20000	<100000	<500	<500	
5/4/2004	50.76	16.47	NP	34.29	--	110000	8100	7500	4300	17000	--	<250	<250	<250	<10000	<50000	<250	<250	
8/31/2004	50.76	19.16	NP	31.6	--	91000	6600	8400	3700	14000	--	<250	<250	<250	<10000	<50000	<250	<250	
11/23/2004	50.76	18.02	NP	32.74	--	740000	20000	150000	320000	1400000	--	<2500	<2500	<2500	<100000	<500000	<2500	<2500	
1/18/2005	50.76	14.21	NP	36.55	--	170000	5400	14000	6900	33000	--	<250	<250	<250	<10000	<50000	<250	<250	
6/29/2005	50.76	13.86	NP	36.9	--	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	50.32	16.75	NP	33.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/23/1999	50.32	22.55	NP	27.77	--	<50	<1	<1	<1	<1	--	--	--	--	--	--	--	--
	12/23/1999	50.32	23.00	NP	27.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2000	50.32	16.89	NP	33.43	--	1700	4.4	0.54	<0.5	1	--	--	--	--	--	--	--	--
	5/22/2000	50.32	18.02	NP	32.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/31/2000	50.32	21.62	NP	28.7	--	1200	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	12/11/2000	50.32	21.81	NP	28.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/20/2001	50.32	16.97	NP	33.35	--	3300	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	--
	6/19/2001	50.32	19.30	NP	31.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2001	50.32	22.00	NP	28.32	--	2200	2.04	8.1	3.62	13.7	--	--	--	--	--	--	--	--
	12/27/2001	50.32	17.85	NP	32.47	--	830	0.59	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	2/28/2002	50.32	16.31	NP	34.01	--	1100	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	6/28/2002	50.32	17.57	NP	32.75	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	--
	9/12/2002	50.32	19.27	NP	31.05	--	190	1.9	4.6	1	7.3	--	--	--	--	--	--	--	--
	12/12/2002	50.32	20.94	NP	29.38	--	270	<2.5	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	--
	3/10/2003	50.32	17.11	NP	33.21	--	110	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	5/12/2003	50.32	15.18	NP	35.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--
	8/27/2003	50.32	18.90	NP	31.42	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	11/10/2003	50.32	20.13	NP	30.19	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	--	--
	2/3/2004	50.32	15.83	NP	34.49	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	5/4/2004	50.32	15.62	NP	34.7	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	8/31/2004	50.32	18.56	NP	31.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	11/23/2004	50.32	16.95	NP	33.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2005	50.32	13.61	NP	36.71	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<100	<0.5	<0.5
	6/29/2005	50.32	13.55	NP	36.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/1/2005	50.32	16.52	NP	33.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/3/2005	50.32	19.28	NP	31.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/2006	50.32	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/30/2006	50.32	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/2006	50.32	17.15	NP	33.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/29/2006	50.32	19.50	NP	30.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/2007	50.32	15.81	NP	34.51	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<20	<300	<0.5	<0.5
	5/25/2007	50.32	16.38	NP	33.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/9/2007	50.32	19.15	NP	31.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/2007	50.32	20.70	NP	29.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
12/14/2007	50.32	NG	NG	NG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/11/2008	50.32	15.08	NP	35.24	--	<50	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<100	<0.5	<0.5	
5/22/2008	50.32	17.07	NP	33.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/25/2008	50.32	19.82	NP	30.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2008	50.32	21.58	NP	28.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/25/2009	50.32	17.34	NP	32.98	--	120	<0.50	<0.50	<0.50	<0.50	13	--	--	--	--	--	--	--	
5/21/2009	50.32	16.85	NP	33.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/14/2009	50.32	20.03	NP	30.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/10/2010	50.32	15.31	NP	35.01	--	<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	50.32	16.60	NP	33.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/7/2011	50.32	14.86	NP	35.46	--	<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	50.32	16.07	NP	34.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	
8/31/2012	43.64	18.82	NP	24.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	

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-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	
MW-7	12/17/2008	38.99	21.86	NP	17.13	--	<50	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<10	<300	<0.5	<0.5	
	8/14/2009	38.99	20.31	NP	18.68	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/20/2010	38.99	16.82	NP	22.17	--	<50.0	<0.50	<0.50	<0.50	<1.5	17.2	<0.50	<0.50	<0.50	9.8	<250	<1.0	<1.0
	8/15/2011	38.99	16.28	NP	22.71	--	<50.0	<0.50	<0.50	<0.50	<1.5	14.8	<0.50	<0.50	<0.50	13.1	<250	<1.0	<1.0
	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
6/27/2012	44.21	16.70	NP	27.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/31/2012	44.21	19.39	NP	24.82	<50	<50	<0.50	<0.50	<0.50	<0.50	20	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	

TABLE 3
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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	
8/31/2012	44.18	18.81	NP	25.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	
	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	--	--	

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-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	
8/31/2012	44.35	19.68	NP	24.67	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	
9/27/2012	44.35	20.25	NP	24.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	1/9/1998	NSVD	20.97	NP	--	--	<50	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	5/6/1998	NSVD	18.07	NP	--	--	800	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	7/21/1998	NSVD	18.28	NP	--	--	80	<0.5	<1	<1	<1	--	--	--	--	--	--	--	
	12/30/1998	NSVD	22.22	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/2/1999	NSVD	21.83	NP	--	--	940	<10	<10	<10	<10	--	--	--	--	--	--	--	
	5/10/1999	NSVD	17.99	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/23/1999	NSVD	22.61	NP	--	--	<50	<1	<1	<1	1.4	--	--	--	--	--	--	--	
	12/23/1999	NSVD	23.75	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/27/2000	NSVD	18.83	NP	--	--	1900	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	5/22/2000	NSVD	19.47	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/31/2000	NSVD	22.64	NP	--	--	1700	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	12/11/2000	NSVD	22.84	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/20/2001	NSVD	19.57	NP	--	--	16000	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	
	6/19/2001	NSVD	20.63	NP	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/20/2001	NSVD	23.07	NP	--	--	5800	<0.5	<0.5	<0.5	<1.5	--	--	--	--	--	--	--	
	12/27/2001	NSVD	20.92	NP	--	--	6600	17.3	14.5	<12.5	<25	--	--	--	--	--	--	--	
	2/28/2002	NSVD	18.52	NP	--	--	3600	10.8	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	6/28/2002	NSVD	18.41	NP	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	9/12/2002	NSVD	20.57	NP	--	--	660	<5	<5	<5	<5	--	--	--	--	--	--	--	
12/12/2002	NSVD	22.80	NP	--	--	1400	<5	<5	<5	<5	--	--	--	--	--	--	--		
3/10/2003	NSVD	19.26	NP	--	--	1700	<5	<5	5.3	15	--	--	--	--	--	--	--		
5/12/2003	NSVD	17.90	NP	--	--	1500	<12	<12	<12	<12	--	--	--	--	--	--	--		
8/27/2003	NSVD	20.82	NP	--	--	4100	<25	<25	<25	<25	--	<25	<25	<25	<1000	<5000	--	--	
11/10/2003	NSVD	21.92	NP	--	--	<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)

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
¹ - Sample taken pre-purge.
² - Sample taken post-purge.

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



Well I.D.	Date	GROUND WATER ANALYTICAL DATA																						
		Alkalinity, Total as CaCO3 (mg/L)	Biochemical Oxygen Demand (ug/L)	Chemical Oxygen Demand (ug/L)	Chloride (ug/L)	Chromium (ug/L)	Chromium, Hexavalent (ug/L)	Iron SW6010B D (mg/L)	Iron SW6010B T (mg/L)	Iron, Ferric (ug/L)	Iron, Ferrous (ug/L)	m,p-Xylenes (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)	o-Xylene (ug/L)	Phosphate, Ortho (ug/L)	Phosphorous (ug/L)	Sulfate (ug/L)	Sulfide (mg/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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/31/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/27/2012	--	--	--	--	--	--	0.77	--	--	--	--	1670	<0.10	--	--	--	--	--	--	--	<500	--	--
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/31/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/27/2012	--	--	--	--	--	--	<0.10	--	--	<100	--	<1.00	43,000	--	--	--	--	--	--	--	28,000	--	--
MW-4	3/7/2012	525	--	63000	--	--	--	2.08	4.55	--	--	890	5870	--	--	--	--	--	200	--	--	--	<0.050	7,800
	3/19/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/27/2012	742	--	120000	--	--	--	2.23	4.89	--	--	--	5020	<100	--	--	--	--	--	--	--	13,000	0.20	25.00
	5/29/2012	496	--	100000	--	--	--	3.88	5.62	--	--	2000	4300	<100	--	--	--	--	570	--	--	<1000	0.25	63.00
	6/27/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/31/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	9/27/2012	--	--	520	--	--	--	6.57	27.1	--	--	--	4340	<100	--	--	--	--	--	--	1000	0.2	73.00	
MW-11	9/27/2012	--	--	--	--	--	--	<0.10	--	--	<100	--	38.6	3000	--	--	--	--	--	--	38,000	--	--	
MW-11	9/27/2012	--	--	--	--	--	--	1.6	--	--	1800	--	1770	<0.10	--	--	--	--	--	--	11,000	--	--	

Analytical Notes:

- No information available
- < - Not detected at or above indicated laboratory reporting limit
- ug/L - micrograms/liter
- TPH-g - Gasoline range organics
- GC/MS - Gas Chromatograph/Mass Spectrometer

Semi-Annual Monitoring Report, Third 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. 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 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 nearby businesses (Eastmont Mall and Burger King) for the 3-phase power source. Due to financial considerations, Antea Group also explored another alternative for the startup of the DPE system, which included reconfiguring the current system for single phase power.

2011-2012 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. In October 2011, Antea Group and subcontractors advanced borings C-1 through C-5, and advanced and installed remedial wells SVE-1 and AS-1 per the August 2011 Work Plan. 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 called Plume Stop, a product created by Regenesis. Between March 26 and 30, 2012, Antea Group and Regenesis oversaw subcontractor Vironex inject Plume Stop at nine soil boring locations using direct push technology. Antea Group is currently conducting the post injection groundwater monitoring events as outlined in the December 2011 Work Plan Addendum.

FREE PRODUCT RECOVERY DURING GROUNDWATER MONITORING EVENTS

Free product was observed in groundwater monitoring well MW-2 between 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 24.9 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, Third Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



Appendix B

Blaine Tech Services Groundwater Sampling Field Data Sheets

Well-Head Inspection & Well Gauging Form

Antea Group Project No: 261117 Site Address: 7210 Bancroft Ave., Oakland
 Field Technician: Pete Cornish BTS Date: 8/31/12 Weather: cloudy
(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-1	P	P	P	G	G	G	2	1020	18.23	38.39			2/2 bolts str. pped
	MW-3	G	G	G	G	G	G	2	1000	18.51	40.70			
	MW-4	G	G	G	G	G	G	2	1050	18.82	38.88			Injection/Equip collar on top
	MW-6	G	G	G	G	G	G	2	1012	18.82	39.40			
	MW-7	G	G	G	G	G	G	2	0949	19.39	44.18			
	MW-8	P	P	P	G	G	G	2	0945	18.81	39.38			3/3 bolts missing
	MW-9	G	G	G	G	G	P	2	1025 1025	19.68	38.85			
	MW-10	G	G	G	G	G	G	2	1006	20.79	35.30			
	MW-11	G	G	G	G	G	G	4	1040	13.61	36.98			
	EX-1	P	P	P	NA	NA	G	4	1030	19.55	37.27			Injection/Equip collar on top
	EX-2	G	G	G	G	G	G	4	0952	19.99	35.01			

Notes: _____

** 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: <u>7210 Bancroft Ave., Oakland</u>	
Project No: <u>261117</u>	Field Technician: <u>PL</u>
Field Point: <u>MW-4</u>	Date: <u>8/31/12</u>
Depth to Water (DTW) (ft bgs): <u>18.82</u>	Well Diameter (in): <u>② 4 6 8</u>
Depth to LNAPL (ft bgs): <u>-</u>	Thickness of LNAPL (ft): <u>-</u>
Total Depth of Well (ft bgs): <u>38.88</u>	Water Column Height (ft): <u>20.06</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): _____ X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): _____ Casing Volume (gal): <u>3.4</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>10.2</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: <u>1502</u>		Stop Time: <u>1512</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								
<u>1502</u>	<u>16.7</u>	<u>7.05</u>	<u>460</u>	<u>-67.6</u>	<u>2000</u>	<u>6.15</u>	<u>1.7</u>	<u>-</u>
<u>1504</u>	<u>19.3</u>	<u>6.62</u>	<u>1134</u>	<u>-104.7</u>	<u>717</u>	<u>2.70</u>	<u>3.4</u>	<u>-</u>
<u>1506</u>	<u>19.8</u>	<u>6.64</u>	<u>1061</u>	<u>-113.2</u>	<u>285</u>	<u>2.22</u>	<u>5.1</u>	<u>-</u>
<u>1508</u>	<u>20.0</u>	<u>6.64</u>	<u>1048</u>	<u>-117.2</u>	<u>167</u>	<u>1.84</u>	<u>6.8</u>	<u>-</u>
<u>1510</u>	<u>20.1</u>	<u>6.64</u>	<u>1047</u>	<u>-118.2</u>	<u>158</u>	<u>1.77</u>	<u>8.5</u>	<u>-</u>
<u>1512</u>	<u>20.3</u>	<u>6.64</u>	<u>1044</u>	<u>-118.9</u>	<u>121</u>	<u>1.69</u>	<u>10.2</u>	<u>-</u>
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 10.2

Other Comments: 80% = 22.83
DTW =
* Purged through flowcell

Sample Info:	
Sample ID: <u>MW-4-20120831</u>	Sample Date and Time: <u>8/31/12 1522</u>
Selected Analysis: <u>CrO, BTEX, MTBE, Oxy's</u>	

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

Signature: [Signature] Date: 8/31/12



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:	PC
Field Point:	MW-7	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	19.39	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	44.18	Water Column Height (ft):	24.79

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>24.79</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>4.2</u> Casing Volume (gal): <u>4.2</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>12.6</u>		

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius² * 0.163

Purge:	Start Time:								Stop Time:
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								—	
1117	20.5	7.41	413	130.5	62	7.87	11.0	—	
1119	20.7	7.42	390	7.1	38	3.02	2.1	—	
1122	20.8	7.43	383	6.0	23	2.70	4.2	—	
1124	21.0	7.43	377	-26.6	13	1.96	6.3	—	
1127	21.0	7.43	382	-37.9	7	1.94	8.4	—	
1129	20.8	7.41	388	-39.3	4	1.77	10.5	—	
1131	20.8	7.38	388	-56.2	4	1.49	12.6	—	
1134	19.4	7.38	388	-51.0	4	1.50	14.7	—	
Post-Purge									

Did Well dewater? Yes No Total Purge volume (gal): 21

Other Comments: 80% = 24.35
 DTW = 23.98
* Purged through flowcell

Sample Info:	
Sample ID: MW-7_20120831	Sample Date and Time: 8/31/12 1150
Selected Analysis:	

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

Signature: PC Date: 8/31/12



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:	PL
Field Point:	MW-9	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	19.68	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	-	Thickness of LNAPL (ft):	-
Total Depth of Well (ft bgs):	38.85	Water Column Height (ft):	19.17

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 19.17	X Conversion Factor (gal/ft): 0.17	= Casing Volume (gal): 3.3
Casing Volume (gal): 3.3	X Specified Volumes: 3	= Calculated Purge (gal): 9.9
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge:	Start Time: 1300	Stop Time: 1311						
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								
1302	17.9	7.03	684	-3.7	>1000	3.20	1.7	-
1304	18.4	7.06	635	-17.1	>1000	2.15	3.3	-
1305	18.7	7.06	560	-39.4	>1000	1.44	5	-
1307	18.7	7.05	529	-44.1	>1000	1.39	6.6	-
1309	18.8	7.05	519	-51	>1000	1.28	8	-
1311	18.8	7.05	513	-59	547	1.19	9.9	-
Post-Purge								
Did Well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total Purge volume (gal): 9.9						

Other Comments: 80% = 23.51'
DTW = 23.29' * Purged through flowcell

Sample Info:	
Sample ID: MW-9-20120831	Sample Date and Time: 8/31/12 1320
Selected Analysis: G, R, O, BTEX, MTBB, Oxy's	

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

Signature: Pete Cornish Date: 8/31/12

Groundwater Sampling Form

Site Address:	7210 Bancroft Ave., Oakland		
Project No:	261117	Field Technician:	PC
Field Point:	MW-10	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	20.79	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	-	Thickness of LNAPL (ft):	-
Total Depth of Well (ft bgs):	35.30	Water Column Height (ft):	14.51

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>14.51</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>2.5</u>
Casing Volume (gal): <u>2.5</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>7.5</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: <u>12:30</u>	Stop Time: <u>12:56</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								
1232	20.5	6.83	807	18.0	>1000	2.04	1.7	-
1234	21.3	6.81	816	6.3	494	1.75	2.5	-
1236	21.6	6.82	829	-0.2	480	1.43	3.7	-
1238	21.6	6.84	806	-8.6	>1000	1.22	5	-
1239	21.6	6.86	801	-17.2	532	1.50	6.2	-
1241	21.7	6.87	768	-25.4	780	1.84	7.5	-
1243	21.7	6.85	823	-24.5	>1000	2.21	8.7	-
1244	21.6	6.85	832	-13.7	7000	2.55	10	-
Post-Purge								
Did Well dewater? <input checked="" type="checkbox"/> Yes No			Total Purge volume (gal): <u>11</u>					

Other Comments: 80% = 23.69
 DTW = 22.99
* Purged through flowcell

Sample Info:

Sample ID:	MW-10_20120831.	Sample Date and Time:	8/31/12 1255
Selected Analysis:	GRO, BTEX, MTBE, Oxy's		

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

Signature: PC Date: 8/31/12



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:	PL
Field Point:	MW-10	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	20.79	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	-	Thickness of LNAPL (ft):	-
Total Depth of Well (ft bgs):	35.30	Water Column Height (ft):	14.51

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>14.51</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>2.5</u>
Casing Volume (gal): <u>2.5</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>7.5</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: <u>1230</u>	Stop Time: <u>1240</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								
<u>1245</u>								
	<u>Well dewatered @ 11 gal.</u>							
<u>1255</u>	<u>21.1</u>	<u>7.00</u>	<u>772</u>	<u>21.8</u>	<u>235</u>	<u>2.98</u>	<u>-</u>	
Post-Purge								
Did Well dewater? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Total Purge volume (gal): <u>11</u>						

Other Comments: 80% = 23.69
DTW = 22.99
* Purged through flowcell

Sample Info:

Sample ID: <u>MW-10-20120831</u>	Sample Date and Time: <u>8/31/12 1255</u>
Selected Analysis: <u>GRO, BTEX, MTBE, Oxy</u>	

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

Signature: Pete Date: 8/31/12



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:	PL
Field Point:	MW-11	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	17.61	Well Diameter (in):	2 @ 6 8
Depth to LNAPL (ft bgs):	-	Thickness of LNAPL (ft):	-
Total Depth of Well (ft bgs):	36.98	Water Column Height (ft):	19.37

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailor <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailor Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>19.37</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>12.8</u>
Casing Volume (gal): <u>12.8</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>38.4</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: 1404 Stop Time: 1422

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								
1407	19.6	6.94	457	-82.4	160	1.90	6.4	-
1410	19.7	7.00	464	-76.1	118	1.30	12.8	-
1413	19.7	7.01	466	-67.7	321	0.96	19.2	-
1416	19.7	7.01	464	-73.8	149	0.85	25.6	-
1419	19.6	7.02	461	-77.1	133	0.78	32	-
1422	19.7	7.02	459	-78.3	103	0.74	38.4	-
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 38.4

Other Comments: 80% = 21.48'
 DTW = 1444' 21.40' * Purged through flowcell

Sample Info:

Sample ID: MW-11 - 20120831	Sample Date and Time: 8/31/12 1440
Selected Analysis: GRO, BTEX, MTBE, Oxy's	

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

Signature: [Signature] Date: 8/31/12



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:	PC
Field Point:	EX-1	Date:	8/31/12
Depth to Water (DTW) (ft bgs):	19.55	Well Diameter (in):	2 (4) 6 8
Depth to LNAPL (ft bgs):	-	Thickness of LNAPL (ft):	-
Total Depth of Well (ft bgs):	37.27	Water Column Height (ft):	17.72

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>17.72</u> X Conversion Factor (gal/ft): <u>0.66</u> = Casing Volume (gal): <u>11.6</u> Casing Volume (gal): <u>11.6</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>34.8</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>1335</u>	Stop Time: <u>1435</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								
1338	20.5	6.51	364	-75.5	33	1.33	0	-
1341	20.7	6.55	375	-78.7	35	1.29	11.6	-
1343	20.6	6.58	394	-78.3	14	1.33	17.5	-
1345	Well dewatered @ 19 gal							-
1430	20.4	6.70	404	-83.1	>1000	2.10	-	-
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 19

Other Comments: 80% = 23.09
 DTW = 22.80
* Purged through flowcell

Sample Info:

Sample ID:	EX-1_20120831.	Sample Date and Time:	8/31/12 1430
Selected Analysis:	GRO, MTBE, BTEX, Oxy's		

