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April 26, 2012

Ms. Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Quarterly Summary Report, First Quarter 2012

**Site: 76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California
Fuel Leak Case No. RO0000219**

Dear Ms. Jakub;

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:

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Sincerely,

PACIFIC CONVENIENCE & FUEL

LIZ BERMUDEZ
Senior Paralegal
Division, Unit, or Group

Attachment

Quarterly Summary Report, First Quarter 2012

*76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California*

*Alameda County Health Care Services
Agency Fuel Leak Case No. R00000219*

*San Francisco Bay, Regional Water Quality
Control Board Case No. 01-1601*

GeoTracker Global ID No. T0600101476

Antea Group Project No. I42705191

April 23, 2012

Prepared for:
Ms. Barbara Jakub
Hazardous Materials Specialist
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Services Agency
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1.0 INTRODUCTION

Antea™ Group is pleased to submit this *Quarterly Summary Report, First Quarter 2012*, for the referenced site in Oakland, California (**Figure 1**). The subject site is an operating 76 station located on the southwestern corner of Hegenberger Road and Edgewater Drive in Oakland, California. Station facilities include three underground storage tanks (USTs), two dispenser islands, a station building, and a carwash. A total of fourteen groundwater monitoring wells are located at or near the site (**Figures 1 and 2**). Please refer to **Appendix A** for additional site information and for the history of environmental investigations and remedial actions.

This report summarizes the data obtained from the recent groundwater monitoring and sampling event conducted on March 6, 2012. Included herein are site figures and groundwater contaminant data tables and a discussion of trends. This report has received a technical review by Mr. Dennis Dettloff, California Professional Geologist No. 7480.

1.1 Work Performed [First Quarter 2012]

1. Antea Group submitted the *Quarterly Summary Report, Fourth Quarter 2011*, dated January 19, 2012 to the Alameda County Health Care Services Agency (ACHCSA).
2. Blaine Tech Services, Inc. (Blaine Tech) conducted the first quarter 2012 groundwater monitoring and sampling event on March 6, 2012.
3. Antea Group conducted a site investigation on March 6, 2012. The investigation consisted of the advancement of five (5) hydraulic profile borings (HPB-1 through HPB-5).

1.2 Work Proposed [Second Quarter 2012]

1. Antea Group will submit the *Quarterly Summary Report, First Quarter 2012* (contained herein) to the ACHCSA.
2. Blaine Tech will conduct the second quarter 2012 monitoring and sampling event.
3. Antea Group will submit a work plan for initiating a pilot test for in-situ remediation. The work plan will also document the results of the site investigation conducted on March 6, 2012.

2.0 CURRENT PROJECT STATUS

Current phase of project:	Quarterly Groundwater Monitoring
Local Oversight Program (LOP) – Lead agency for cleanup oversight:	Alameda County Health Care Services Agency Case No. RO0000219
Secondary agency(s):	San Francisco Bay Regional Water Quality Control Board
Monitoring well gauging schedule:	Quarterly: MW-3, MW-6 through MW-12, MW-12A, and MW-13 through MW-17

Monitoring well sampling schedule:	Quarterly: MW-6, MW-10, MW-11, MW-12, MW-12A, and MW-13 through 17 Semi-Annual (second and fourth quarters): MW-3 and MW-7 through MW-9
Total number of monitoring/remediation wells (Table 1):	Fourteen (MW-3, MW-6 through MW-12, MW-12A, and MW-13 through MW-17).
Range of well depths (total depth below ground surface, bgs) (Table 1):	Wells are set from 13 feet to 34 feet bgs.
Wells with historical measurable LNAPL (light non-aqueous phase liquid):	Former monitoring wells MW-1 and MW-2 and current monitoring well MW-6
Historical depth to water range, in feet below top of casing (BTOC):	Min: 0.07 (MW-9, Q1 2005) Max: 8.42 (MW-6, Q4 2010)
Historical groundwater elevation range (ft) for monitoring wells MW-1 through MW-17	Min: 2.77 (MW-3, Q3 1994) Max: 9.17 (MW-9, Q4 2010)
Local receptors:	See Appendix A
Current remediation technique	None

2.1 Regulatory Correspondence

No regulatory correspondence were sent to or received from the ACHCSA during the first quarter 2012.