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

Signature: Pete Cornish Date: 8/31/12



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 CA		
Project No:	261117	Field Technician:	DW
Field Point:	MW-4	Date:	9/27/12
Depth to Water (DTW) (ft bgs):	19.30	Well Diameter (in):	② 4 6 8 —
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	38.90	Water Column Height (ft):	19.60

Purging Info and Calculations:

Purge Method: Low Flow 3 casing volumes 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): _____	X Conversion Factor (gal/ft): _____	= Casing Volume (gal): _____
Casing Volume (gal): _____	X Specified Volumes: _____	= Calculated Purge (gal): _____
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:						
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								
0925	20.0	6.23	1167		143		Grab	
Post-Purge								
Did Well dewater?	Yes	<input checked="" type="radio"/> No	Total Purge volume (gal): Grab					

Other Comments: * No Purge Sample

Sample Info:	
Sample ID:	MW-4 20120930
Sample Date and Time:	9/27/12 @ 0925
Selected Analysis:	SEE COC

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

Signature: [Signature] Date: 9/27/12



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 CA		
Project No:	261117	Field Technician:	DW
Field Point:	MW-4	Date:	9/27/12
Depth to Water (DTW) (ft bgs):	19.30	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	38.90	Water Column Height (ft):	19.60

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: <u>Electric Submersible</u> Disposable Bailer Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>19.60</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>3.3</u>
Casing Volume (gal): <u>3.3</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>9.9</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:	Stop Time:						
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								
0947	17.33	6.50	1149	-105.4	294	2.42	1.7	20.32
0948	17.38	6.55	1085	-81.8	172	2.02	3.4	20.50
0950	17.41	6.95	1081	-75.7	112	1.93	5.1	20.58
0953	17.42	6.55	1080	-71.8	124	1.67	6.8	20.63
0955	17.47	6.56	1080	-68.0	89	1.63	8.5	20.65
0957	17.44	6.56	1080	-67.2	73	1.60	10.2	20.65
Post-Purge								

Did Well dewater? Yes No Total Purge volume (gal): 10.2

Other Comments: 80% = 23.22 odor Sheen * purged through flow cell
DTW = 19.50 Fe²⁺ = 0.8 mg/L

Sample Info:	
Sample ID: MW-4 - 20120930	Sample Date and Time: 9/27/12 @ 1005
Selected Analysis: SEE COE	

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: 9/27/12



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 CA		
Project No:	261117	Field Technician:	DW
Field Point:	MW-9	Date:	9/27/12
Depth to Water (DTW) (ft bgs):	20.25	Well Diameter (in):	② 4 6 8 —
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	38.42	Water Column Height (ft):	18.17

Purging Info and Calculations:

Purge Method: <u>Low-Flow</u> <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>18.17</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>3.1</u>
Casing Volume (gal): <u>3.1</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>9.3</u>

Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius² * 0.163

Purge:	Start Time:	Stop Time:						
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								
1042	15.61	7.07	637	-109.1	71000	3.09	1.6	20.51
1043	15.61	7.00	586	-113.2	389	3.04	3.2	20.77
1044	15.69	6.96	563	-125.4	221	2.86	4.8	20.77
1045	15.73	6.94	556	-131.0	147	2.83	6.4	20.77
1046	15.75	6.92	552	-136.0	112	2.84	8.0	20.77
1047	15.77	6.91	548	-137.1	85	2.86	9.6	20.77
Post-Purge								
Did Well dewater?	Yes	<input checked="" type="radio"/> No	Total Purge volume (gal): <u>9.6</u>					

Other Comments: 80% = 23.88 slight odor * purged through flow cell DTW = 20.31 Fe²⁺ = 0.0 mg/L

Sample Info:	
Sample ID:	MW-9_20120930 Sample Date and Time: 9/27/12 @ 1055
Selected Analysis:	SPE COE

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: 9/27/12



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 CA		
Project No:	261117	Field Technician:	DW
Field Point:	EX-1	Date:	9/27/12
Depth to Water (DTW) (ft bgs):	19.62	Well Diameter (in):	2 4 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	37.38	Water Column Height (ft):	17.76

Purging Info and Calculations:

Purge Method: <u>Low-Flow</u> <u>3 casing volumes</u> Other: _____	Purge Equipment: <u>Disposable Bailor</u> <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>17.76</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>11.7</u>
Casing Volume (gal): <u>11.7</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>35.1</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:	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										
	1209		17.70	6.40	468	-148.1	8	1.71	5.8	27.07
	1211		18.09	6.35	434	-158.4	8	1.54	11.6	30.45
	1213		18.07	6.35	469	-184.7	7	1.32	17.4	32.29
	1215		17.85	6.43	538	-200.8	7	1.27	24.2	36.41
	1216		well	dewatered	@	26.0	gals			
	1420		20.16	6.53	469	-158.2	17	1.84	Grab	
Post-Purge										

Did Well dewater?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Total Purge volume (gal):	26.0
Other Comments:	80% = 23.17 odor * purged through flow cell DTW = 31.97 (2hr) Fe ²⁺ = 1.0 mg/L		

Sample Info:	
Sample ID:	EX-1_20120930
Sample Date and Time:	9/27/12 @ 1420
Selected Analysis:	SEE COE

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: 9/27/12



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 CA		
Project No:	261117	Field Technician:	DW
Field Point:	EX-2	Date:	9/27/12
Depth to Water (DTW) (ft bgs):	20.60	Well Diameter (in):	2 <u>4</u> 6 8
Depth to LNAPL (ft bgs):	_____	Thickness of LNAPL (ft):	_____
Total Depth of Well (ft bgs):	35.00	Water Column Height (ft):	19.40

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailer <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>14.40</u> X Conversion Factor (gal/ft): <u>0.66</u> = Casing Volume (gal): <u>9.5</u> Casing Volume (gal): <u>9.5</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>28.5</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: <u>1232</u>	Stop Time: <u>1247</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								
1234	17.70	6.48	707	-149.2	41	2.09	4.8	23.62
1237	18.09	6.37	693	-161.6	46	1.81	9.6	25.53
1240	18.07	6.34	702	-162.9	25	1.65	14.4	29.11
1243	17.89	6.32	703	-172.7	4	1.61	19.2	30.67
1245	17.86	6.32	696	-173.8	5	1.57	24.0	32.53
1247	17.81	6.32	690	-175.2	8	1.53	28.8	33.40
Post-Purge								
Did Well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total Purge volume (gal): <u>28.8</u>						

Other Comments: 80% = 23.48 DTW = 23.31 * purged through flow cell Fe²⁺ = 0.4 mg/L

Sample Info:	
Sample ID: EX-2_20120930	Sample Date and Time: 9/27/12 @ 1315
Selected Analysis: SFE COE	

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: 9/27/12

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



COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: _____ of _____
Cooler # _____ of _____

Required Lab Information:		Required Project Information:		Required Invoice Information:	
Lab Name: Kiff Analytical	Site ID #: 2611117	Task:	Send Invoice to: Jerilyn Thao		
Address: 2795 Second Street #300	AnteaGrp proj#: 142611117	Address: 11050 White Rock Road, Suite 110	Turn around time (days) 10		
Davis, CA 95618	Site Address: 7210 Bancroft Ave	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411	QC level Required: Standard	Special <input type="checkbox"/> Mark one
Lab PM: Scott Forbes	City: Oakland State: CA	Reimbursement project? <input type="checkbox"/>	Non-reimbursement project? <input checked="" type="checkbox"/>	NJ Reduced Deliverable Package? <input type="checkbox"/>	
Phone/Fax: 530-297-4800 ext 109	AG PM Name: Doug Umland	Send EDD to: copeltdata@intelligentehs.com		MA MCP Cert? <input type="checkbox"/>	CT RCP Cert? <input type="checkbox"/> Mark One
Lab PM email: sforbes@kiffanalytical.com	Phone/Fax: 408-826-1874	CC Hardcopy report to: nicole.persaud@anteagroup.com		Lab Project ID (lab use)	
Applicable Lab Quote #:	AG PM Email: doug.umland@anteagroup.com	CC Hardcopy report to: sara.sichley@anteagroup.com		Requested Analyses	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		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.			
		MATRIX DRINKING WATER WP GROUND WATER WG WASTE WATER WW FREE PRODUCT LP SOIL SO DL WPE AMBIENT AIR AA SVE AIR AE SOE GAS GS	MATRIX WATER W SURFACE WATER WS WATER QC WQ SLUDGE RU RISEATE RH OTHER RT ANIMAL TISSUE TA							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₅	Methanol	Other	6010 Total Diss Iron	375-PR-3 Sulfate			323-PR-2 Sulfate	SOP-173 Nitrate	Ferrous Iron Hatch Bill
1	EX-1_20120930	WG	G	WG	G	9/27/12	1420	4	Y		X	Y						X	X	X	X	X		
2	EX-2_20120930	WG	↓	WG	↓	↓	1615	4	↓		X	X						X	X	X	X	X		
3	MW-9_20120930	WG	↓	WG	↓	↓	1055	4	↓		X	X						X	X	X	X	X		
4	MW-11_20120930	WG	↓	WG	↓	↓	1145	4	↓		X	X						X	X	X	X	X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Additional Comments/Special Instructions: Global ID: T0600100201	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	Sample Receipt Conditions			
	<i>[Signature]</i>		9/27/12	1645	<i>[Signature]</i>				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
UPS COURIER FEDEX					<i>[Signature]</i>							
US MAIL					SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed: 9/27/12	TIME: 1645	Samples on Ice?	Sample intact?	Trip Blank?	



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



Appendix C

Certified Laboratory Analytical Reports and Data Validation Forms

Laboratory Results

Douglas Umland
Antea Group
312 Piercy Rd.
San Jose, CA 95138

Subject : 8 Water Samples
Project Name : 2611117
Project Number :

Dear Mr. Umland,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Troy Turpen

Subject : 8 Water Samples
Project Name : 2611117
Project Number :

Case Narrative

The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-4_20120831.

Repeat analysis by EPA Method 8260B yielded inconsistent results for sample MW-4_20120831. The concentrations appear to vary between the bottles. The highest concentration results are reported.



Report Number : 82484

Date : 09/12/12

Analysis Summary

Attention : Douglas Umland
 Antea Group
 312 Piercy Rd.
 San Jose, CA 95138

Project Name :2611117

Project Number :

Sample Name		EX-1_20120831	EX-2_20120831	MW-10_20120831	MW-11_20120831	MW-4_20120831	MW-7_20120831	MW-9_20120831								
Sample Date		08/31/12	08/31/12	08/31/12	08/31/12	08/31/12	08/31/12	08/31/12								
Analyte	Method	Units	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Benzene	EPA 8260B	ug/L	3.0	1600	0.50	ND	0.50	ND	0.50	ND	25	2800	0.50	ND	0.50	ND
Ethylbenzene	EPA 8260B	ug/L	3.0	53	0.50	ND	0.50	ND	0.50	40	25	6100	0.50	ND	0.50	ND
Toluene	EPA 8260B	ug/L	3.0	40	0.50	ND	0.50	ND	0.50	2.3	25	600	0.50	ND	0.50	ND
Total Xylenes	EPA 8260B	ug/L	3.0	150	0.50	ND	0.50	ND	0.50	46	25	17000	0.50	ND	0.50	ND
Diisopropyl ether (DIPE)	EPA 8260B	ug/L	3.0	ND	0.50	ND	0.50	ND	0.50	ND	25	ND	0.50	ND	0.50	ND
Ethanol	EPA 8260B	ug/L	30	ND	5.0	ND	5.0	ND	5.0	ND	300	ND	5.0	ND	5.0	ND
Ethyl-t-butyl ether (ETBE)	EPA 8260B	ug/L	3.0	ND	0.50	ND	0.50	ND	0.50	ND	25	ND	0.50	ND	0.50	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L	3.0	59	0.50	6.3	0.50	57	0.50	0.58	25	240	0.50	20	0.50	ND
Tert-Butanol	EPA 8260B	ug/L	15	1100	5.0	ND	5.0	ND	5.0	5.1	150	1800	5.0	ND	5.0	ND
Tert-amyl methyl ether (TAME)	EPA 8260B	ug/L	3.0	ND	0.50	ND	0.50	ND	0.50	ND	25	ND	0.50	ND	0.50	ND
TPH as Gasoline	EPA 8260B	ug/L	300	5100	50	ND	50	ND	50	1800	2500	230000	50	ND	50	ND
1,2-Dibromoethane	EPA 8260B	ug/L	3.0	ND	0.50	ND	0.50	ND	0.50	ND	25	ND	0.50	ND	0.50	ND
1,2-Dichloroethane	EPA 8260B	ug/L	3.0	ND	0.50	ND	0.50	ND	0.50	ND	25	ND	0.50	ND	0.50	ND
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%		95.1		100		101		97.7		93.3		99.9		100
Toluene - d8 (Surr)	EPA 8260B	%		98.2		99.8		99.8		99.2		96.4		99.4		99.2

MRL = Method Reporting Limit

ND = Not Detected



Analysis Summary

Report Number : 82484

Date : 09/12/12

Attention : Douglas Umland
 Antea Group
 312 Piercy Rd.
 San Jose, CA 95138

Project Name :2611117

Project Number :

Sample Name		TB1_20120831		
Sample Date		08/31/12		
Analyte	Method	Units	MRL	Results
Benzene	EPA 8260B	ug/L	0.50	ND
Ethylbenzene	EPA 8260B	ug/L	0.50	ND
Toluene	EPA 8260B	ug/L	0.50	ND
Total Xylenes	EPA 8260B	ug/L	0.50	ND
Diisopropyl ether (DIPE)	EPA 8260B	ug/L	0.50	ND
Ethanol	EPA 8260B	ug/L	5.0	ND
Ethyl-t-butyl ether (ETBE)	EPA 8260B	ug/L	0.50	ND
Methanol	EPA 8260B	ug/L	50	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L	0.50	ND
Tert-Butanol	EPA 8260B	ug/L	5.0	ND
Tert-amyl methyl ether (TAME)	EPA 8260B	ug/L	0.50	ND
1,2-Dibromoethane	EPA 8260B	ug/L	0.50	ND
1,2-Dichloroethane	EPA 8260B	ug/L	0.50	ND
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%		101
Toluene - d8 (Surr)	EPA 8260B	%		98.9

MRL = Method Reporting Limit

ND = Not Detected

Project Name : **2611117**

Project Number :

Sample : **EX-1_20120831**

Matrix : Water

Lab Number : 82484-01

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	1600	3.0	ug/L	EPA 8260B	09/11/12 11:30
Toluene	40	3.0	ug/L	EPA 8260B	09/11/12 11:30
Ethylbenzene	53	3.0	ug/L	EPA 8260B	09/11/12 11:30
Total Xylenes	150	3.0	ug/L	EPA 8260B	09/11/12 11:30
Methyl-t-butyl ether (MTBE)	59	3.0	ug/L	EPA 8260B	09/11/12 11:30
Diisopropyl ether (DIPE)	< 3.0	3.0	ug/L	EPA 8260B	09/11/12 11:30
Ethyl-t-butyl ether (ETBE)	< 3.0	3.0	ug/L	EPA 8260B	09/11/12 11:30
Tert-amyl methyl ether (TAME)	< 3.0	3.0	ug/L	EPA 8260B	09/11/12 11:30
Tert-Butanol	1100	15	ug/L	EPA 8260B	09/11/12 11:30
Ethanol	< 30	30	ug/L	EPA 8260B	09/11/12 11:30
TPH as Gasoline	5100	300	ug/L	EPA 8260B	09/11/12 11:30
1,2-Dichloroethane	< 3.0	3.0	ug/L	EPA 8260B	09/11/12 11:30
1,2-Dibromoethane	< 3.0	3.0	ug/L	EPA 8260B	09/11/12 11:30
1,2-Dichloroethane-d4 (Surr)	95.1		% Recovery	EPA 8260B	09/11/12 11:30
Toluene - d8 (Surr)	98.2		% Recovery	EPA 8260B	09/11/12 11:30

Project Name : **2611117**

Project Number :

Sample : **EX-2_20120831**

Matrix : Water

Lab Number : 82484-02

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Methyl-t-butyl ether (MTBE)	6.3	0.50	ug/L	EPA 8260B	09/10/12 22:53
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/10/12 22:53
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/10/12 22:53
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/10/12 22:53
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/10/12 22:53
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/10/12 22:53
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	09/10/12 22:53

Project Name : **2611117**

Project Number :

Sample : **MW-10_20120831**

Matrix : Water

Lab Number : 82484-03

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Methyl-t-butyl ether (MTBE)	57	0.50	ug/L	EPA 8260B	09/11/12 01:17
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 01:17
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 01:17
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/11/12 01:17
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:17
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	09/11/12 01:17
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	09/11/12 01:17

Project Name : **2611117**

Project Number :

Sample : **MW-11_20120831**

Matrix : Water

Lab Number : 82484-04

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
Toluene	2.3	0.50	ug/L	EPA 8260B	09/11/12 01:51
Ethylbenzene	40	0.50	ug/L	EPA 8260B	09/11/12 01:51
Total Xylenes	46	0.50	ug/L	EPA 8260B	09/11/12 01:51
Methyl-t-butyl ether (MTBE)	0.58	0.50	ug/L	EPA 8260B	09/11/12 01:51
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
Tert-Butanol	5.1	5.0	ug/L	EPA 8260B	09/11/12 01:51
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 01:51
TPH as Gasoline	1800	50	ug/L	EPA 8260B	09/11/12 01:51
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 01:51
1,2-Dichloroethane-d4 (Surr)	97.7		% Recovery	EPA 8260B	09/11/12 01:51
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	09/11/12 01:51

Project Name : **2611117**

Project Number :

Sample : **MW-4_20120831**

Matrix : Water

Lab Number : 82484-05

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	2800	25	ug/L	EPA 8260B	09/11/12 12:38
Toluene	600	25	ug/L	EPA 8260B	09/11/12 12:38
Ethylbenzene	6100	25	ug/L	EPA 8260B	09/11/12 12:38
Total Xylenes	17000	25	ug/L	EPA 8260B	09/11/12 12:38
Methyl-t-butyl ether (MTBE)	240	25	ug/L	EPA 8260B	09/11/12 12:38
Diisopropyl ether (DIPE)	< 25	25	ug/L	EPA 8260B	09/11/12 12:38
Ethyl-t-butyl ether (ETBE)	< 25	25	ug/L	EPA 8260B	09/11/12 12:38
Tert-amyl methyl ether (TAME)	< 25	25	ug/L	EPA 8260B	09/11/12 12:38
Tert-Butanol	1800	150	ug/L	EPA 8260B	09/11/12 12:38
Ethanol	< 300	300	ug/L	EPA 8260B	09/11/12 12:38
TPH as Gasoline	230000	2500	ug/L	EPA 8260B	09/11/12 12:38
1,2-Dichloroethane	< 25	25	ug/L	EPA 8260B	09/11/12 12:38
1,2-Dibromoethane	< 25	25	ug/L	EPA 8260B	09/11/12 12:38
1,2-Dichloroethane-d4 (Surr)	93.3		% Recovery	EPA 8260B	09/11/12 12:38
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	09/11/12 12:38

Project Name : **2611117**

Project Number :

Sample : **MW-7_20120831**

Matrix : Water

Lab Number : 82484-06

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Methyl-t-butyl ether (MTBE)	20	0.50	ug/L	EPA 8260B	09/11/12 02:26
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 02:26
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 02:26
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/11/12 02:26
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 02:26
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	09/11/12 02:26
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	09/11/12 02:26

Project Name : **2611117**

Project Number :

Sample : **MW-9_20120831**

Matrix : Water

Lab Number : 82484-07

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 03:00
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 03:00
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/11/12 03:00
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:00
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/11/12 03:00
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	09/11/12 03:00

Project Name : **2611117**

Project Number :

Sample : **TB1_20120831**

Matrix : Water

Lab Number : 82484-08

Sample Date :08/31/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 03:39
Methanol	< 50	50	ug/L	EPA 8260B	09/11/12 03:39
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/11/12 03:39
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/11/12 03:39
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	09/11/12 03:39
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	09/11/12 03:39

QC Report : Method Blank Data

Project Name : **261117**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	09/10/12
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Methanol	< 50	50	ug/L	EPA 8260B	09/10/12
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/10/12
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/10/12
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/10/12
1,2-Dichloroethane-d4 (Surr)	97.9		%	EPA 8260B	09/10/12
Toluene - d8 (Surr)	101		%	EPA 8260B	09/10/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2611117

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dibromoethane	82484-02	<0.50	39.7	39.6	39.3	41.0	ug/L	EPA 8260B	9/10/12	99.1	103	4.28	80-120	25
1,2-Dichloroethane	82484-02	<0.50	39.8	39.7	35.6	35.7	ug/L	EPA 8260B	9/10/12	89.5	90.0	0.582	75.7-122	25
Benzene	82484-02	<0.50	39.8	39.7	40.0	40.0	ug/L	EPA 8260B	9/10/12	100	101	0.327	80-120	25
Diisopropyl ether	82484-02	<0.50	39.3	39.2	39.6	39.9	ug/L	EPA 8260B	9/10/12	101	102	1.01	80-120	25
Ethanol	82484-02	<5.0	99.5	99.3	102	92.4	ug/L	EPA 8260B	9/10/12	103	93.0	10.2	55.1-159	25
Ethyl-tert-butyl ether	82484-02	<0.50	39.6	39.5	39.4	39.7	ug/L	EPA 8260B	9/10/12	99.5	100	0.933	76.5-120	25
Ethylbenzene	82484-02	<0.50	39.8	39.7	39.8	39.4	ug/L	EPA 8260B	9/10/12	100	99.2	0.860	80-120	25
Methanol	82484-02	<50	992	990	1080	930	ug/L	EPA 8260B	9/10/12	109	94.0	15.1	53.2-147	25
Methyl-t-butyl ether	82484-02	6.3	39.8	39.7	44.7	45.7	ug/L	EPA 8260B	9/10/12	96.7	99.4	2.77	69.7-121	25
P + M Xylene	82484-02	<0.50	39.8	39.7	40.7	39.7	ug/L	EPA 8260B	9/10/12	102	100	2.34	76.8-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **2611117**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	82484-02	<5.0	200	200	193	191	ug/L	EPA 8260B	9/10/12	96.4	95.5	1.00	80-120	25
Tert-amyl-methyl ether	82484-02	<0.50	39.7	39.6	40.1	40.0	ug/L	EPA 8260B	9/10/12	101	101	0.00738	78.9-120	25
Toluene	82484-02	<0.50	39.8	39.7	40.3	40.0	ug/L	EPA 8260B	9/10/12	101	101	0.574	80-120	25

QC Report : Laboratory Control Sample (LCS)Project Name : **2611117**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	39.9	ug/L	EPA 8260B	9/10/12	101	80-120
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	9/10/12	89.5	75.7-122
Benzene	40.0	ug/L	EPA 8260B	9/10/12	102	80-120
Diisopropyl ether	39.5	ug/L	EPA 8260B	9/10/12	103	80-120
Ethanol	100	ug/L	EPA 8260B	9/10/12	99.3	55.1-159
Ethyl-tert-butyl ether	39.8	ug/L	EPA 8260B	9/10/12	101	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	9/10/12	99.3	80-120
Methanol	998	ug/L	EPA 8260B	9/10/12	93.7	53.2-147
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	9/10/12	97.8	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	9/10/12	102	76.8-120
Tert-Butanol	202	ug/L	EPA 8260B	9/10/12	95.8	80-120
Tert-amyl-methyl ether	39.9	ug/L	EPA 8260B	9/10/12	100	78.9-120
Toluene	40.0	ug/L	EPA 8260B	9/10/12	101	80-120

82484



COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

3Q12 GW Event

Required Lab Information:

Required Project Information:

Required Invoice Information:

Lab Name: Kiff Analytical	Site ID #: 2611117	Task: WG_Q_201208	Send Invoice to: Tara Bosch
Address: 2795 Second Street # 300	AnteaGrp proj#:	Address: 11050 White Rock Road, Suite 110	
Davis, CA 95618	Site Address: 7210 BANCROFT AVE	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411
Lab PM: Scott Forbes	City: OAKLAND	State: CA 94605	Reimbursement project? <input type="checkbox"/>
Phone/Fax: 530-297-4800 Ext 109	AG PM Name: Doug Umland	Send EDD to: copeltdata@intelligentehs.com	Non-reimbursement project? <input checked="" type="checkbox"/>
Lab PM email: sforbes@kiffanalytical.com	Phone/Fax: P: 1-800-477-7411 F: 408-225-8506	CC Hardcopy report to: dan.keltner@anteagroup.com	Mark one
Applicable Lab Quote #:	AG PM Email: doug.umland@anteagroup.com	CC Hardcopy report to:	Turn around time (days): 10

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, ., -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINKING WATER WP WATER W GROUND WATER WG SURFACE WATER WS WASTE WATER WW WATER QC WO FREE PRODUCT LF SLUDGE SL SOL SO RINSEATE WH OIL OL OTHER OT WIPE SW ANIMAL TISSUE TA AMBIENT AIR AA SVE AIR AE SOL GAS OS	MATRIX CODE	SAMPLE TYPE G-GRAB C-COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses 8015TPH/GRO 8200P6/M/150/01/C1 8200P6/M/150/01/C1	Comments/Lab Sample I.D.		
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₅	Methanol	Other						
1	EX-1_20120831		WG		8/31/12	1430	3	N									X	X				7 Oxy's = DIPE, TBA, TAME, ETBE, 1,2DCA, EDB, and Ethanol
2	EX-2_20120831		WG			1220	3										X	X				
3	MW-10_20120831		WG			1255	3										X	X				
4	MW-11_20120831		WG			1440	3										X	X				04
5	MW-4_20120831		WG			1522	3										X	X				05
6	MW-7_20120831		WG			1150	3										X	X				06
7	MW-9_20120831		WG			1320	3										X	X				07
8	TB1_20120831		W			0800	2										X					08

Additional Comments/Special Instructions: Global ID: T0600100201	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions		
	Peter G	8/31/12	1700	POTLU (SC)	8/31/12	1700	Y/N	Y/N	Y/N
	My (Sandra Custody)	9/4/12	1338				Y/N	Y/N	Y/N
				Antea Analytical	04/04/12	1338	Y/N	Y/N	Y/N

UPS COURIER FEDEX	PRINT Name of SAMPLER:	
US MAIL	SIGNATURE OF SAMPLER:	
	DATE Signed	Time:

Page 11 of 10

SAMPLE RECEIPT CHECKLIST

RECEIVER
TJB
Initials

SRG#: 82484 Date: 090412

Project ID: 261117

Method of Receipt: Courier Over-the-counter Shipper

Shipping Only: FedEx * OnTrac * Greyhound Other *Service level if not Priority or Sunrise (M-F): _____

COC Inspection

Is COC present? Yes No
 Custody seals on shipping container? Intact Broken Not present N/A
 Is COC Signed by Relinquisher? Yes No Dated? Yes No
 Is sampler name legibly indicated on COC? Yes No
 Is analysis or hold requested for all samples? Yes No
 Is the turnaround time indicated on COC? Yes No
 Is COC free of whiteout and uninitialed cross-outs? Yes No, Whiteout No, Cross-outs

Sample Inspection

Coolant Present: 4.8 Yes No (includes water)
 Temperature °C 4.8 Therm. ID# FR-4 Initial WJL Date/Time 090412 15819 N/A
 Are there custody seals on sample containers? Intact Broken Not present
 Do containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample(s) present
 Are there samples matrices other than soil, water, air or carbon? Yes No
 Are any sample containers broken, leaking or damaged? Yes No
 Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/A
 Are preservatives correct for analyses requested? Yes No N/A
 Are samples within holding time for analyses requested? Yes No
 Are the correct sample containers used for the analyses requested? Yes No
 Is there sufficient sample to perform testing? Yes No
 Does any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No

Receipt Details

Matrix WA Container type VOA # of containers received 23
 Matrix _____ Container type _____ # of containers received _____
 Matrix _____ Container type _____ # of containers received _____
 Date and Time Sample Put into Temp Storage Date: 090412 Time: 1829

Quicklog

Are the Sample ID's indicated: On COC On sample container(s) On Both Not indicated
 If Sample ID's are listed on both COC and containers, do they all match? Yes No N/A
 Is the Project ID indicated: On COC On sample container(s) On Both Not indicated
 If project ID is listed on both COC and containers, do they all match? Yes No N/A
 Are the sample collection dates indicated: On COC On sample container(s) On Both Not indicated
 If collection dates are listed on both COC and containers, do they all match? Yes No N/A
 Are the sample collection times indicated: On COC On sample container(s) On Both Not indicated
 If collection times are listed on both COC and containers, do they all match? Yes No N/A

COMMENTS: Bubble in - 08(VOA 2 of 2). WJL 090412-1929

Is the Data Set Valid?

(circle)

Yes / No

Preservation Temperature

(if Known): _____ °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: WPI/ELT

Project #: 261117

Date of Validation: 9/17/12 Date of Analysis: 9/10 + 9/11/12

Sample Date: 8/31/12 Completed By: Laurie Ziminski

Signature: Laurie Ziminski

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

Analytical Lab Used and Report # (if any):

KIFF, #82484

1. Were the analyses the ones 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 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., approximately 80-120%, depending on the 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%)?

Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No
Yes	/	No

If any answer is no, explain why and what corrective action was taken (use additional sheet(s), as necessary):

Data Qualifiers:

The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-4_20120831.

Repeat analysis by EPA Method 8260B yielded inconsistent results for sample MW-4_20120831. The concentrations appear to vary between the bottles. The highest concentration results are reported.



CALSCIENCE

WORK ORDER NUMBER: 12-09-1802

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Antea Group

Client Project Name: 2611117

Attention: Doug Umland
3229 E. Spring Street, Suite 100
Long Beach, CA 90806-2425

Approved for release on 10/5/2012 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶



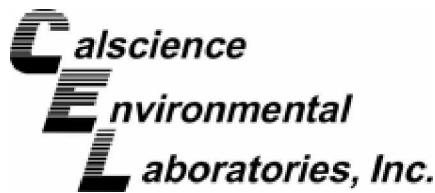
Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any litigation which may arise.



Contents

Client Project Name: 2611117
Work Order Number: 12-09-1802

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Analytical Report



Antea Group
312 Piercy Rd
San Jose, CA 95138-1401

Date Received: 09/28/12
Work Order No: 12-09-1802
Preparation: EPA 5030C
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 2611117

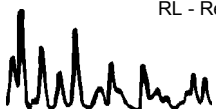
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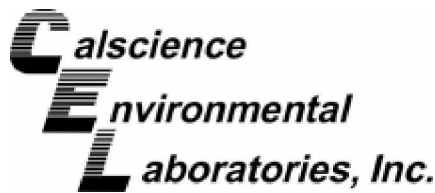
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1802-1-A	09/27/12 09:25	Aqueous	GC/MS LL	09/28/12	09/29/12 09:42	120928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	400	20		c-1,3-Dichloropropene	ND	10	20	
Benzene	2300	10	20		t-1,3-Dichloropropene	ND	10	20	
Bromobenzene	ND	20	20		Ethylbenzene	2000	20	20	
Bromochloromethane	ND	20	20		2-Hexanone	ND	200	20	
Bromodichloromethane	ND	20	20		Isopropylbenzene	85	20	20	
Bromoform	ND	20	20		p-Isopropyltoluene	ND	20	20	
Bromomethane	ND	200	20		Methylene Chloride	ND	200	20	
2-Butanone	ND	200	20		4-Methyl-2-Pentanone	ND	200	20	
n-Butylbenzene	56	20	20		Naphthalene	390	200	20	
sec-Butylbenzene	ND	20	20		n-Propylbenzene	220	20	20	
tert-Butylbenzene	ND	20	20		Styrene	ND	20	20	
Carbon Disulfide	ND	200	20		1,1,1,2-Tetrachloroethane	ND	20	20	
Carbon Tetrachloride	ND	10	20		1,1,2,2-Tetrachloroethane	ND	20	20	
Chlorobenzene	ND	20	20		Tetrachloroethene	ND	20	20	
Chloroethane	ND	100	20		Toluene	420	20	20	
Chloroform	ND	20	20		1,2,3-Trichlorobenzene	ND	20	20	
Chloromethane	ND	200	20		1,2,4-Trichlorobenzene	ND	20	20	
2-Chlorotoluene	ND	20	20		1,1,1-Trichloroethane	ND	20	20	
4-Chlorotoluene	ND	20	20		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	200	20	
Dibromochloromethane	ND	20	20		1,1,2-Trichloroethane	ND	20	20	
1,2-Dibromo-3-Chloropropane	ND	100	20		Trichloroethene	ND	20	20	
1,2-Dibromoethane	ND	20	20		Trichlorofluoromethane	ND	200	20	
Dibromomethane	ND	20	20		1,2,3-Trichloropropane	ND	100	20	
1,2-Dichlorobenzene	ND	20	20		1,2,4-Trimethylbenzene	1600	20	20	
1,3-Dichlorobenzene	ND	20	20		1,3,5-Trimethylbenzene	420	20	20	
1,4-Dichlorobenzene	ND	20	20		Vinyl Acetate	ND	200	20	
Dichlorodifluoromethane	ND	20	20		Vinyl Chloride	ND	10	20	
1,1-Dichloroethane	ND	20	20		p/m-Xylene	5000	20	20	
1,2-Dichloroethane	ND	10	20		o-Xylene	1000	20	20	
1,1-Dichloroethene	ND	20	20		Methyl-t-Butyl Ether (MTBE)	150	20	20	
c-1,2-Dichloroethene	ND	20	20		Tert-Butyl Alcohol (TBA)	3800	200	20	
t-1,2-Dichloroethene	ND	20	20		Diisopropyl Ether (DIPE)	ND	40	20	
1,2-Dichloropropane	ND	20	20		Ethyl-t-Butyl Ether (ETBE)	ND	40	20	
1,3-Dichloropropane	ND	20	20		Tert-Amyl-Methyl Ether (TAME)	ND	40	20	
2,2-Dichloropropane	ND	20	20		Ethanol	ND	2000	20	
1,1-Dichloropropene	ND	20	20		TPPH	28000	1000	20	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
Dibromofluoromethane	100	80-126			1,2-Dichloroethane-d4	108	80-134		
Toluene-d8	97	80-120			Toluene-d8-TPPH	97	88-112		
1,4-Bromofluorobenzene	101	80-120							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



Antea Group
312 Piercy Rd
San Jose, CA 95138-1401

Date Received: 09/28/12
Work Order No: 12-09-1802
Preparation: EPA 5030C
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 2611117

Page 2 of 2

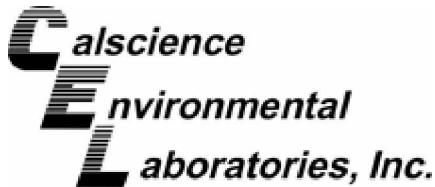
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-767-5,835	N/A	Aqueous	GC/MS LL	09/28/12	09/29/12 03:09	120928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		c-1,3-Dichloropropene	ND	0.50	1	
Benzene	ND	0.50	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromobenzene	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2-Hexanone	ND	10	1	
Bromodichloromethane	ND	1.0	1		Isopropylbenzene	ND	1.0	1	
Bromoform	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
Bromomethane	ND	10	1		Methylene Chloride	ND	10	1	
2-Butanone	ND	10	1		4-Methyl-2-Pentanone	ND	10	1	
n-Butylbenzene	ND	1.0	1		Naphthalene	ND	10	1	
sec-Butylbenzene	ND	1.0	1		n-Propylbenzene	ND	1.0	1	
tert-Butylbenzene	ND	1.0	1		Styrene	ND	1.0	1	
Carbon Disulfide	ND	10	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Carbon Tetrachloride	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Tetrachloroethene	ND	1.0	1	
Chloroethane	ND	5.0	1		Toluene	ND	1.0	1	
Chloroform	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Chloromethane	ND	10	1		1,2,4-Trichlorobenzene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		1,1,1-Trichloroethane	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromochloromethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		Trichloroethene	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
1,2-Dichlorobenzene	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,4-Dichlorobenzene	ND	1.0	1		Vinyl Acetate	ND	10	1	
Dichlorodifluoromethane	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
1,1-Dichloroethane	ND	1.0	1		p/m-Xylene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		o-Xylene	ND	1.0	1	
1,1-Dichloroethene	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
c-1,2-Dichloroethene	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
t-1,2-Dichloroethene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
1,2-Dichloropropane	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
1,3-Dichloropropane	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
2,2-Dichloropropane	ND	1.0	1		Ethanol	ND	100	1	
1,1-Dichloropropene	ND	1.0	1		TPPH	ND	50	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
Dibromofluoromethane	101	80-126			1,2-Dichloroethane-d4	105	80-134		
Toluene-d8	95	80-120			Toluene-d8-TPPH	95	88-112		
1,4-Bromofluorobenzene	100	80-120							

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Quality Control - Spike/Spike Duplicate



Antea Group
3229 E. Spring Street, Suite 100
Long Beach, CA 90806-2425

Date Received: 09/28/12
Work Order No: 12-09-1802
Preparation: EPA 5030C
Method: LUFT GC/MS / EPA 8260B

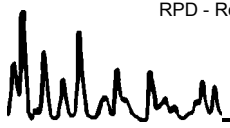
Project 2611117

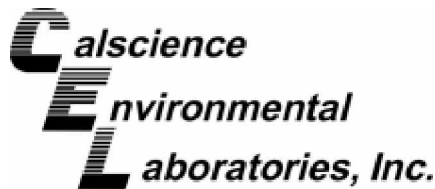
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1571-18	Aqueous	GC/MS LL	09/28/12	09/29/12	120928S02

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	49.31	99	48.56	97	78-120	2	0-20	
Carbon Tetrachloride	ND	50.00	57.08	114	54.84	110	67-139	4	0-20	
Chlorobenzene	ND	50.00	50.76	102	48.02	96	80-120	6	0-20	
1,2-Dibromoethane	ND	50.00	52.70	105	51.50	103	80-123	2	0-20	
1,2-Dichlorobenzene	ND	50.00	49.74	99	49.86	100	76-120	0	0-20	
1,2-Dichloroethane	ND	50.00	57.24	114	55.88	112	76-130	2	0-20	
1,1-Dichloroethene	ND	50.00	48.58	97	46.14	92	70-130	5	0-27	
Ethylbenzene	ND	50.00	51.56	103	50.49	101	73-127	2	0-20	
Toluene	ND	50.00	50.12	100	49.57	99	72-126	1	0-20	
Trichloroethene	ND	50.00	49.79	100	50.01	100	74-122	0	0-20	
Vinyl Chloride	ND	50.00	45.97	92	44.98	90	65-131	2	0-24	
p/m-Xylene	ND	100.0	105.9	106	102.1	102	70-130	4	0-30	
o-Xylene	ND	50.00	53.36	107	51.81	104	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	49.30	99	46.93	94	69-123	5	0-20	
Tert-Butyl Alcohol (TBA)	74.89	250.0	344.6	108	331.1	102	65-131	4	0-22	
Diisopropyl Ether (DIPE)	ND	50.00	48.55	97	46.07	92	68-128	5	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	49.00	98	47.66	95	69-123	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	49.40	99	49.58	99	70-124	0	0-20	
Ethanol	ND	500.0	416.7	83	432.2	86	41-155	4	0-35	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Antea Group
3229 E. Spring Street, Suite 100
Long Beach, CA 90806-2425

Date Received: N/A
Work Order No: 12-09-1802
Preparation: EPA 5030C
Method: LUFT GC/MS / EPA 8260B

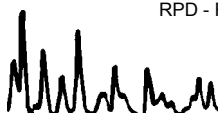
Project: 2611117

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
099-12-767-5,835	Aqueous	GC/MS LL	09/28/12	09/29/12	120928L02					
Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	47.84	96	49.12	98	80-120	73-127	3	0-20	
Carbon Tetrachloride	50.00	55.90	112	56.68	113	66-138	54-150	1	0-20	
Chlorobenzene	50.00	51.17	102	51.40	103	80-120	73-127	0	0-20	
1,2-Dibromoethane	50.00	55.66	111	54.03	108	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	50.00	52.32	105	50.24	100	80-120	73-127	4	0-20	
1,2-Dichloroethane	50.00	55.48	111	55.82	112	80-129	72-137	1	0-20	
1,1-Dichloroethene	50.00	49.19	98	49.41	99	71-131	61-141	0	0-20	
Ethylbenzene	50.00	53.43	107	53.31	107	80-123	73-130	0	0-20	
Toluene	50.00	50.01	100	49.90	100	79-121	72-128	0	0-20	
Trichloroethene	50.00	49.66	99	51.31	103	80-120	73-127	3	0-20	
Vinyl Chloride	50.00	46.83	94	46.16	92	70-136	59-147	1	0-20	
p/m-Xylene	100.0	111.4	111	111.8	112	75-125	67-133	0	0-25	
o-Xylene	50.00	55.74	111	55.79	112	75-125	67-133	0	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	49.74	99	49.00	98	72-126	63-135	1	0-22	
Tert-Butyl Alcohol (TBA)	250.0	242.4	97	246.8	99	71-125	62-134	2	0-25	
Diisopropyl Ether (DIPE)	50.00	47.54	95	47.61	95	69-129	59-139	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	49.04	98	49.38	99	69-129	59-139	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	50.00	100	49.64	99	67-133	56-144	1	0-20	
Ethanol	500.0	419.6	84	469.1	94	47-155	29-173	11	0-36	
TPPH	1000	978.9	98	943.4	94	65-135	53-147	4	0-30	

Total number of LCS compounds : 20
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

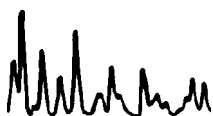


Work Order Number: 12-09-1802

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

MPN - Most Probable Number





COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

12-09-1802

Regenesis Event

Required Lab Information:		Required Project Information:		Required Invoice Information:	
Lab Name: Calscience	Site ID #: 2011117	Tack:	Send Invoice to: Jerilyn Than		
Address:	AnteaGrp proj#: 142611117	Address: 11050 White Rock Road, Suite 110		Turn around time (days)	10
	Site Address: 7210 Bancroft Ave	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411	QC level Required: Standard	Special <input type="checkbox"/> Mark One <input type="checkbox"/>
Lab PM:	City: Oakland State: CA	Reimbursement project? <input type="checkbox"/>	Non-reimbursement project? <input checked="" type="checkbox"/>	Mark one NJ Reduced Deliverable Package? <input type="checkbox"/>	
Phone/Fax:	AG PM Name: Doug Umland	Send EDD to: copeltdata@intelligentehs.com		MA MCP Cert? <input type="checkbox"/>	CT RCP Cert? <input type="checkbox"/> Mark One <input type="checkbox"/>
Lab PM email:	Phone/Fax: 408-826-1874	CC Hardcopy report to: nicole.persaud@anteagroup.com		Lab Project ID (lab use)	
Applicable Lab Quote #:	AG PM Email: doug.umland@anteagroup.com	CC Hardcopy report to: sara.sichley@anteagroup.com		Requested Analyses	

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses B200/016/MTBE+7Oxy's B280/PPH/RO	Comments/Lab Sample I.D.			
		MATRIX	MATRIX							W	WS	WQ	SL	WH	OT	TA	Unpreserved	H ₂ SO ₄	HNO ₃			HCl	NaOH	Na ₂ S ₂ O ₃
1	MW-4 20120930	WG	G			9/27/12	0925	6	N	X									X	X				7 Oxy's = DIPE, TBA, TAME, ETBE, 1-2DCA, EDB, and Ethanol
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Additional Comments/Special Instructions: Global ID: T0600100201	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions					
	<i>Mud cell</i>	9/27/12	1110	<i>[Signature]</i>	9/27/12	1115	Y/N	Y/N	Y/N			
	<i>[Signature]</i>	9/27/12	1730	<i>[Signature]</i>	9/28/12	1030	Y/N	Y/N	Y/N			
							Y/N	Y/N	Y/N			
SHIPPING METHOD: (mark as appropriate)		SAMPLER NAME AND SIGNATURE										
UPS COURIER FEDEX	SIGNATURE of SAMPLER:											
US MAIL	DATE Signed		Time:						Temp in °C	Sample as on ice?	Sample intact?	Trip Blank?