2.2 Remedial Activities

No remedial activities took place during the first quarter 2012.

2.3 Groundwater Monitoring

For the first quarter 2012 groundwater monitoring and sampling event, fourteen wells were gauged and ten wells were purged and sampled by Blaine Tech per standard sampling protocol (**Appendix B**). Copies of Blaine Tech's field data sheets are presented as **Appendix C**. The recent gauging and sampling data are summarized below and in **Table 2**. Historical gauging and sampling data are summarized in **Tables 3, 3a, 3b, and 3c**.

Well gauging and sampling date:	March 6, 2012
Wells gauged:	MW-3, MW-6 through MW-12, MW-12A, and MW-13 through MW-17
Wells sampled:	MW-6, MW-10, MW-11, MW-12, MW-12A, and MW-13 through 17
Purge method:	3 well casing volumes via electric, submersible pump
Sample collection method:	Disposable bailers
Groundwater parameters measured (Attachment C):	Temperature, pH, Conductivity, and Dissolved Oxygen (DO)
Wells with measurable LNAPL:	None
Current depth to water range (ft BTOC):	Min: 2.31 (MW-11) Max: 5.37 (MW-13)
Current groundwater elevation range (ft):	Min: 5.71 (MW-13) Max: 8.42 (MW-15)

Change in water depths from previous event (average change for all gauged wells):	0.05 foot increase
Groundwater flow direction and gradient in foot per foot (ft/ft):	South-Southeast at 0.01 ft/ft

2.3.1 Groundwater Flow Gradient and Directional Trends

The first quarter 2012 groundwater monitoring and sampling event was performed by Blaine Tech on March 6, 2012. The average groundwater elevation decreased 0.05 feet from the December 2011 event. Depth to groundwater in the site monitoring wells ranged from 2.31 feet (MW-11) to 5.37 feet (MW-13) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the south-southeast at 0.01 ft/ft during the current event which is consistent with the historical groundwater flow direction and gradient (**Table 4**).

2.3.2 Groundwater Quality Data

Groundwater samples collected during the first quarter 2012 were submitted with chain-of-custody (COC) documentation to Pace Analytical Services, Inc. (Pace), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 01153CA). The complete analytical report and Antea Group's laboratory data validation checklist is presented as **Appendix D**. Groundwater samples were analyzed for one or more of the following:

- Total petroleum hydrocarbons as gasoline (TPHg) by CA LUFT Method;
- Diesel Range Organics (DRO) [silica gel treated] by Environmental Protection Agency (EPA) Method 8015B;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), and ethanol by EPA Method 8260;

Groundwater analytical results are presented in **Table 2** (current) and **Tables 3, 3a, 3b, and 3c** (historical). The following ranges of contaminant concentrations were reported in the specified site wells groundwater samples collected on March 6, 2012. Only the reported contaminants are listed in the table below.

Constituents	Number of Reported Samples Above LRL of the Samples Collected	Minimum Reported Concentration, in µg/L (Sample ID)	Maximum Reported Concentration, in µg/L (Sample ID)
TPHg	6 of 10	63.9** (MW-13)	55,000 (MW-6)
DRO	7* of 10	52.0 (MW-12A)	14,800 (MW-6)
Benzene	4 of 10	193 (MW-12)	2,090 (MW-17)
Toluene	4 of 10	15.0 (MW-14)	131 (MW-6)
Ethylbenzene	4 of 10	28.8 (MW-12)	2,330 (MW-14)
Total Xylenes	4 of 10	80.5 (MW-12)	4,730 (MW-6)
MTBE	7 of 10	1.1 (MW-17)	1,090 (MW-16)
TBA	9 of 10	5.7 (MW-11)	481 (MW-17)

Explanations:

µg/L = Micrograms per liter

LRL = Laboratory reporting limit

*= The DRO results for these samples did not match the pattern of the laboratory standard for diesel.