1802

			
800-322-5555 www.gso.com			
Ship From: ALAN KEMP CAL SCIENCE- CONCORD 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520		Tracking #: 520088769 	
Ship To: SAMPLE RECEIVING CEL 7440 LINCOLN WAY GARDEN GROVE, CA 92841		NPS ORC GARDEN GROVE A	
COD: \$0.00		D92841A 	
Reference: ERM, TPG, REGENESIS, ANTEA		5102449	
Delivery Instructions:		Print Date : 09/27/12 16:28 PM	
Signature Type: SIGNATURE REQUIRED			

Package 1 of 1

Print All

LABEL INSTRUCTIONS:

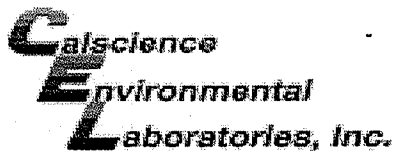
- Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
- STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
- STEP 2 - Fold this page in half.
- STEP 3 - Securely attach this label to your package, do not cover the barcode.
- STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but are not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

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WORK ORDER #: 12-09-1802

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Antea

DATE: 09/28/12

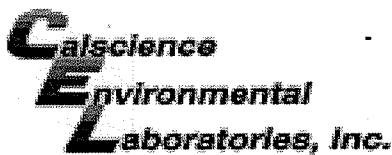
TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C - 6.0 °C, not frozen)
Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C
Blank Sample
Sample(s) outside temperature criteria (PM/APM contacted by:)
Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.
Received at ambient temperature, placed on ice for transport by Courier.
Ambient Temperature: Air Filter
Initial: JP

CUSTODY SEALS INTACT:
Cooler No (Not Intact) Not Present N/A
Sample No (Not Intact) Not Present
Initial: JP
Initial: WSC

Table with columns: SAMPLE CONDITION, Yes, No, N/A. Rows include Chain-Of-Custody (COC) document(s) received with samples, COC document(s) received complete, Collection date/time, matrix, and/or # of containers logged in based on sample labels, No analysis requested, Not relinquished, No date/time relinquished, Sampler's name indicated on COC, Sample container label(s) consistent with COC, Sample container(s) intact and good condition, Proper containers and sufficient volume for analyses requested, Analyses received within holding time, pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours, Proper preservation noted on COC or sample container, Unpreserved vials received for Volatiles analysis, Volatile analysis container(s) free of headspace, Tedlar bag(s) free of condensation.

CONTAINER TYPE:
Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve () EnCores TerraCores
Water: VOA VOAh VOAna2 125AGB 125AGBh 125AGBp 1AGB 1AGBna2 1AGBs
500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB
250PB 250PBn 125PB 125PBzna 100PJ 100PJna2
Air: Tedlar Summa Other: Trip Blank Lot#: Labeled/Checked by: WSC
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: WSC
Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 u: Ultra-pure zna: ZnAc2+NaOH f: Filtered Scanned by: WSC





WORK ORDER #: 12-09-[1][8][5][2]

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

(H) received vials with HCl preserved per label, (H2SO4 preserved per COC)

HEADSPACE – Containers with Bubble > 6mm or 1/4 inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: WS 09/28/12



Is the Data Set Valid?

(circle)

Yes / No

Preservation Temperature

(if Known): _____ °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: COP/ ELT

Project #: 142611117

Date of Validation: 11/8/2012 Date of Analysis: 9/27/2012

Sample Date: 9/27/2012 Completed By: Nadine Periat

Signature: 

Circle

or

Highlight

Yes / No

(below)

Analytical Lab Used and Report # (if any): Calscience Environmental Laboratories No. 12-09-1802

1. Were the analyses the ones 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 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., approximately 80-120%, depending on the 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%)?

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

NA

Yes / No

Yes / No

Yes / No

If any answer is no, explain why and what corrective action was taken (use additional sheet(s), as necessary):

- 1) Sample additionally analyzed for a full VOC scan – not requested on COC.



CALSCIENCE

WORK ORDER NUMBER: 12-09-1803

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Regenesis

Client Project Name: 2611117

Attention: Joy Gravitt
1011 Calle Sombra
San Clemente, CA 92673-4204

Approved for release on 10/5/2012 by:
Richard Villafania
Project Manager

ResultLink ▶

Email your PM ▶



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Work Order Number: 12-09-1803

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Client: Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204
Attn: Joy Gravitt

Work Order: 12-09-1803
Project name: 2611117
Received: 09/28/12 10:30

DETECTIONS SUMMARY

Client Sample ID

Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
MW-4_20120930 (12-09-1803-1)						
Methane	4340		20.0	ug/L	RSK-175M	N/A
Iron	6.57		0.100	mg/L	EPA 6010B	EPA 3005A Filt.
Iron	27.1		0.100	mg/L	EPA 6010B	EPA 3010A Total
Alkalinity, Total (as CaCO3)	556		5.00	mg/L	SM 2320B	N/A
Chemical Oxygen Demand	520		20	mg/L	EPA 410.4	N/A
Sulfide, Total	0.20		0.050	mg/L	SM 4500 S2 - D	N/A
Carbon, Total Organic	73		5.0	mg/L	SM 5310 D	N/A
TPH as Gasoline	58000		500	ug/L	EPA 8015B (M)	EPA 5030C
Benzene	2600		25	ug/L	EPA 8260B	EPA 5030C
Ethylbenzene	7700		50	ug/L	EPA 8260B	EPA 5030C
Toluene	530		50	ug/L	EPA 8260B	EPA 5030C
Xylenes (total)	15000		250	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	160		50	ug/L	EPA 8260B	EPA 5030C
Tert-Butyl Alcohol (TBA)	2400		500	ug/L	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Analytical Report



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: 09/28/12
 Work Order No: 12-09-1803
 Preparation: N/A
 Method: RSK-175M

Project: 2611117

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1803-1-G	09/27/12 10:05	Aqueous	GC 52	N/A	09/29/12 12:37	120929L01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Methane	4340	20.0	20		ug/L

Method Blank	099-12-663-1,714	N/A	Aqueous	GC 52	N/A	09/29/12 11:10	120929L01
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Methane	ND	1.00	1		ug/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: 09/28/12
 Work Order No: 12-09-1803
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: 2611117

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1803-1-D	09/27/12 10:05	Aqueous	GC 24	09/28/12	09/28/12 17:15	120928B01

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	58000	500	10		ug/L

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
1,4-Bromofluorobenzene	131	38-134	

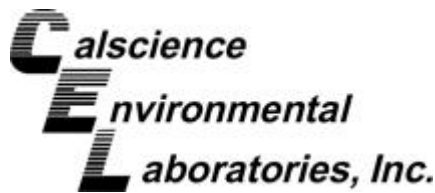
Method Blank	099-12-436-7,898	N/A	Aqueous	GC 24	09/28/12	09/28/12 12:43	120928B01
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
TPH as Gasoline	ND	50	1		ug/L

<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>
1,4-Bromofluorobenzene	75	38-134	

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 2611117

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1803-1-A	09/27/12 10:05	Aqueous	GC/MS JJ	09/28/12	09/29/12 07:29	120928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2600	25	50		Tert-Butyl Alcohol (TBA)	2400	500	50	
Ethylbenzene	7700	50	50		Diisopropyl Ether (DIPE)	ND	100	50	
Toluene	530	50	50		Ethyl-t-Butyl Ether (ETBE)	ND	100	50	
Xylenes (total)	15000	250	250		Tert-Amyl-Methyl Ether (TAME)	ND	100	50	
Methyl-t-Butyl Ether (MTBE)	160	50	50		Ethanol	ND	5000	50	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	100	80-120			Dibromofluoromethane	96	80-126		
1,2-Dichloroethane-d4	100	80-134			Toluene-d8	104	80-120		

Method Blank	099-14-001-8,912	N/A	Aqueous	GC/MS JJ	09/28/12	09/29/12 02:38	120928L02
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		Ethanol	ND	100	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	107	80-126		
1,2-Dichloroethane-d4	115	80-134			Toluene-d8	98	80-120		

Method Blank	099-14-001-8,915	N/A	Aqueous	GC/MS JJ	09/29/12	09/29/12 11:40	120929L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
Ethylbenzene	ND	1.0	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Toluene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		Ethanol	ND	100	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	104	80-126		
1,2-Dichloroethane-d4	115	80-134			Toluene-d8	97	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: 09/28/12
 Work Order No: 12-09-1803
 Preparation: EPA 3010A Total
 Method: EPA 6010B

Project: 2611117

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1803-1-I	09/27/12 10:05	Aqueous	ICP 7300	09/28/12	09/29/12 12:49	120928LA3

Parameter	Result	RL	DF	Qual	Units
Iron	27.1	0.100	1		mg/L

Method Blank	097-01-003-12,969	N/A	Aqueous	ICP 7300	09/28/12	09/29/12 11:40	120928LA3
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Parameter	Result	RL	DF	Qual	Units
Iron	ND	0.100	1		mg/L

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: 09/28/12
 Work Order No: 12-09-1803
 Preparation: EPA 3005A Filt.
 Method: EPA 6010B

Project: 2611117

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4_20120930	12-09-1803-1-J	09/27/12 10:05	Aqueous	ICP 7300	09/28/12	09/29/12 12:47	120928LA3F

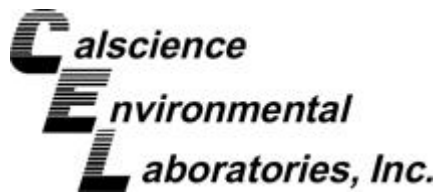
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Iron	6.57	0.100	1		mg/L

Method Blank	099-15-683-115	N/A	Aqueous	ICP 7300	09/28/12	09/29/12 11:38	120928LA3F
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>
Iron	ND	0.100	1		mg/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803

Project: 2611117

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Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-4_20120930	12-09-1803-1	09/27/12	Aqueous

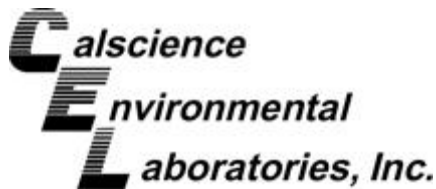
Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	0.10	1		mg/L	N/A	09/28/12	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	09/28/12	EPA 300.0
Chemical Oxygen Demand	520	20	1		mg/L	10/01/12	10/01/12	EPA 410.4
Alkalinity, Total (as CaCO3)	556	5.00	1		mg/L	N/A	09/28/12	SM 2320B
Sulfide, Total	0.20	0.050	1		mg/L	10/03/12	10/03/12	SM 4500 S2 - D
Carbon, Total Organic	73	5.0	10		mg/L	10/01/12	10/01/12	SM 5310 D
Method Blank					N/A			Aqueous

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	0.10	1		mg/L	N/A	09/28/12	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	09/28/12	EPA 300.0
Chemical Oxygen Demand	ND	20	1		mg/L	10/01/12	10/01/12	EPA 410.4
Alkalinity, Total (as CaCO3)	ND	1.0	1		mg/L	N/A	09/28/12	SM 2320B
Sulfide, Total	ND	0.050	1		mg/L	10/03/12	10/03/12	SM 4500 S2 - D
Carbon, Total Organic	ND	0.50	1		mg/L	10/01/12	10/01/12	SM 5310 D

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 3010A Total
Method: EPA 6010B

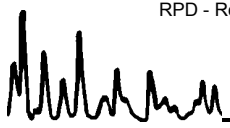
Project 2611117

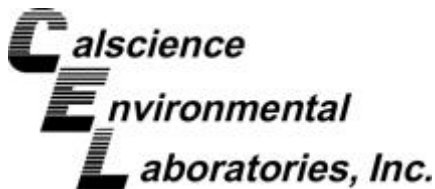
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1748-1	Aqueous	ICP 7300	09/28/12	09/29/12	120928SA3

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Iron	3.894	0.5000	5.327	4X	4.461	4X	65-149	4X	0-21	Q

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - PDS / PDSD



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 3010A Total
Method: EPA 6010B

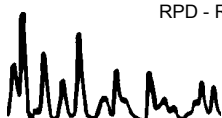
Project: 2611117

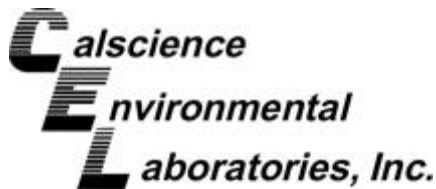
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
12-09-1748-1	Aqueous	ICP 7300	09/28/12	09/29/12	120928SA3

Parameter	SAMPLE CONC	SPIKE ADDED	PDS CONC	PDS %REC	PDSD CONC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron	3.894	0.5000	4.241	4X	4.257	4X	75-125	4X	0-21	Q

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: N/A
Method: EPA 300.0

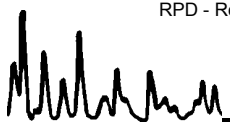
Project 2611117

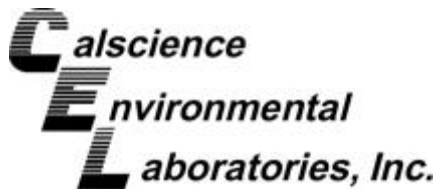
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1812-4	Aqueous	IC 7	N/A	09/28/12	120928S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	29	500	540	103	540	102	80-120	1	0-20	
Sulfate	2200	5000	7500	107	7500	108	80-120	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: N/A
Method: SM 5310 D

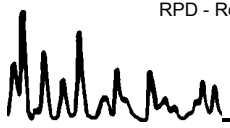
Project 2611117

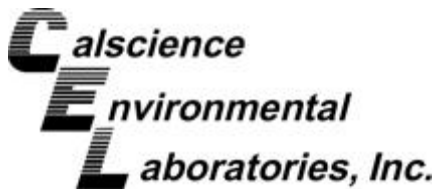
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1842-3	Aqueous	TOC 6	10/01/12	10/01/12	C1001TOCS1

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	14	25	38	97	38	95	28-148	1	0-23	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8015B (M)

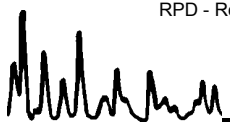
Project 2611117

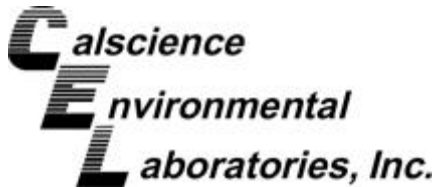
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1749-1	Aqueous	GC 24	09/28/12	09/28/12	120928S01

Parameter	<u>SAMPLE CONC</u>	<u>SPIKE ADDED</u>	<u>MS CONC</u>	<u>MS %REC</u>	<u>MSD CONC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Gasoline	ND	2000	1576	79	1336	67	68-122	16	0-18	3

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8260B

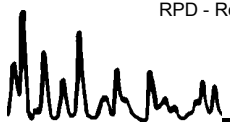
Project 2611117

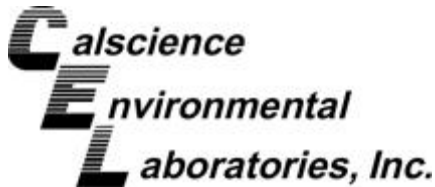
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1695-1	Aqueous	GC/MS JJ	09/28/12	09/29/12	120928S02

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	37.64	75	43.98	88	78-120	16	0-20	3
Carbon Tetrachloride	ND	50.00	42.87	86	49.51	99	67-139	14	0-20	
Chlorobenzene	1.142	50.00	40.47	79	48.26	94	80-120	18	0-20	3
1,2-Dibromoethane	ND	50.00	40.59	81	48.11	96	80-123	17	0-20	
1,2-Dichlorobenzene	ND	50.00	39.70	79	46.62	93	76-120	16	0-20	
1,2-Dichloroethane	ND	50.00	43.67	87	50.47	101	76-130	14	0-20	
1,1-Dichloroethene	ND	50.00	32.60	65	39.13	78	70-130	18	0-27	3
Ethylbenzene	ND	50.00	41.28	83	49.20	98	73-127	18	0-20	
Toluene	ND	50.00	40.21	80	46.72	93	72-126	15	0-20	
Trichloroethene	ND	50.00	39.45	79	46.65	93	74-122	17	0-20	
Vinyl Chloride	ND	50.00	36.24	72	45.36	91	65-131	22	0-24	
Xylenes (total)	ND	150.0	127.4	85	150.2	100	70-130	16	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	36.98	74	44.49	89	69-123	18	0-20	
Tert-Butyl Alcohol (TBA)	ND	250.0	180.4	72	195.7	78	65-131	8	0-22	
Diisopropyl Ether (DIPE)	ND	50.00	34.73	69	41.80	84	68-128	18	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	37.26	75	44.60	89	69-123	18	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	38.73	77	47.06	94	70-124	19	0-20	
Ethanol	ND	500.0	304.4	61	320.9	64	41-155	5	0-35	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: 09/28/12
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8260B

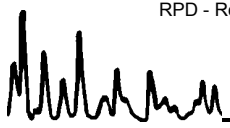
Project 2611117

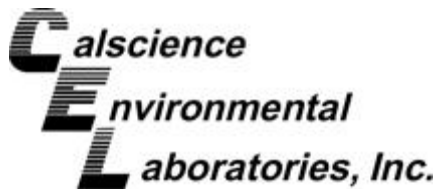
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-09-1644-2	Aqueous	GC/MS JJ	09/29/12	09/29/12	120929S01

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	2.363	100.0	90.65	88	93.04	91	78-120	3	0-20	
Carbon Tetrachloride	ND	100.0	109.2	109	105.5	105	67-139	3	0-20	
Chlorobenzene	ND	100.0	97.16	97	97.59	98	80-120	0	0-20	
1,2-Dibromoethane	ND	100.0	93.54	94	94.79	95	80-123	1	0-20	
1,2-Dichlorobenzene	ND	100.0	96.68	97	95.67	96	76-120	1	0-20	
1,2-Dichloroethane	ND	100.0	99.80	100	99.26	99	76-130	1	0-20	
1,1-Dichloroethene	ND	100.0	84.59	85	85.33	85	70-130	1	0-27	
Ethylbenzene	ND	100.0	104.7	105	104.2	104	73-127	0	0-20	
Toluene	ND	100.0	101.8	102	99.90	100	72-126	2	0-20	
Trichloroethene	ND	100.0	101.1	101	100.3	100	74-122	1	0-20	
Vinyl Chloride	ND	100.0	89.39	89	99.97	100	65-131	11	0-24	
Xylenes (total)	ND	300.0	319.4	106	316.2	105	70-130	1	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	100.0	87.07	87	87.70	88	69-123	1	0-20	
Tert-Butyl Alcohol (TBA)	22.06	500.0	457.2	87	445.2	85	65-131	3	0-22	
Diisopropyl Ether (DIPE)	ND	100.0	82.36	82	83.33	83	68-128	1	0-22	
Ethyl-t-Butyl Ether (ETBE)	ND	100.0	87.15	87	89.72	90	69-123	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	ND	100.0	89.70	90	93.40	93	70-124	4	0-20	
Ethanol	ND	1000	704.6	70	633.7	63	41-155	11	0-35	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803

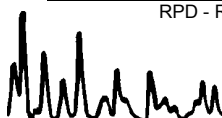
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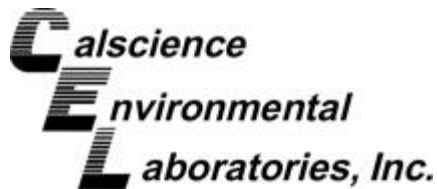
Matrix: Aqueous or Solid

<u>Parameter</u>	<u>Method</u>	<u>QC Sample ID</u>	<u>Date Analyzed</u>	<u>Sample Conc</u>	<u>DUP Conc</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)	SM 2320B	12-09-1842-3	09/28/12	167	168	1	0-25	
Chemical Oxygen Demand	EPA 410.4	12-09-1809-8	10/01/12	850	870	2	0-25	
Sulfide, Total	SM 4500 S2 - D	12-09-1842-12	10/03/12	ND	ND	NA	0-25	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803
 Preparation: N/A
 Method: RSK-175M

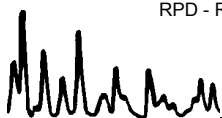
Project: 2611117

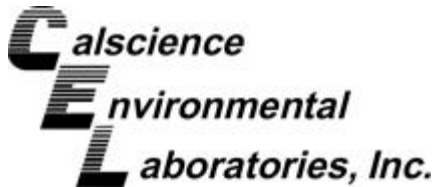
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-663-1,714	Aqueous	GC 52	N/A	09/29/12	120929L01

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Methane	98.50	94.91	96	95.10	97	79-109	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803
 Preparation: EPA 3010A Total
 Method: EPA 6010B

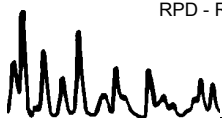
Project: 2611117

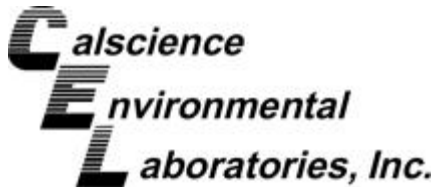
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-12,969	Aqueous	ICP 7300	09/28/12	09/29/12	120928LA3

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Iron	0.5000	0.5020	100	0.5108	102	80-120	2	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803
 Preparation: EPA 3005A Filt.
 Method: EPA 6010B

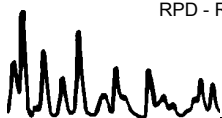
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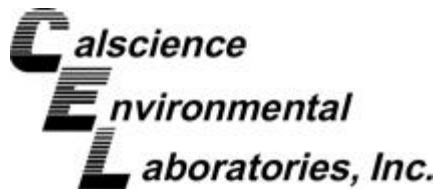
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-683-115	Aqueous	ICP 7300	09/28/12	09/29/12	120928LA3F

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Iron	0.5000	0.5020	100	0.5108	102	80-120	2	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: N/A
Work Order No: 12-09-1803
Preparation: N/A
Method: EPA 300.0

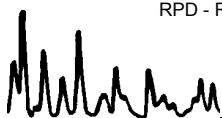
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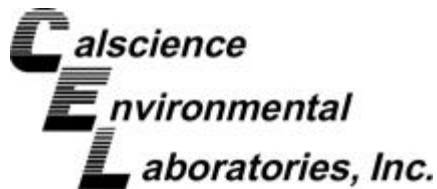
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-906-3,053	Aqueous	IC 7	N/A	09/28/12	120928L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	5.0	4.9	97	4.9	99	90-110	2	0-15	
Sulfate	50	49	97	49	98	90-110	1	0-15	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803
 Preparation: N/A
 Method: SM 5310 D

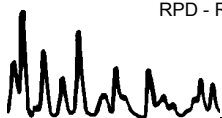
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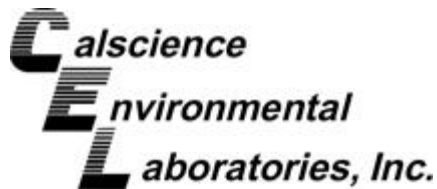
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-097-4,709	Aqueous	TOC 6	10/01/12	10/01/12	C1001TOCL1

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	5.0	4.8	97	4.8	96	77-125	1	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
 1011 Calle Sombra
 San Clemente, CA 92673-4204

Date Received: N/A
 Work Order No: 12-09-1803
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

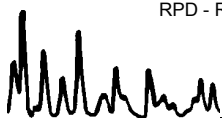
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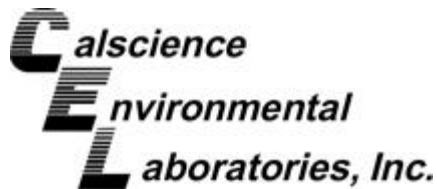
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-7,898	Aqueous	GC 24	09/28/12	09/28/12	120928B01

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Gasoline	2000	1897	95	1964	98	78-120	3	0-10	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: N/A
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8260B

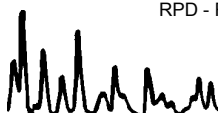
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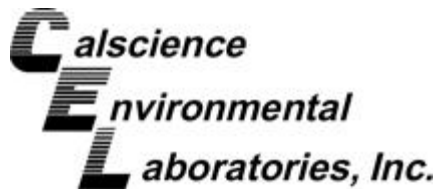
Quality Control Sample ID	Matrix	Instrument		Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-001-8,912	Aqueous	GC/MS JJ		09/28/12	09/29/12	120928L02				
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	50.00	45.43	91	48.68	97	80-120	73-127	7	0-20	
Carbon Tetrachloride	50.00	51.18	102	52.45	105	66-138	54-150	2	0-20	
Chlorobenzene	50.00	47.66	95	50.84	102	80-120	73-127	6	0-20	
1,2-Dibromoethane	50.00	47.90	96	51.78	104	80-120	73-127	8	0-20	
1,2-Dichlorobenzene	50.00	47.62	95	51.79	104	80-120	73-127	8	0-20	
1,2-Dichloroethane	50.00	51.95	104	54.15	108	80-129	72-137	4	0-20	
1,1-Dichloroethene	50.00	40.48	81	41.88	84	71-131	61-141	3	0-20	
Ethylbenzene	50.00	49.91	100	53.29	107	80-123	73-130	7	0-20	
Toluene	50.00	48.55	97	51.50	103	79-121	72-128	6	0-20	
Trichloroethene	50.00	48.55	97	51.40	103	80-120	73-127	6	0-20	
Vinyl Chloride	50.00	45.63	91	47.58	95	70-136	59-147	4	0-20	
Xylenes (total)	150.0	152.7	102	163.3	109	75-125	67-133	7	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	45.95	92	47.18	94	72-126	63-135	3	0-22	
Tert-Butyl Alcohol (TBA)	250.0	220.9	88	225.7	90	71-125	62-134	2	0-25	
Diisopropyl Ether (DIPE)	50.00	43.12	86	44.57	89	69-129	59-139	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	46.43	93	47.97	96	69-129	59-139	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	48.67	97	51.74	103	67-133	56-144	6	0-20	
Ethanol	500.0	324.7	65	357.9	72	47-155	29-173	10	0-36	

Total number of LCS compounds : 18
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Regenesis
1011 Calle Sombra
San Clemente, CA 92673-4204

Date Received: N/A
Work Order No: 12-09-1803
Preparation: EPA 5030C
Method: EPA 8260B

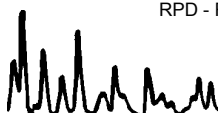
Project: 2611117

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number					
099-14-001-8,915	Aqueous	GC/MS JJ	09/29/12	09/29/12	120929L01					
Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	50.00	44.11	88	41.10	82	80-120	73-127	7	0-20	
Carbon Tetrachloride	50.00	48.88	98	44.39	89	66-138	54-150	10	0-20	
Chlorobenzene	50.00	47.48	95	44.20	88	80-120	73-127	7	0-20	
1,2-Dibromoethane	50.00	45.40	91	43.38	87	80-120	73-127	5	0-20	
1,2-Dichlorobenzene	50.00	47.51	95	43.64	87	80-120	73-127	8	0-20	
1,2-Dichloroethane	50.00	48.12	96	44.72	89	80-129	72-137	7	0-20	
1,1-Dichloroethene	50.00	38.92	78	36.06	72	71-131	61-141	8	0-20	
Ethylbenzene	50.00	49.77	100	45.86	92	80-123	73-130	8	0-20	
Toluene	50.00	47.58	95	42.30	85	79-121	72-128	12	0-20	
Trichloroethene	50.00	47.88	96	43.53	87	80-120	73-127	10	0-20	
Vinyl Chloride	50.00	44.70	89	41.36	83	70-136	59-147	8	0-20	
Xylenes (total)	150.0	152.7	102	140.9	94	75-125	67-133	8	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	43.05	86	39.35	79	72-126	63-135	9	0-22	
Tert-Butyl Alcohol (TBA)	250.0	226.7	91	202.9	81	71-125	62-134	11	0-25	
Diisopropyl Ether (DIPE)	50.00	41.67	83	38.21	76	69-129	59-139	9	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	44.86	90	41.74	83	69-129	59-139	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	45.93	92	42.66	85	67-133	56-144	7	0-20	
Ethanol	500.0	361.3	72	328.2	66	47-155	29-173	10	0-36	

Total number of LCS compounds : 18
 Total number of ME compounds : 0
 Total number of ME compounds allowed : 1
 LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit



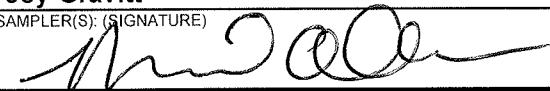
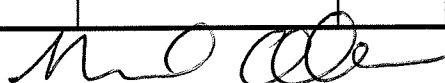
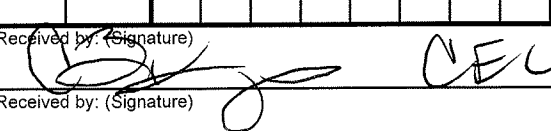
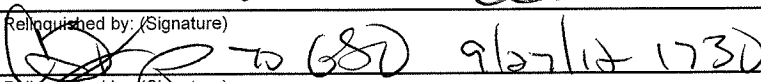
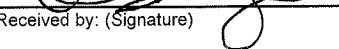
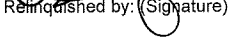
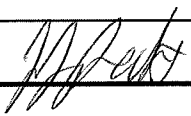
Work Order Number: 12-09-1803

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

MPN - Most Probable Number



LABORATORY CLIENT: Regenesis				CLIENT PROJECT NAME / NUMBER: 261117				P.O. NO.:													
ADDRESS: 1011 Calle Sombra				PROJECT CONTACT: Joy Gravitt				QUOTE NO.:													
CITY: San Clemente, CA 92673				SAMPLER(S): (SIGNATURE) 				LAB USE ONLY 12-09-1803													
TEL: 949-366-8000		FAX: 949-366-8090		E-MAIL: Jgravitt@Regenesis.com		REQUESTED ANALYSIS															
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS																					
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL ___/___/___																					
SPECIAL INSTRUCTIONS																					
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		Matrix	#Cont	Alkalinity, Nitrate, Sulfate	Total Fe	Dissolved Fe, Lab Filtered	Sulfide	Dissolved Gases (Methane)	TOC, COD	TPH-G	BTEX / Oxygenates 8260							
			DATE	TIME																	
	MW-4-20120930	7210 Bancroft Ave Gardland CA	9/27/12	1005	W	13	X	X	X	X	X	X	X	X							
Relinquished by: (Signature) 				Received by: (Signature) 				Date: 9/27/12		Time: 1115											
Relinquished by: (Signature) 				Received by: (Signature) 				Date:		Time:											
Relinquished by: (Signature) 				Received by: (Signature) 				Date: 9/28/12		Time: 1030											

1803

	<p align="center">< WebShip > > > > 800-322-5555 www.gso.com</p>	
<p>Ship From: ALAN KEMP CAL SCIENCE- CONCORD 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520</p>	<p>Tracking #: 520088769 </p>	<p align="center">NPS</p>
<p>Ship To: SAMPLE RECEIVING CEL 7440 LINCOLN WAY GARDEN GROVE, CA 92841</p>	<p align="center">ORC GARDEN GROVE</p> <div style="border: 1px solid black; width: 50px; height: 50px; float: right; text-align: center; line-height: 50px;">A</div>	
<p>COD: \$0.00</p>	<p align="center">D92841A</p>	
<p>Reference: ERM, TPG, REGENESIS, ANTEA</p> <p>Delivery Instructions:</p> <p>Signature Type: SIGNATURE REQUIRED</p>	<p align="center"> 5102449</p>	<p align="right">Print Date : 09/27/12 16:28 PM</p>

Package 1 of 1

<input type="button" value="Send Label To Printer"/>	<input checked="" type="checkbox"/> Print All	<input type="button" value="Edit Shipment"/>	<input type="button" value="Finish"/>
--	---	--	---------------------------------------

LABEL INSTRUCTIONS:

- Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
- STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
- STEP 2 - Fold this page in half.
- STEP 3 - Securely attach this label to your package, do not cover the barcode.
- STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

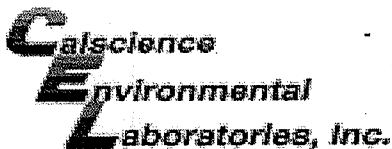
ADDITIONAL OPTIONS:

<input type="button" value="Send Label Via Email"/>	<input type="button" value="Create Return Label"/>
---	--

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Return to Contents



WORK ORDER #: 12-09-1803

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Regeneris

DATE: 09/28/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.7 °C - 0.3 °C (CF) = 2.4 °C [X] Blank [] Sample

[] Sample(s) outside temperature criteria (PM/APM contacted by: _____).

[] Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

[] Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: [] Air [] Filter

Initial: JF

CUSTODY SEALS INTACT:

[X] Cooler [] _____ [] No (Not Intact) [] Not Present [] N/A

Initial: JF

[] Sample [] _____ [] No (Not Intact) [X] Not Present

Initial: WSC

SAMPLE CONDITION:

Table with 4 columns: Description, Yes, No, N/A. Rows include Chain-Of-Custody (COC) document(s) received with samples, COC document(s) received complete, Sampler's name indicated on COC, Sample container label(s) consistent with COC, etc.

CONTAINER TYPE:

Solid: [] 4ozCGJ [] 8ozCGJ [] 16ozCGJ [] Sleeve (____) [] EnCores® [] TerraCores® [] _____
Water: [] VOA [X] VOA⁸h [] VOAna₂ [] 125AGB [] 125AGBh [] 125AGBp [] 1AGB [] 1AGBna₂ [] 1AGBs
[] 500AGB [] 500AGJ [] 500AGJs [] 250AGB [] 250CGB [X] 250CGBs [] 1PB [] 1PBna [] 500PB
[X] 250PB [X] 250PBn [] 125PB [X] 125PBz²na [] 100PJ [] 100PJna₂ [] _____ [] _____

Air: [] Tedlar® [] Summa® Other: [] _____ Trip Blank Lot#: _____ Labeled/Checked by: WSC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: JF

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z²na: ZnAc₂+NaOH f: Filtered Scanned by: JF



Is the Data Set Valid?

(circle)

Yes / No

Preservation Temperature

(if Known): _____ °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: COP/ELT

Project #: 142611117

Date of Validation: 11/8/2012 Date of Analysis: 9/28-29/2012

Sample Date: 9/27/2012 Completed By: Nadine Periat

Signature: 

Circle

or

Highlight

Yes / No

(below)

Analytical Lab Used and Report # (if any): Calscience Environmental Laboratories No. 12-09-1803

1. Were the analyses the ones 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 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., approximately 80-120%, depending on the 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%)?

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

NA

Yes / No

Yes / No

Yes / No

If any answer is no, explain why and what corrective action was taken (use additional sheet(s), as necessary):

- 9) Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.



Laboratory Results

Douglas Umland
Antea Group
312 Piercy Rd.
San Jose, CA 95138

Subject : 4 Water Samples
Project Name : 2611117
Project Number : I42611117

Dear Mr. Umland,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy Turpen



Analysis Summary

Report Number : 82778

Date : 10/05/12

Attention : Douglas Umland
 Antea Group
 312 Piercy Rd.
 San Jose, CA 95138

Project Name :2611117
 Project Number : I42611117

Sample Name		EX-1_20120930	EX-2_20120930	MW-9_20120930	MW-11_20120930					
Sample Date		09/27/12	09/27/12	09/27/12	09/27/12					
Analyte	Method	Units	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Ferrous Iron	SM 3500-Fe D	mg/L	0.10	ND	0.10	ND	0.10	ND	0.25	1.8
Nitrate as N	EPA 300.0	mg/L	0.10	ND	1.0	43	0.10	3.0	0.10	ND
Sulfate	EPA 300.0	mg/L	0.50	ND	0.50	28	0.50	38	0.50	11
Iron, Dissolved	EPA 6010B	mg/L	0.10	0.77	0.10	ND	0.10	ND	0.10	1.6

MRL = Method Reporting Limit
 ND = Not Detected

Project Name : **2611117**

Project Number : **I42611117**

Sample : **EX-1_20120930**

Matrix : Water

Lab Number : 82778-01

Sample Date :09/27/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Ferrous Iron	< 0.10	0.10	mg/L	SM 3500-Fe D	09/28/12 10:40
Nitrate as N	< 0.10	0.10	mg/L	EPA 300.0	09/28/12 12:56
Sulfate	< 0.50	0.50	mg/L	EPA 300.0	09/28/12 12:56
Iron, Dissolved	0.77	0.10	mg/L	EPA 6010B	10/04/12 12:59

Sample : **EX-2_20120930**

Matrix : Water

Lab Number : 82778-02

Sample Date :09/27/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Ferrous Iron	< 0.10	0.10	mg/L	SM 3500-Fe D	09/28/12 10:42
Nitrate as N	43	1.0	mg/L	EPA 300.0	09/28/12 15:04
Sulfate	28	0.50	mg/L	EPA 300.0	09/28/12 13:25
Iron, Dissolved	< 0.10	0.10	mg/L	EPA 6010B	10/04/12 13:03

Sample : **MW-9_20120930**

Matrix : Water

Lab Number : 82778-03

Sample Date :09/27/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Ferrous Iron	< 0.10	0.10	mg/L	SM 3500-Fe D	09/28/12 10:43
Nitrate as N	3.0	0.10	mg/L	EPA 300.0	09/28/12 13:54
Sulfate	38	0.50	mg/L	EPA 300.0	09/28/12 13:54
Iron, Dissolved	< 0.10	0.10	mg/L	EPA 6010B	10/04/12 13:07

Project Name : **2611117**

Project Number : **I42611117**

Sample : **MW-11_20120930**

Matrix : Water

Lab Number : 82778-04

Sample Date :09/27/12

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Ferrous Iron	1.8	0.25	mg/L	SM 3500-Fe D	09/28/12 10:48
Nitrate as N	< 0.10	0.10	mg/L	EPA 300.0	09/28/12 14:24
Sulfate	11	0.50	mg/L	EPA 300.0	09/28/12 14:24
Iron, Dissolved	1.6	0.10	mg/L	EPA 6010B	10/04/12 13:11

Report Number : 82778

Date : 10/05/12

QC Report : Method Blank Data

Project Name : **261117**

Project Number : **I4261117**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Iron, Dissolved	< 0.10	0.10	mg/L	EPA 6010B	10/02/12
Ferrous Iron	<0.10	0.10	mg/L	SM 3500-Fe D	09/28/12
Nitrate as N	<0.10	0.10	mg/L	EPA 300.0	09/28/12
Sulfate	<0.50	0.50	mg/L	EPA 300.0	09/28/12

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
------------------	-----------------------	-------------------------------	--------------	------------------------	----------------------

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2611117

Project Number : I42611117

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Ferrous Iron	82778-01	< 0.10	0.252	0.252	0.310	0.290	mg/L	SM 3500-Fe D	9/28/12	107	99.0	6.67	70.0-130	25
Sulfate	82778-01	< 0.50	2.50	2.50	2.72	2.72	mg/L	EPA 300.0	9/28/12	99.3	99.4	0.0999	90.0-110	10
Nitrate as N	82778-01	< 0.10	0.500	0.500	0.494	0.495	mg/L	EPA 300.0	9/28/12	97.2	97.5	0.230	90.0-110	10
Iron, (Dis)	82734-02	< 0.10	0.400	0.400	0.386	0.394	mg/L	EPA 6010B	10/2/12	95.7	97.9	2.26	75-125	20

QC Report : Laboratory Control Sample (LCS)Project Name : **2611117**Project Number : **I42611117**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Iron, (Dis)	0.400	mg/L	EPA 6010B	10/2/12	97.2	85-115
Ferrous Iron	0.252	mg/L	SM 3500-Fe D	9/28/12	100	70.0-130
Sulfate	2.50	mg/L	EPA 300.0	9/28/12	106	90.0-110
Nitrate as N	0.500	mg/L	EPA 300.0	9/28/12	98.9	90.0-110

82778

Page: 1 of 1
Cooler #: _____ of _____

COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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



Required Lab Information: Lab Name: Kiff Analytical
 Required Project Information: Site ID #: 2611117 Task:
 Required Invoice Information: Send Invoice to: Jeryllyn Thao
 Address: 2795 Second Street #300 AnteaGrp proj#: I42611117 Address: 11050 White Rock Road, Suite 110 Turn around time (days) 10
 Davis, CA 95618 Site Address: 7210 Bancroft Ave City/State: Rancho Cordova CA 95670 Phone #: 1-800-477-7411 QC level Required: Standard Special Mark one
 Lab PM: Scott Forbes City: Oakland State: CA Reimbursement project? Non-reimbursement project? Y Mark one NJ Reduced Deliverable Package?
 Phone/Fax: 530-297-4800 ext 109 AG PM Name: Doug Umland Send EDD to: copeltdata@intelligentehts.com MA MCP Cert? CT RCP Cert? Mark One
 Lab PM email: sforbes@kiffanalytical.com Phone/Fax: 408-826-1874 CC Hardcopy report to: nicole.persaud@anteagroup.com Lab Project ID (lab use)
 Applicable Lab Quote #: AG PM Email: doug.umland@anteagroup.com CC Hardcopy report to: sara.sichley@anteagroup.com 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 WIRE WH AMBIENT AIR AA SVE AIR AE SOIL GAS GS	MATRIX WATER WP SURFACE WATER WS WATER OC WO SLUDGE SL RINSEATE SR OTHER OT ANIMAL TISSUE TA	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives									Comments/Lab Sample I.D.					
										Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	6010 Total Diss. Iron		375-2P2-0 Sulfide	322-2P2-0 Sulfate	30P-175 Nitrate	Ferrous Ion HACH FR	
1	EX-1_20120930			WG	G	9/27/12	1420	4	Y		X	Y						X	X	X	X	X		
2	EX-2_20120930			WG	↓	↓	1375	4	↓		X	X						X	X	X	X	X		
3	MW-9_20120930			WG	↓	↓	1035	4	↓		X	X						X	X	X	X	X		
4	MW-11_20120930			WG	↓	↓	1145	4	↓		X	X						X	X	X	X	X		