**=The TPHg result for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of MTBE in the sample.

2.2.3 Groundwater Contaminant Trends

During the first quarter 2012, analytical results from the sample collected from monitoring well MW-6 indicated that DRO and TPHg decreased in concentration and BTEX, and MTBE increased in concentration. MTBE concentrations in monitoring well MW-11 increased. Analytical results from the groundwater sample collected from monitoring well MW-12 indicated a decrease in DRO, TPHg, BTEX, and MTBE. Analytical results from the groundwater sample collected from monitoring well MW-12a indicated an increase in DRO concentrations. Analytical results from the groundwater sample collected from monitoring well MW-13 indicated a decrease in TPHg and MTBE concentrations. Analytical results from the groundwater sample collected from monitoring well MW-14 indicated a decrease in DRO concentrations and an increase in BTEX concentrations. Analytical results from the groundwater sample collected from monitoring well MW-15 indicated a decrease in TPHg, benzene, and MTBE concentrations and an increase in DRO concentrations. Analytical results from the groundwater sample collected from monitoring well MW-16 indicated an increase in DRO concentrations and a decrease in TPHg and MTBE concentrations. Analytical results from the groundwater sample collected from monitoring well MW-17 indicated a decrease in DRO, TPHg, and BTEX concentrations. Isoconcentration maps for TPHg, benzene, MTBE, and DRO are presented on **Figures 4** through **7** and historical groundwater flow directions are shown on **Figure 8**.

2.3.4 Waste Disposal Summary

Approximately 118 gallons of waste water were generated during well purging/sampling and equipment cleaning during the first quarter event. The waste water was transported to Blaine Tech’s bulk facility in San Jose, California. After the batching process, the wastewater was transported to Seaport Environmental in Redwood City, California for disposal.

2.3.5 Quality Assurance / Quality Control

Antea Group’s QA/QC measures included use of a field duplicate and a detailed QA/QC data validation check on the Pace Laboratory analytical results for the March 2012 sampling event. Antea Group’s laboratory data validation checklist and the Pace laboratory report are presented as **Appendix D**.

Laboratory QA/QC Performed:	Yes (validated by Antea Group)
Laboratory Data Qualifiers:	Yes – nine qualifiers*
Are the data valid for their intended purpose?	Yes, the data are valid

*1n – Sample results were confirmed by an out-of-hold analysis associated with a passing CCV.

*2n – The TPHg result for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of MTBE in the sample.

*CH – The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

*D4 – Sample was diluted due to the presence of high levels of target analytes.

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

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

*S3 – Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

*T4 – Result reported for hydrocarbons within the method-specific range that do not match pattern of laboratory standard.

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

Antea Group recommends that monitoring wells MW-6 through MW-17 be added to the list of monitoring wells that currently include MW-3, MW-7, MW-8, and MW-9 to be purged and sampled on a semi-annual basis.

Based on the data from the recent site investigation and groundwater monitoring at this site, the petroleum hydrocarbon and fuel oxygenate impact to the groundwater reported in monitoring well MW-12A was due to drilling activities during the installation of this monitoring well. The data indicates that the groundwater monitored by this well at 30 feet to 34 feet bgs is not impacted at actionable concentrations and; therefore, Antea Group recommends that this monitoring well be destroyed.

4.0 REMARKS

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

Prepared by:



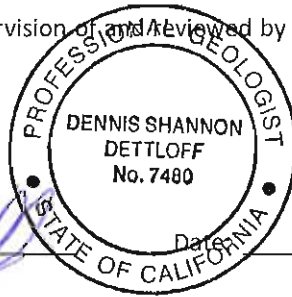
Edward T. Weyrens, G.I.T.
Staff Geologist

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 appears below.

Licensed Approver:



Dennis S. Dettloff
Project Manager
California Registered Professional Geologist No. 7480



Date

4/25/12

cc: GeoTracker (upload)

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- Figure 7 Dissolved Phase DRO Isoconcentration Map – March 6, 2012
- Figure 8 Historical Groundwater Flow Directions

EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL

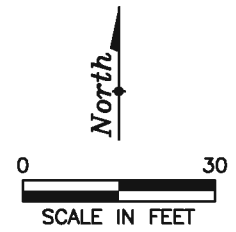
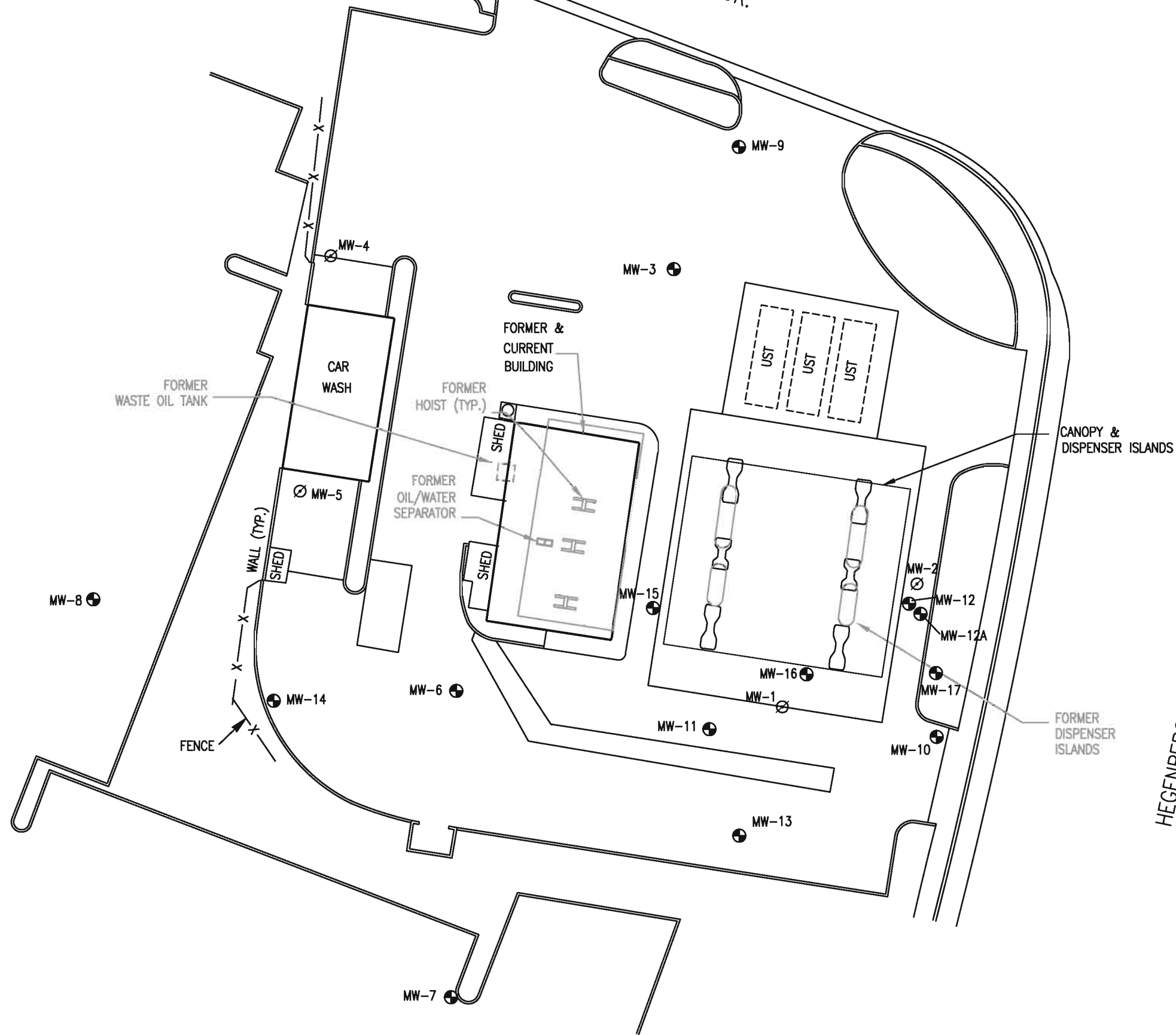