Handwritten notes in right margin: 01 x, 02 x, 03, 04

Additional Comments/Special Instructions: **Global ID: T0600100201**

RELINQUISHED BY - AFFILIATION	DATE	TIME	ACCEPTED BY - AFFILIATION	DATE	TIME	Sample Receipt Conditions			
<i>Michelle Allen</i>	9/27/12	1645	<i>Michelle Allen</i>	9/28/12	1019	Temp in °C	Samples on ice?	Sample intact?	Trip Blank?
SHIPPING METHOD: (mark as appropriate)					SAMPLER NAME AND SIGNATURE				
UPS COURIER <input checked="" type="checkbox"/> FEDEX			US MAIL			PRINT Name of SAMPLER: <i>Daniel Allen</i>			
SIGNATURE of SAMPLER: <i>Michelle Allen</i>			DATE Signed: 9/27/12			Time: 1645			

Page 6 of 6



SAMPLE RECEIPT CHECKLIST

RECEIVER
MAS
Initials

SRG#: 82778 Date: 092812
Project ID: 261117
Method of Receipt: Courier Over-the-counter Shipper
Shipping Only: FedEx * OnTrac * Greyhound Other *Service level if not Priority or Sunrise (M-F): _____

COC Inspection

Is COC present? Yes No
Custody seals on shipping container? Intact Broken Not present N/A
Is COC Signed by Relinquisher? Yes No Dated? Yes No
Is sampler name legibly indicated on COC? Yes No
Is analysis or hold requested for all samples? Yes No
Is the turnaround time indicated on COC? Yes No
Is COC free of whiteout and uninitialed cross-outs? Yes No, Whiteout No, Cross-outs

Sample Inspection

Coolant Present: Yes No (includes water)
Temperature °C 2-8 Therm. ID# FR-4 Initial MAS Date/Time 092812/1015 N/A
Are there custody seals on sample containers? Intact Broken Not present
Do containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample(s) present
Are there samples matrices other than soil, water, air or carbon? Yes No
Are any sample containers broken, leaking or damaged? Yes No
Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/A
Are preservatives correct for analyses requested? Yes No N/A
Are samples within holding time for analyses requested? Yes No
Are the correct sample containers used for the analyses requested? Yes No
Is there sufficient sample to perform testing? Yes No
Does any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No

Receipt Details

Matrix WA Container type VDA # of containers received 8
Matrix WA Container type Poly # of containers received 8
Matrix _____ Container type _____ # of containers received _____
Date and Time Sample Put into Temp Storage Date: 092812 Time: 1019

Quicklog

Are the Sample ID's indicated: On COC On sample container(s) On Both Not indicated
If Sample ID's are listed on both COC and containers, do they all match? Yes No N/A
Is the Project ID indicated: On COC On sample container(s) On Both Not indicated
If project ID is listed on both COC and containers, do they all match? Yes No N/A
Are the sample collection dates indicated: On COC On sample container(s) On Both Not indicated
If collection dates are listed on both COC and containers, do they all match? Yes No N/A
Are the sample collection times indicated: On COC On sample container(s) On Both Not indicated
If collection times are listed on both COC and containers, do they all match? Yes No N/A

COMMENTS:

This project was received at 1019 today. The analyses include Ferrrous Iron (with a 24 hr hold time). Sample collection times are 1055, 1145, 1315 and 1420. J. DenPree of Lab Ops indicated the analysis for the earliest sample would probably not be completed within hold time. He was unsure about the 2nd earliest sample. No notification of the short holds was given prior to the samples' arrival. The analytical methods on the COC do not match available login methods. SR logged in Anions by 300.0 and the Ferrrous without any indication of HACH Kit. MAS 092812 1110



Subcontract Laboratory Report Attachments



CALSCIENCE

WORK ORDER NUMBER: 12-09-1899

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: 2611117

Attention: Joel Kiff
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Amanda Porter

Approved for release on 10/5/2012 by:
Amanda Porter
Project Manager

ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any litigation which may arise.





Contents

Client Project Name: 2611117
Work Order Number: 12-09-1899

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2	Quality Control Sample Data	4
	2.1 LCS/LCSD	4
3	Glossary of Terms and Qualifiers	5
4	Chain of Custody/Sample Receipt Form	6

Analytical Report



Kiff Analytical
 2795 2nd Street, Suite 300
 Davis, CA 95618-6505

Date Received: 09/29/12
 Work Order No: 12-09-1899
 Preparation: N/A
 Method: RSK-175M

Project: 2611117

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EX-1_20120930	12-09-1899-1-A	09/27/12 14:20	Aqueous	GC 61	N/A	10/01/12 18:51	121001L01

Parameter	Result	RL	DF	Qual	Units
Methane	1670	8.00	8		ug/L

EX-2_20120930	12-09-1899-2-A	09/27/12 13:15	Aqueous	GC 61	N/A	10/01/12 15:37	121001L01
---------------	----------------	----------------	---------	-------	-----	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

MW-9_20120930	12-09-1899-3-A	09/27/12 10:55	Aqueous	GC 61	N/A	10/01/12 16:49	121001L01
---------------	----------------	----------------	---------	-------	-----	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Methane	38.6	1.00	1		ug/L

MW-11_20120930	12-09-1899-4-A	09/27/12 11:45	Aqueous	GC 61	N/A	10/01/12 18:27	121001L01
----------------	----------------	----------------	---------	-------	-----	----------------	-----------

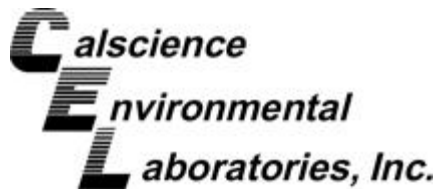
Parameter	Result	RL	DF	Qual	Units
Methane	1770	8.00	8		ug/L

Method Blank	099-12-663-1,713	N/A	Aqueous	GC 61	N/A	10/01/12 13:00	121001L01
--------------	------------------	-----	---------	-------	-----	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

Return to Contents

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - LCS/LCS Duplicate



Kiff Analytical
 2795 2nd Street, Suite 300
 Davis, CA 95618-6505

Date Received: N/A
 Work Order No: 12-09-1899
 Preparation: N/A
 Method: RSK-175M

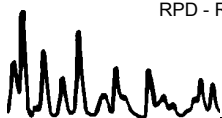
Project: 2611117

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-663-1,713	Aqueous	GC 61	N/A	10/01/12	121001L01

Parameter	<u>SPIKE ADDED</u>	<u>LCS CONC</u>	<u>LCS %REC</u>	<u>LCSD CONC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Methane	98.50	95.08	97	94.78	96	79-109	0	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

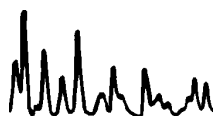


Work Order Number: 12-09-1899

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

MPN - Most Probable Number





2795 Second Street, Suite 300
 Davis, CA 95618
 Lab: 530.297.4800
 Fax: 530.297.4808

Calscience
 7440 Lincoln Way
 Garden Grove, CA 92841-1427
 714-895-5494

12-09-1899

COC No. **82778** Page 1 of 1

Project Contact (Hardcopy or PDF to): **Scott Forbes** EDF Report? **YES** Chain-of-Custody Record and Analysis Request

Company/Address: **Kiff Analytical** Recommended but not mandatory to complete this section: Analysis Request TAT

Phone No.: **530-297-4800** FAX No.: **530-297-4808** Sampling Company Log Code: **DECR** Global ID: **T0600100201**

Project Number: **142611117** P.O. No.: **82778** Deliverables to (Email Address): **inbox@kiffanalytical.com**

Project Name: **2611117** Container / Preservative Matrix

Project Address: Sampling

Sample Designation Date Time VOA 40 ml HCl Water Hydrocarbons in Water by RSK 175 (1) 4-Days For Lab Use Only

EX-1_20120930	09/27/12	14:20	2																X	X	X	1
---------------	----------	-------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---	---

EX-2_20120930	09/27/12	13:15	2																X	X	X	2
---------------	----------	-------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---	---

MW-9_20120930	09/27/12	10:55	2																X	X	X	3
---------------	----------	-------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---	---

MW-11_20120930	09/27/12	11:45	2																X	X	X	4
----------------	----------	-------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---	---

Relinquished by: <i>[Signature]</i> KIFF Analytical LLC	Date: 09/28/12	Time: 1800	Received by:
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date: 9/29/12	Time: 1050	Received by Laboratory: <i>[Signature]</i>

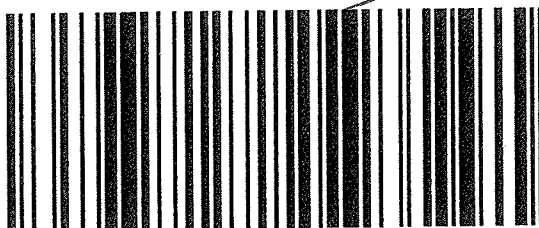
Remarks: 1) Please refer to attached Test Detail.
 2) Please provide an Antea "TDM_EDD" formatted EQUIS EDD with the report.

Bill to: **Accounts Payable**

1899



800.334.5000
ontrac.com



D10010513996144

Date Printed 9/28/2012

Tracking#D10010513996144

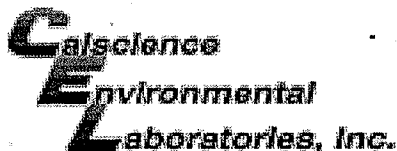
Shipped From:
KIFF ANALYTICAL
2795 2ND STREET 300
DAVIS, CA 95618

Sent By: SAMPLE RECEIVINGX125
Phone#: (530)297-4800
wgt(lbs): 1
Reference: SUBS 82778, 85, 50
Reference 2: CLASS 600

Ship To Company:
CALSCIENCE ENVIRONMENTAL LABS
7440 LINCOLN WAY
GARDEN GROVE, CA 92841
SAMPLE RECEIVING (714)895-5494

Service: **S**
Sort Code: **ORG**
Special Services:
Saturday Delivery
Signature Required

Return to Contents



WORK ORDER #: 12-09-1899

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: KIFF

DATE: 09/29/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.8 °C - 0.3 °C (CF) = 1.5 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Initial: YC

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A

Initial: YC

Sample _____ No (Not Intact) Not Present

Initial: WS

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours...	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____
 Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs
 500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB
 250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: WS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: TS

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: TS



Is the Data Set Valid?

(circle)

Yes / No

Preservation Temperature

(if Known): _____ °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: COP/ELT

Project #: I42611117

Date of Validation: 11/8/2012 Date of Analysis: 9/28, 10/4/2012

Sample Date: 9/27/2012 Completed By: Nadine Periat

Signature: _____

Circle

or

Highlight

Yes / No

(below)

Analytical Lab Used and Report # (if any): Kiff Analytical LLC 82778 (and sub lab: Calcience No. 12-09-1899)

Were the analyses the ones requested?

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

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

NA

Yes / No

Yes / No

Yes / No

If any answer is no, explain why and what corrective action was taken (use additional sheet(s), as necessary):

Empty box for corrective action explanation.

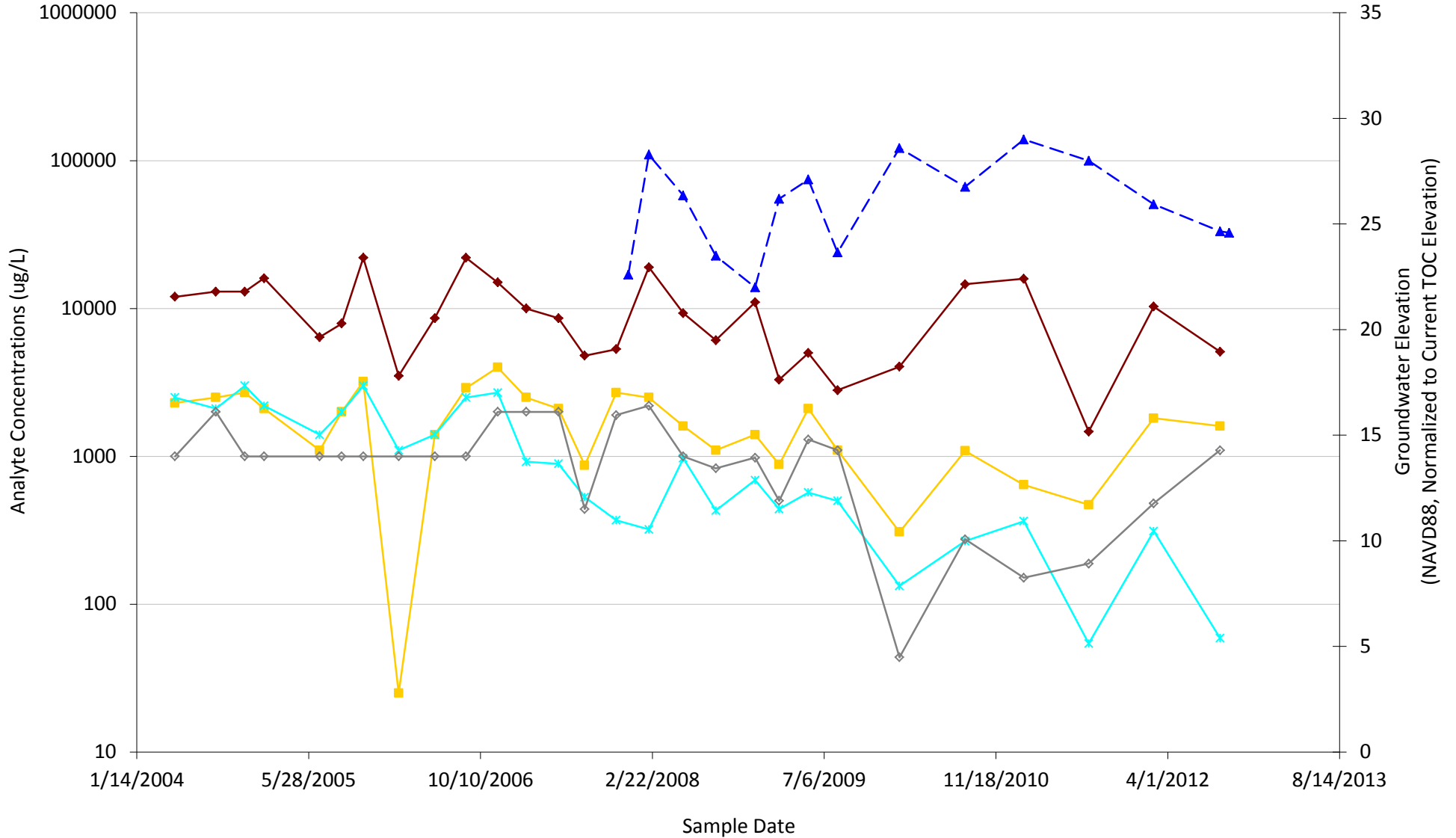
Semi-Annual Monitoring Report, Third Quarter 2012
76 (Former BP) Service Station No. 11117
7210 Bancroft Avenue, Oakland, California USA
Antea Group Project No. I42611117



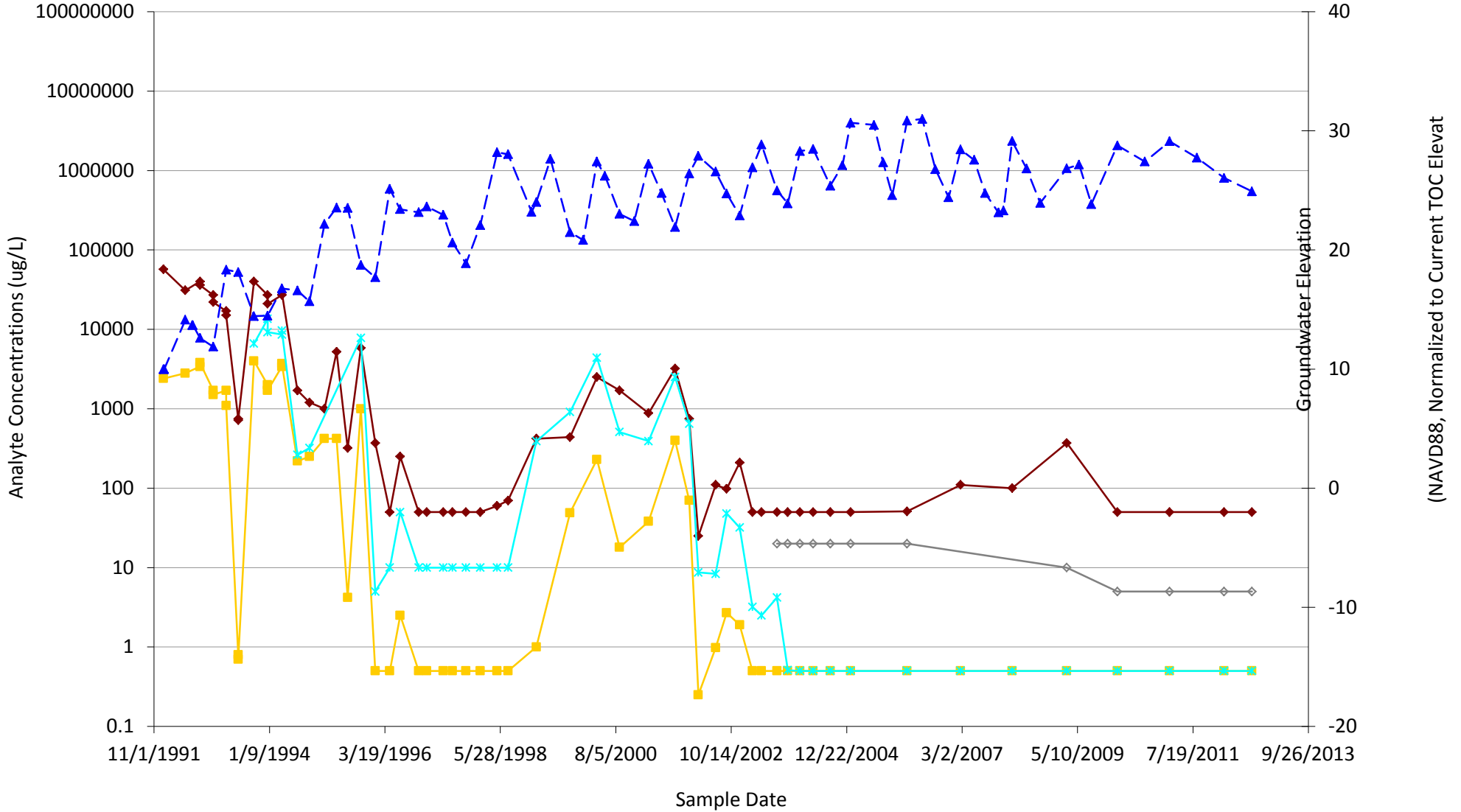
Appendix D

Time Series Graphs

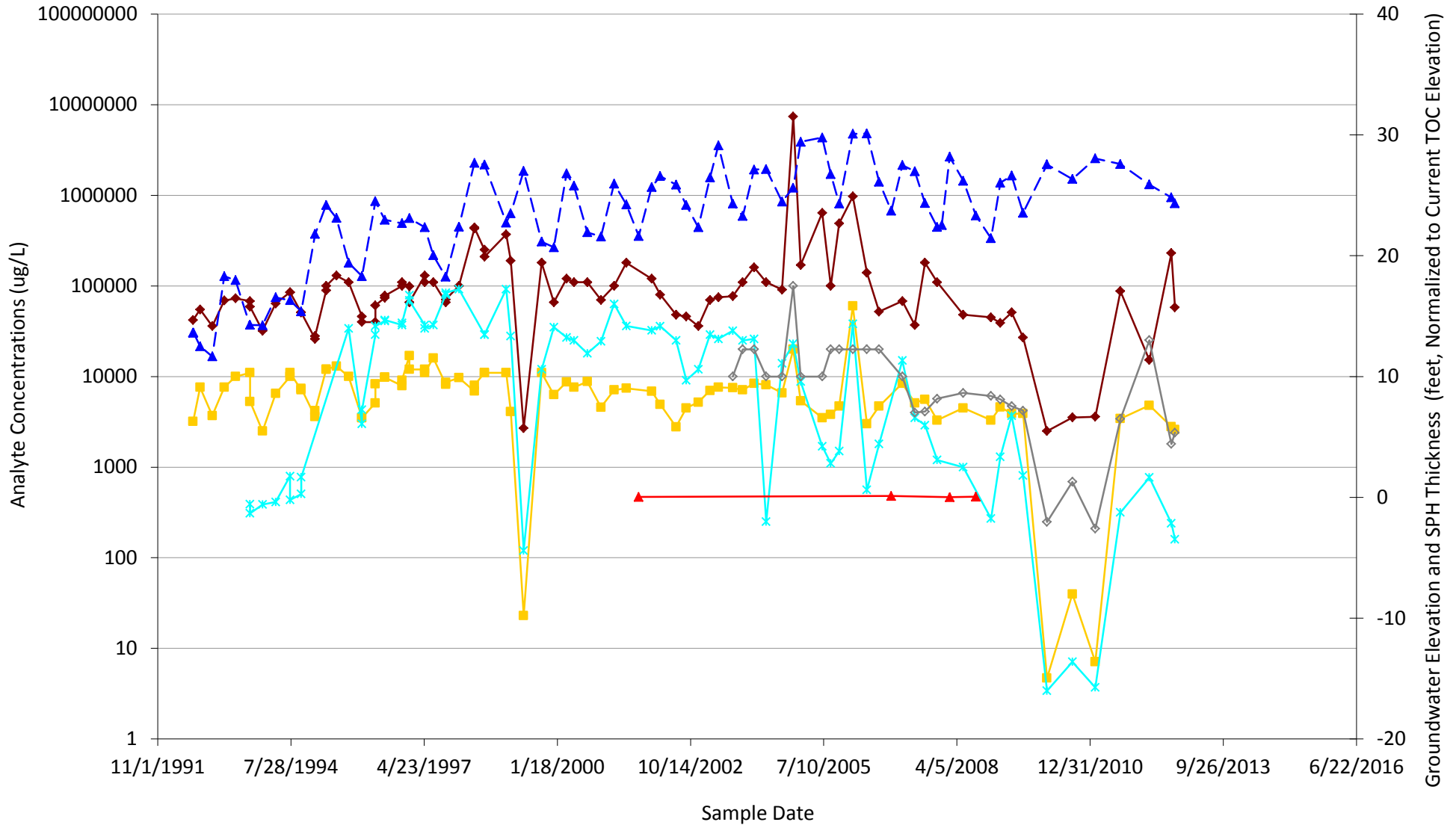
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 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



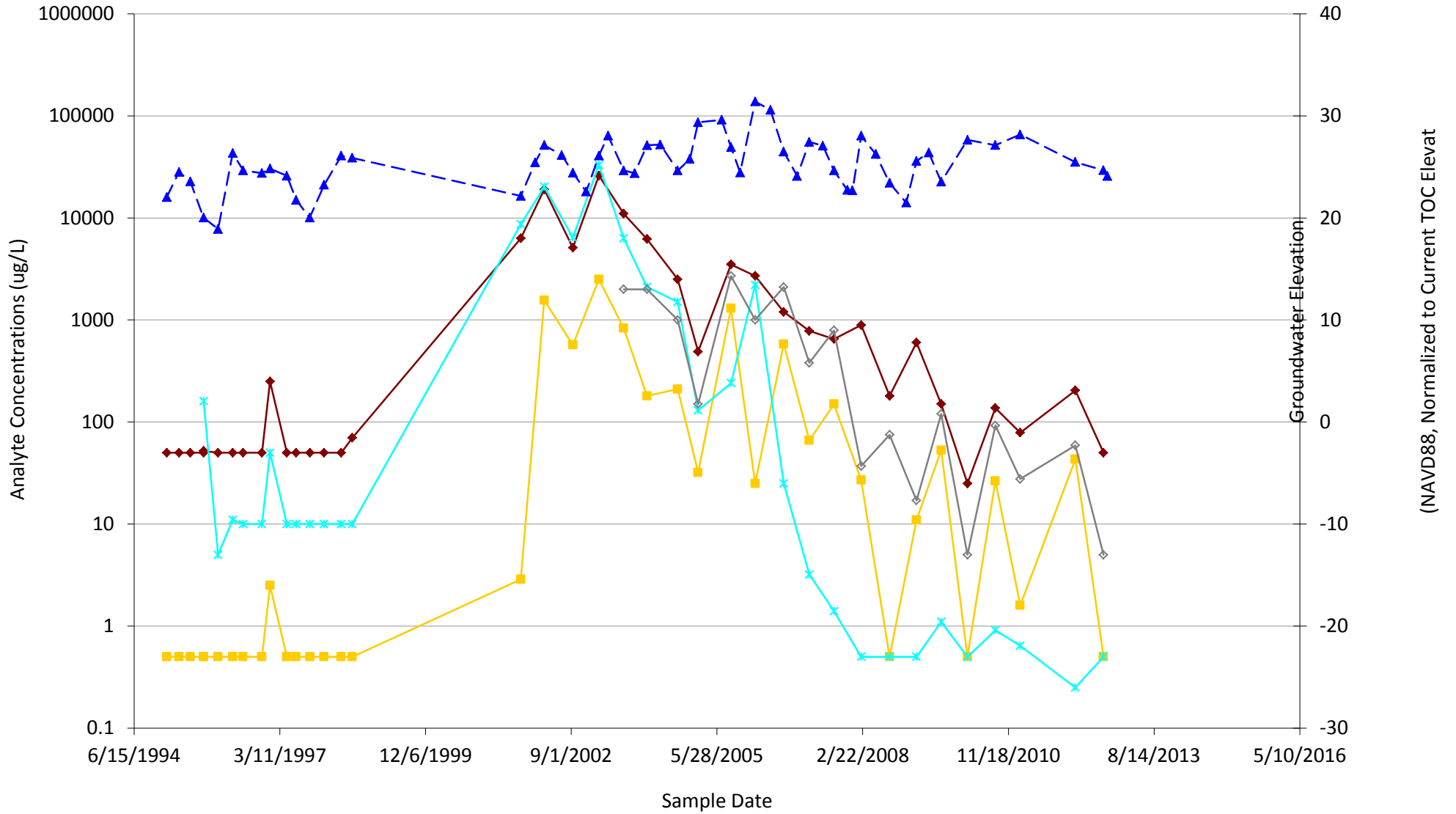
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 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



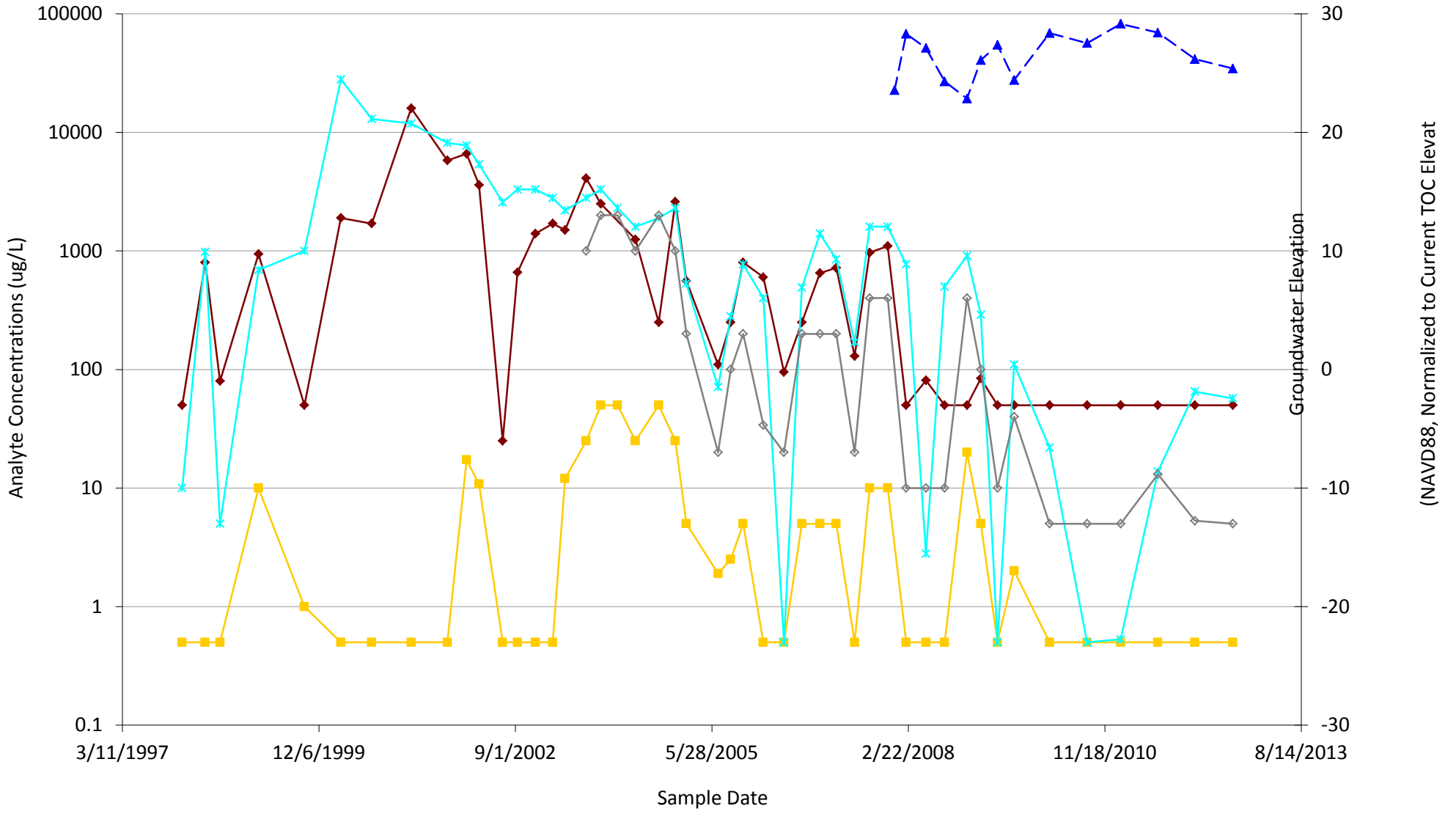
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 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



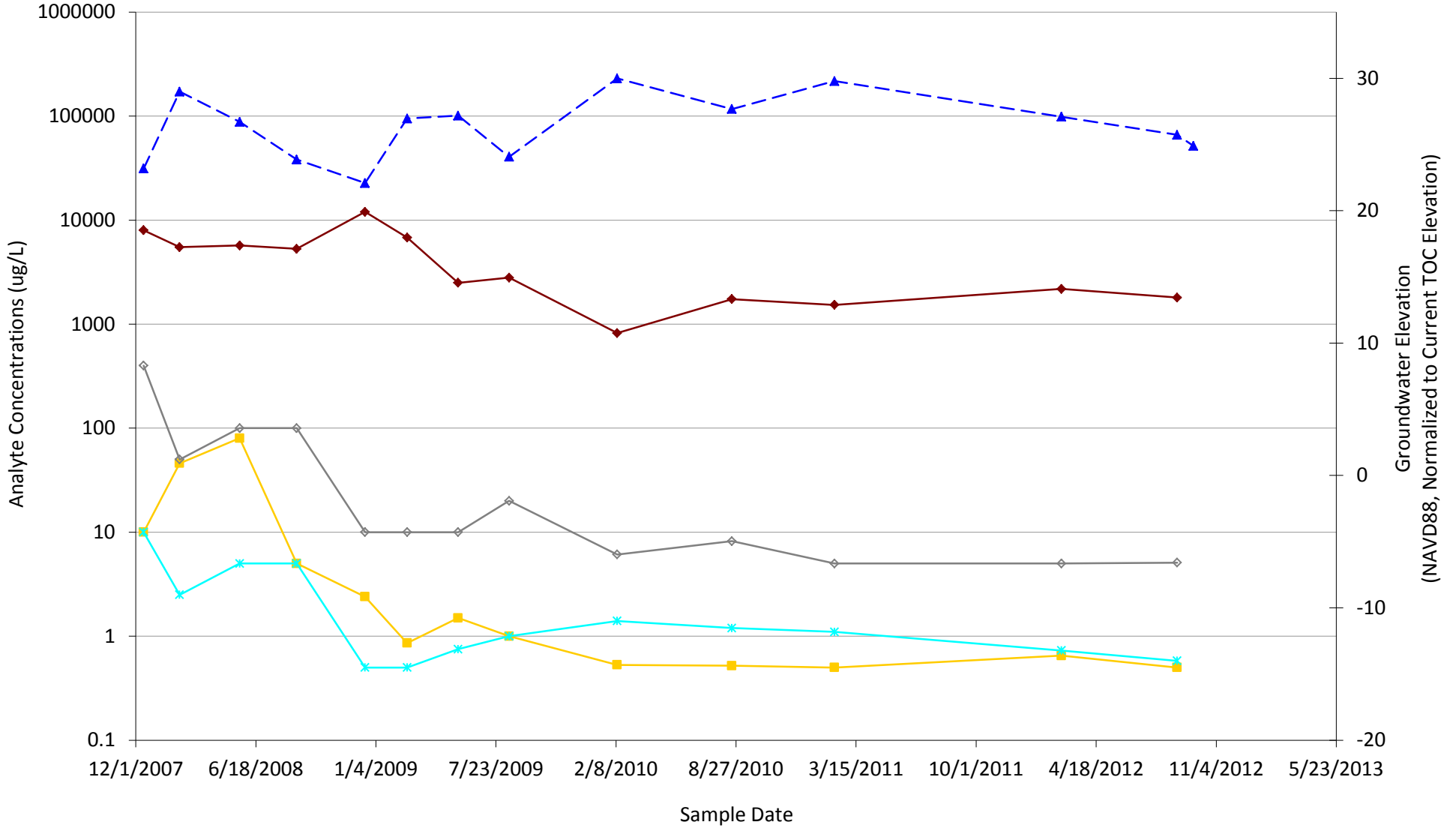
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 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



WELL MW-10
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 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

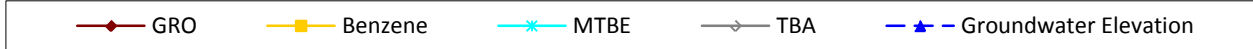
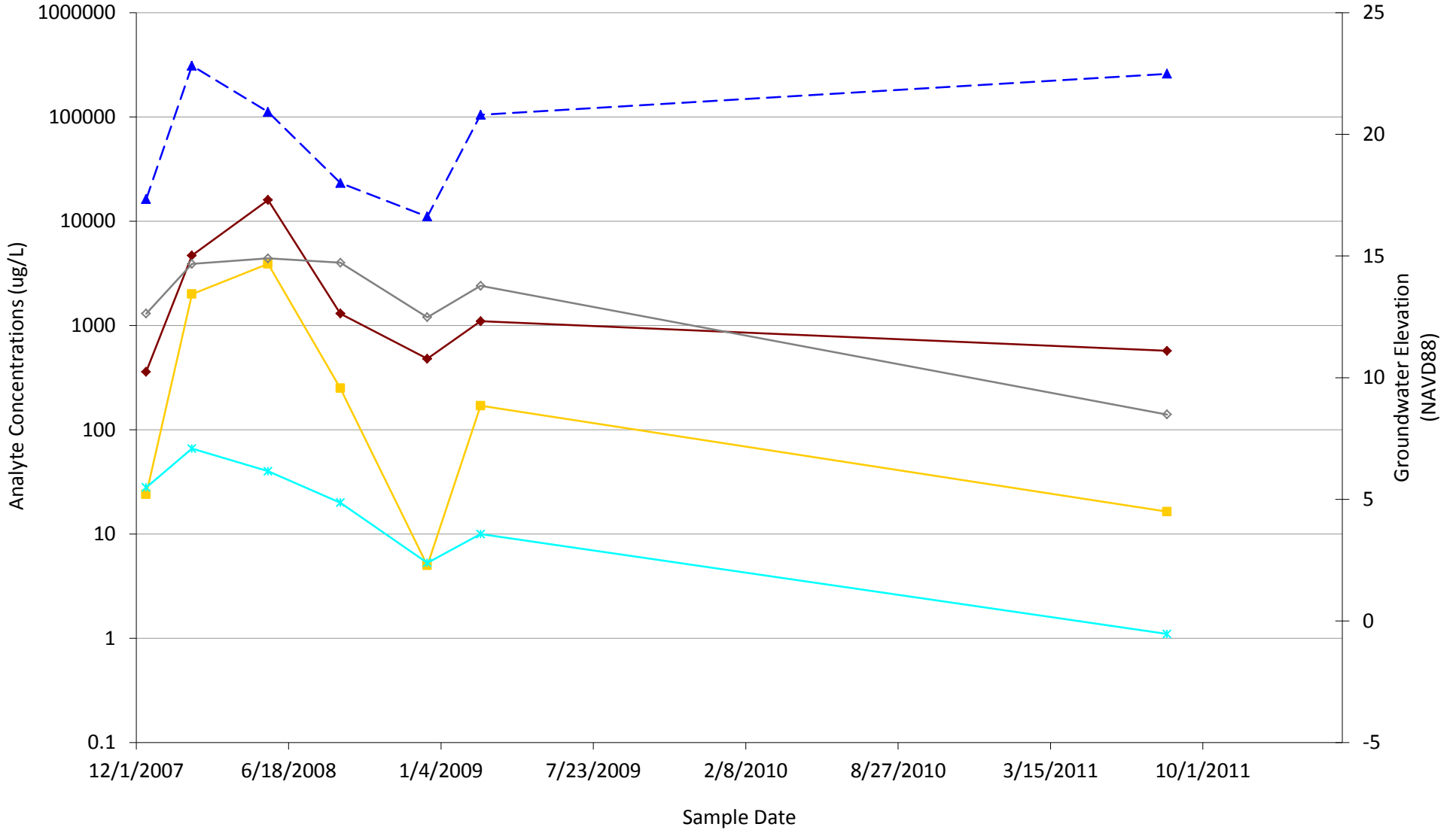


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 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA

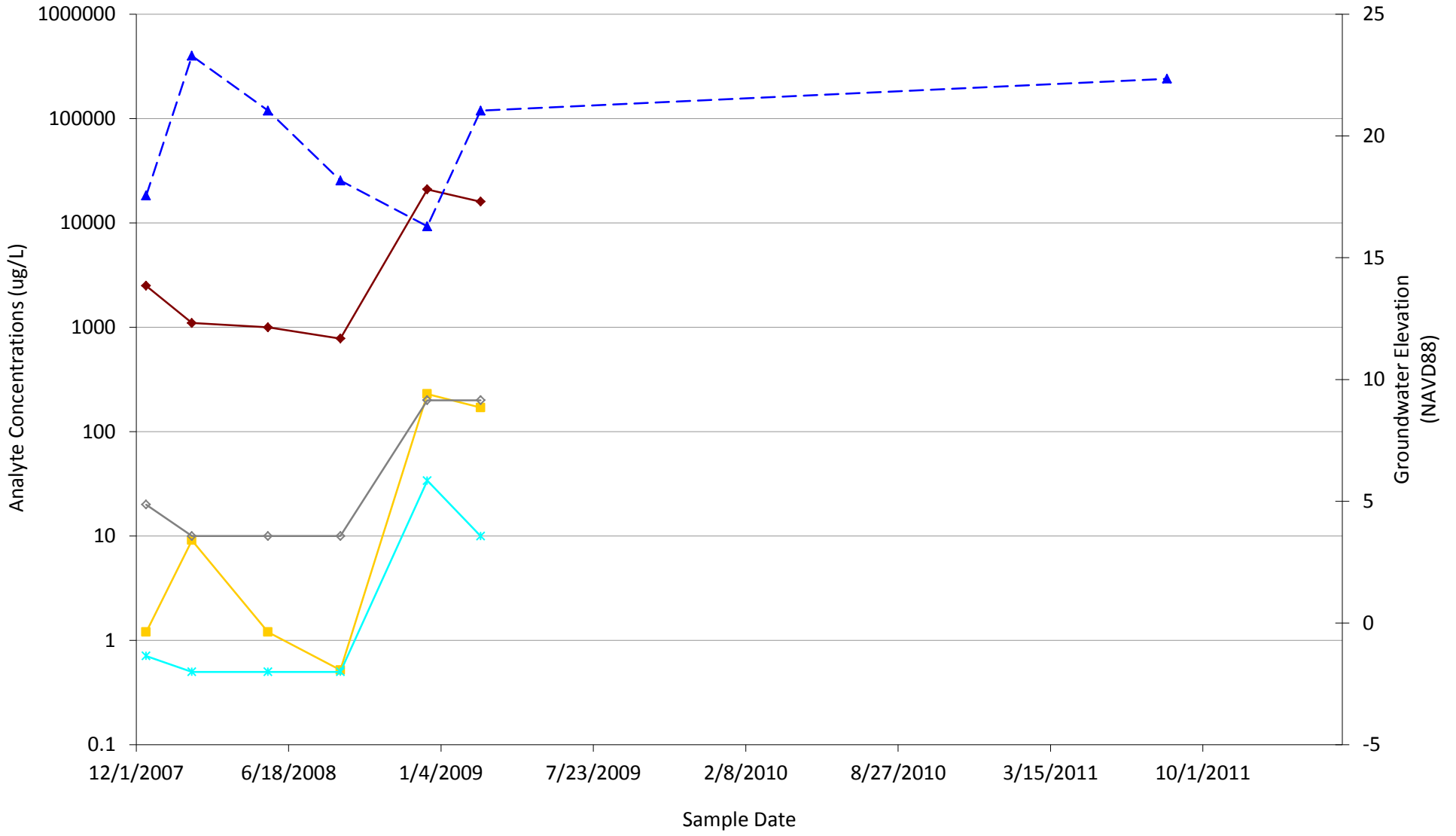


Legend: GRO (dark red line with diamonds), Benzene (yellow line with squares), MTBE (cyan line with asterisks), TBA (grey line with diamonds), Groundwater Elevation (blue dashed line with triangles)

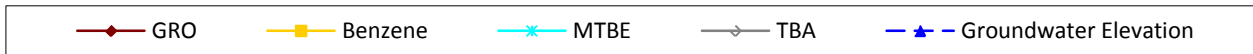
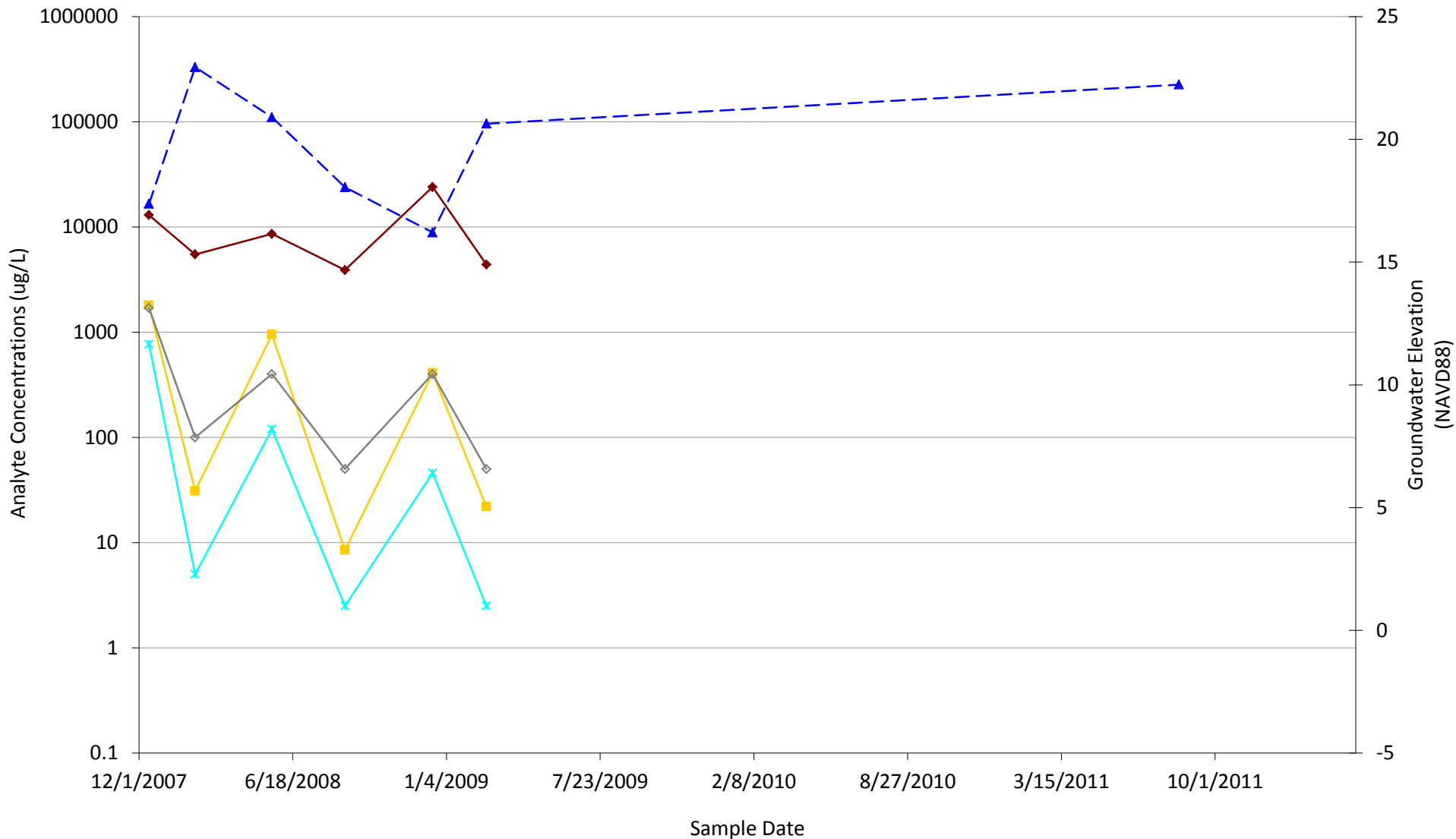
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 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



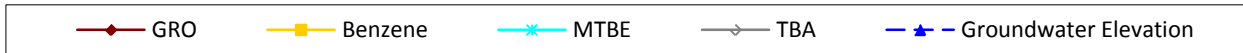
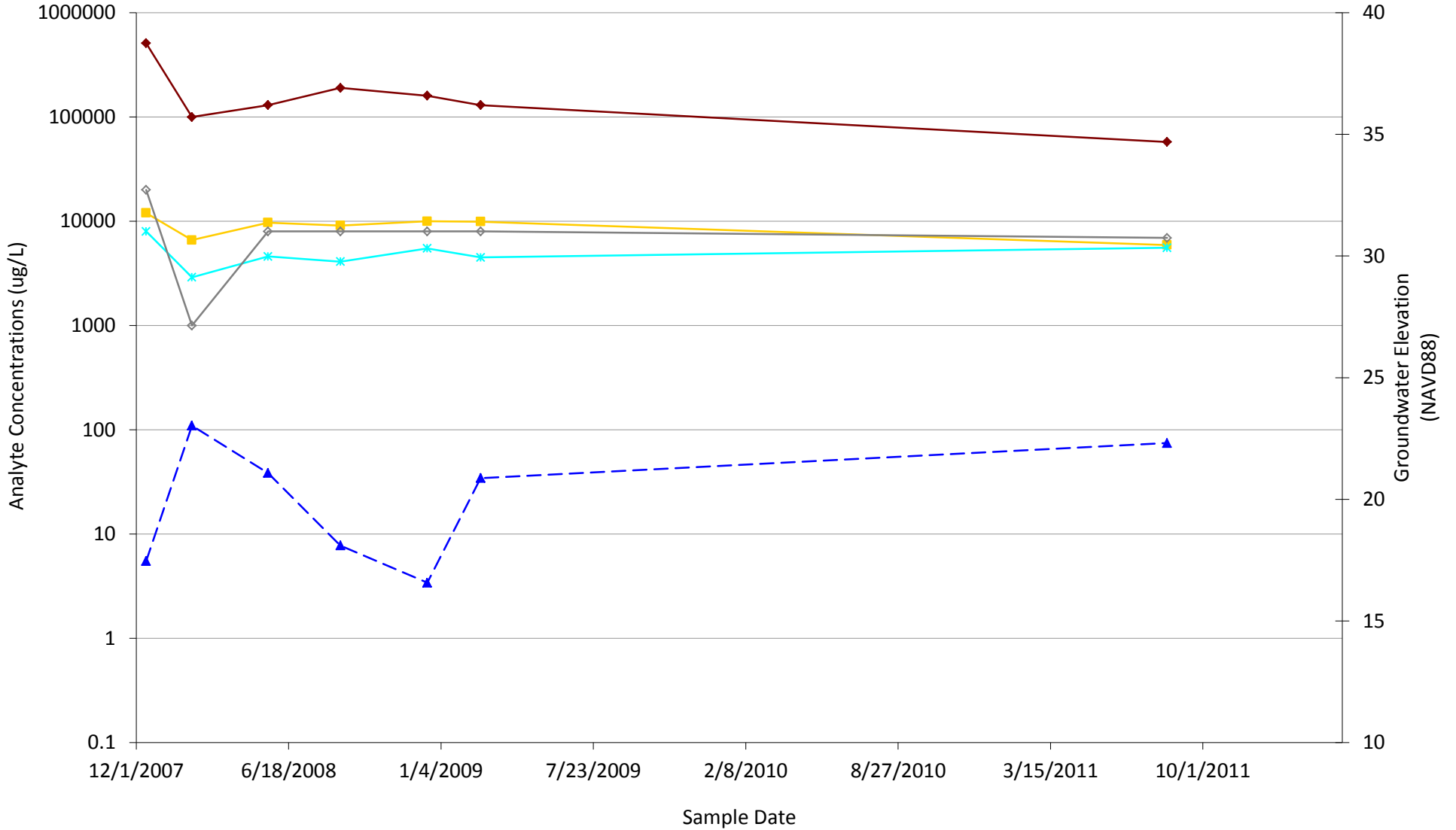
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 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



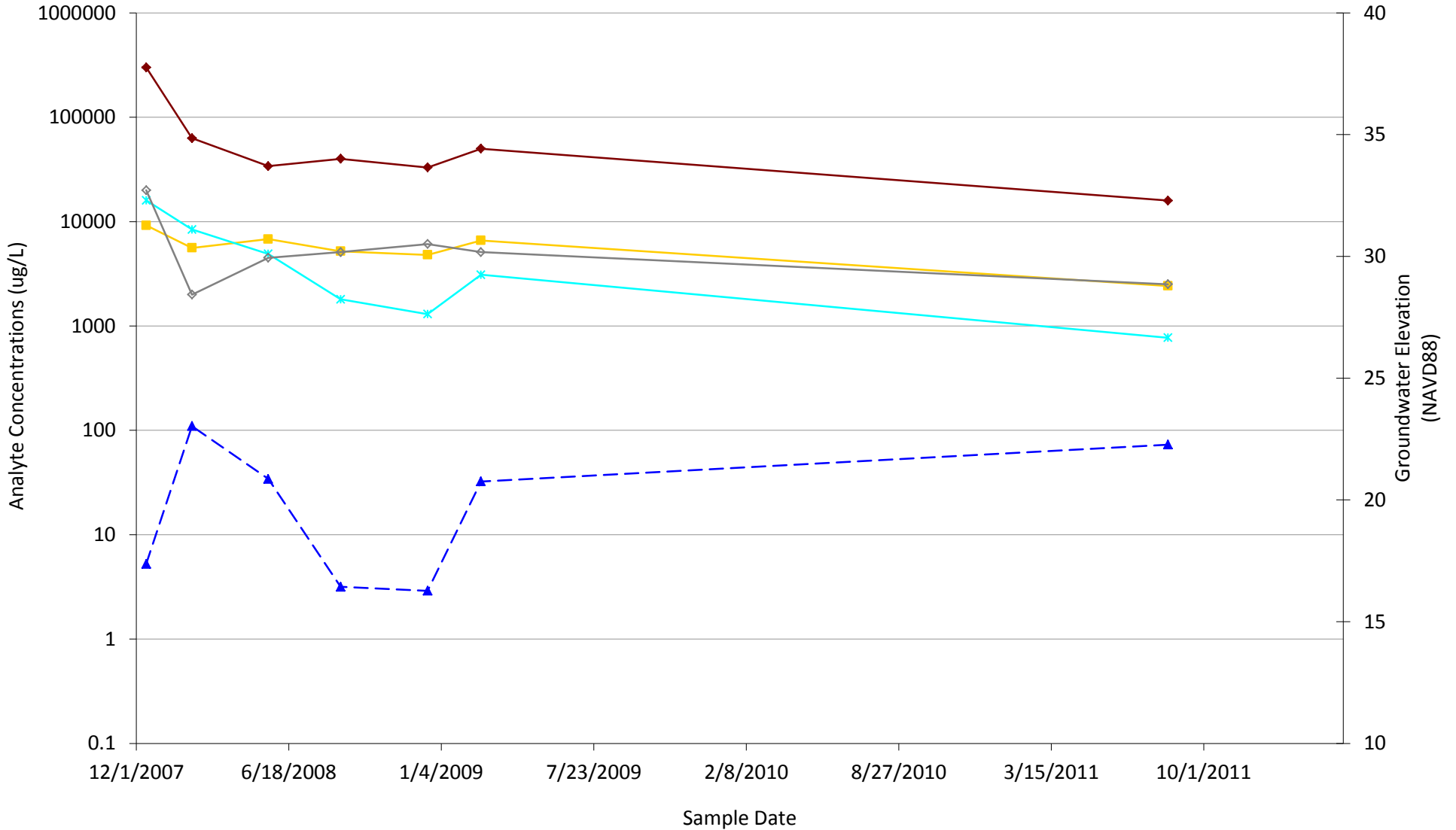
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 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



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



WELL DPE-5
 CONTAMINANT CONCENTRATIONS AND GROUNDWATER ELEVATION VERSUS TIME
 76 (FORMER BP) SERVICE STATION NO. 11117
 7210 BANCROFT AVENUE
 OAKLAND, CALIFORNIA



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



Appendix E

Non-Hazardous Waste Manifests

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. <i>n/a</i>	Manifest Document No. <i>2101117-0312</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>Power Quality & Electrical Systems c/o Tejinder Singh 7210 Bancroft Ave Oakland, CA 94605</i>		Site # <i>2101117</i> <i>7210 Bancroft Ave Oakland, CA 94605</i>		
4. Generator's Phone <i>(510) 553-0109</i>	6. US EPA ID Number _____		A. State Transporter's ID _____	
5. Transporter 1 Company Name <i>Blaine Tech Services</i>	8. US EPA ID Number _____		B. Transporter 1 Phone <i>310-885-4455</i>	
7. Transporter 2 Company Name _____	10. US EPA ID Number <i>000013572</i>		C. State Transporter's ID _____	
9. Designated Facility Name and Site Address <i>Seaport Environmental 700 Seaport Blvd. Redwood City, CA 94063</i>		E. State Facility's ID _____		
		F. Facility's Phone <i>1050-3104-1024</i>		
11. WASTE DESCRIPTION		12. Containers	13. Total Quantity	14. Unit Wt./Vol.
a. <i>Non hazardous waste liquid</i>		No. <i>1</i> Type <i>TT</i>	<i>20</i>	<i>G</i>
b. _____				
c. _____				
d. _____				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Wear protective equipment while handling weights and volumes are approximate 24hr emergency phone (310) 885-4455</i>		<i>Direct bill Blaine Tech Approval No 520-1049</i>		
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 <i>(Anten Group) on behalf of Power Quality & Electrical Systems Inc.</i>		Signature <i>Venky Mendes</i>	Date <i>3/14/12</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name <i>Greg Roberts</i>	Signature <i>[Signature]</i>	Month Day Year <i>3/19/12</i>		
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name	Signature	Month Day Year		
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 <i>Shane</i>		Signature <i>[Signature]</i>	Date <i>5/1/12</i>	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

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. <i>n/a</i>	Manifest Document No. <i>201117-0412</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>Power Quality & Electrical systems Inc.</i>		Site # <i>201117</i> <i>7210 Bancroft Ave</i> <i>Oakland, CA 94605</i>		
4. Generator's Phone <i>(510) 553-009</i>	5. Transporter 1 Company Name <i>Blaine Tech Services</i>		6. US EPA ID Number	
7. Transporter 2 Company Name		8. US EPA ID Number		A. State Transporter's ID
9. Designated Facility Name and Site Address <i>Seaport Environmental</i> <i>700 Seaport Blvd.</i> <i>Redwood City, CA 94063</i>		10. US EPA ID Number <i>000013572</i>		B. Transporter 1 Phone <i>310-885-4455</i>
11. WASTE DESCRIPTION		12. Containers		C. State Transporter's ID
		No.	Type	D. Transporter 2 Phone
a. <i>Non hazardous waste liquid</i>		<i>1</i>	<i>TT</i>	E. State Facility's ID
b.				F. Facility's Phone <i>415-3104-1024</i>
c.				
d.				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Wear protective equipment while handling</i> <i>Weights and volumes are approximate</i> <i>24 hr emergency phone no (310) 885-4455</i>		<i>Approval No 500-1049</i> <i>Direct bill Blaine Tech</i>		
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 <i>(Antes Corp)</i> <i>Jerilyn Mendes</i>		Signature <i>Jerilyn Mendes</i>	Date <i>4/24/12</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name <i>Ben Panell</i>	Signature <i>[Signature]</i>	Month Day Year <i>3/7/12</i>		
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name	Signature	Month Day Year		
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 <i>Shaw</i>		Signature <i>Shaw Study</i>	Date <i>5/9/12</i>	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY



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. <i>na</i>	Manifest Document No. <i>201117-0512</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>Power Quality & Electrical Sys. Inc. c/o Tejinder Singh 7210 Bancroft Ave. Oakland, CA 94605</i>		Site # <i>201117</i> <i>7210 Bancroft Ave Oakland, CA 94605</i>		
4. Generator's Phone <i>(510) 553-0109</i>	6. US EPA ID Number	A. State Transporter's ID		
5. Transporter 1 Company Name <i>Blaine Tech Services</i>	8. US EPA ID Number	B. Transporter 1 Phone <i>810-885-4455</i>		
7. Transporter 2 Company Name	10. US EPA ID Number	C. State Transporter's ID		
9. Designated Facility Name and Site Address <i>Seaport Environmental 705 Seaport Blvd. Redwood City, CA 94063</i>	10. US EPA ID Number <i>000013572</i>	D. Transporter 2 Phone		
11. WASTE DESCRIPTION		E. State Facility's ID		
		F. Facility's Phone <i>1050-3104-1024</i>		
		12. Containers No. Type	13. Total Quantity	14. Unit Wt./Vol.
a. <i>Non hazardous waste liquid</i>		<i>1 TT</i>	<i>13</i>	<i>G</i>
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information				
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 <i>(Antea Group)</i>		Signature <i>Cheryl Mercedes</i>		Date <i>4/24/12</i>
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>Ben Paniel</i>		Date <i>4/27/12</i>
Printed/Typed Name <i>BEN PANIEL</i>		Signature		Date
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date
Printed/Typed Name		Signature		Date
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 <i>Shaw</i>		Signature <i>Shaw</i>		Date <i>5/9/12</i>

NON-HAZARDOUS WASTE

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NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>N/A</i>		Manifest Document No. <i>2101117-0612</i>		2. Page 1 of 1											
3. Generator's Name and Mailing Address <i>Power Quality Electrical Svs c/o Tejinder Singh 7210 Bancroft Ave Oakland, CA 94605</i>				Site <i>2101117</i> <i>7210 Bancroft Ave. Oakland, CA 94605</i>													
4. Generator's Phone (<i>510</i>) <i>558-0109</i>																	
5. Transporter 1 Company Name <i>Blaine Tech Services</i>		6. US EPA ID Number _____		A. State Transporter's ID _____		B. Transporter 1 Phone <i>310-885-4455</i>											
7. Transporter 2 Company Name _____		8. US EPA ID Number _____		C. State Transporter's ID _____		D. Transporter 2 Phone _____											
9. Designated Facility Name and Site Address <i>Seaport Environmental 700 Seaport Blvd. Redwood City, CA 94063</i>				10. US EPA ID Number <i>000013572</i>		E. State Facility's ID _____											
				F. Facility's Phone <i>415-3104-1024</i>													
11. WASTE DESCRIPTION						12. Containers		13. Total Quantity		14. Unit Wt./Vol.							
						No.		Type									
						<i>1</i>		<i>TT</i>		<i>3</i>		<i>G</i>					
G. Additional Descriptions for Materials Listed Above						H. Handling Codes for Wastes Listed Above											
15. Special Handling Instructions and Additional Information <i>wear protective equipment while handling weights and volumes are approximate 24 hr emergency phone (710) 895-8455</i>												<i>Approval No 580-2049 Direct bill Blaine Tech</i>					
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 <i>Cartea Group</i>								Signature <i>[Signature]</i>				Date <i>5/10/12</i>					
17. Transporter 1 Acknowledgement of Receipt of Materials <i>on behalf of Power Quality Elec. Svs</i>								Signature <i>[Signature]</i>				Date <i>5/29/12</i>					
Printed/Typed Name <i>Gregory Roberts</i>								Signature <i>[Signature]</i>				Date <i>5/29/12</i>					
18. Transporter 2 Acknowledgement of Receipt of Materials								Signature				Date					
Printed/Typed Name								Signature				Date					
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 <i>Joaquin D. Canoa</i>								Signature <i>[Signature]</i>				Date <i>06/22/12</i>					

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NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>na</i>		Manifest Document No. <i>2101117-0512</i>	2. Page 1 of 1
3. Generator's Name and Mailing Address <i>Power Quality & Electrical Svc c/o Tesindan Singh 7210 Bancroft Ave Oakland, CA 94605</i>		4. Generator's Phone <i>510 553-0109</i>		Site # <i>2101117</i> <i>7210 Bancroft Ave Oakland, CA 94605</i>	
5. Transporter 1 Company Name <i>Blaine Tech Services</i>		6. US EPA ID Number _____		A. State Transporter's ID _____	
7. Transporter 2 Company Name _____		8. US EPA ID Number _____		B. Transporter 1 Phone <i>310-885-4455</i>	
9. Designated Facility Name and Site Address <i>Seaport Environmental 700 Seaport Blvd, Redwood City, CA 94063</i>		10. US EPA ID Number <i>000013572</i>		C. State Transporter's ID _____	
				D. Transporter 2 Phone _____	
				E. State Facility's ID _____	
				F. Facility's Phone <i>1050-3104-1034</i>	
11. WASTE DESCRIPTION			12. Containers		13. Total Quantity
			No.	Type	14. Unit Wt./Vol.
a. <i>non hazardous waste liquid</i>			<i>1</i>	<i>TT</i>	<i>5</i>
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Wear protective equipment while handling weight and volume are approximate 24 hr emergency phone (310) 885-4455</i>					
<i>Approved No. 500-1049 Direct bill Blaine Tech</i>					
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 <i>Antea Group</i>					Date
Signature <i>Verlyne Thao</i>					Month Day Year <i>5/29/12</i>
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Daniel Allen</i>			Signature <i>Daniel Allen</i>		Date Month Day Year <i>6/27/12</i>
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Date Month Day Year
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 <i>Josquin D. Amador</i>					Date
Signature <i>[Signature]</i>					Month Day Year <i>06/12/12</i>

NON-HAZARDOUS WASTE

GENERATOR

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