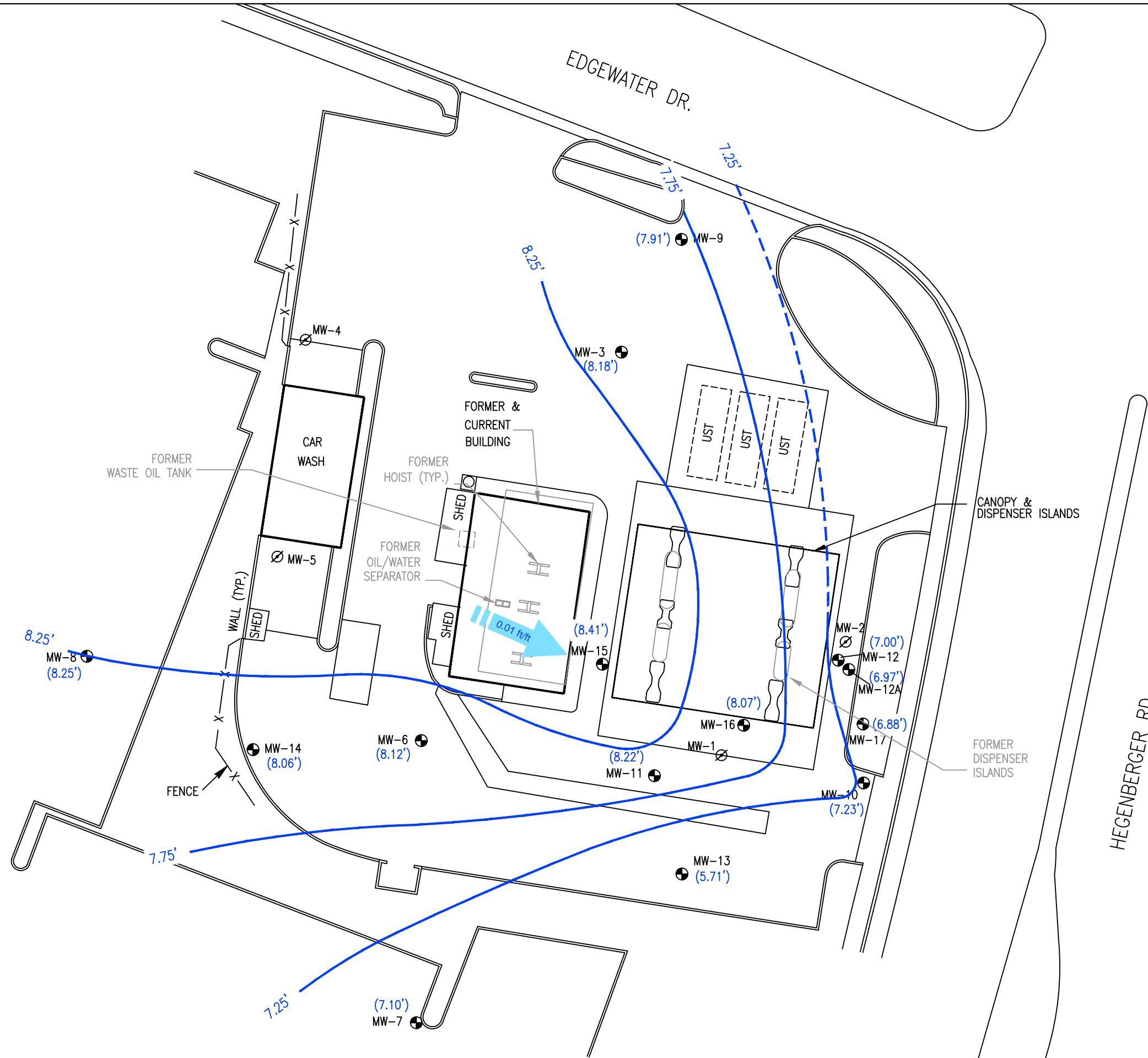


FIGURE 2
SITE PLAN

76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY DD	DRAWN BY JH	
DATE 5/26/11	REVIEWED BY DD	FILE NAME 5191-SiteS	



LEGEND

- MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL
- (8.22) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (ft/msl)
- 8.25' — GROUNDWATER CONTOUR LINE (ft/msl) — DASHED WHERE INFERRED (CONTOUR INTERVAL: 0.50 ft)
- ← 0.01 ft/ft ||| GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT

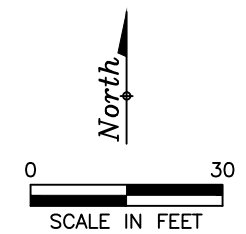
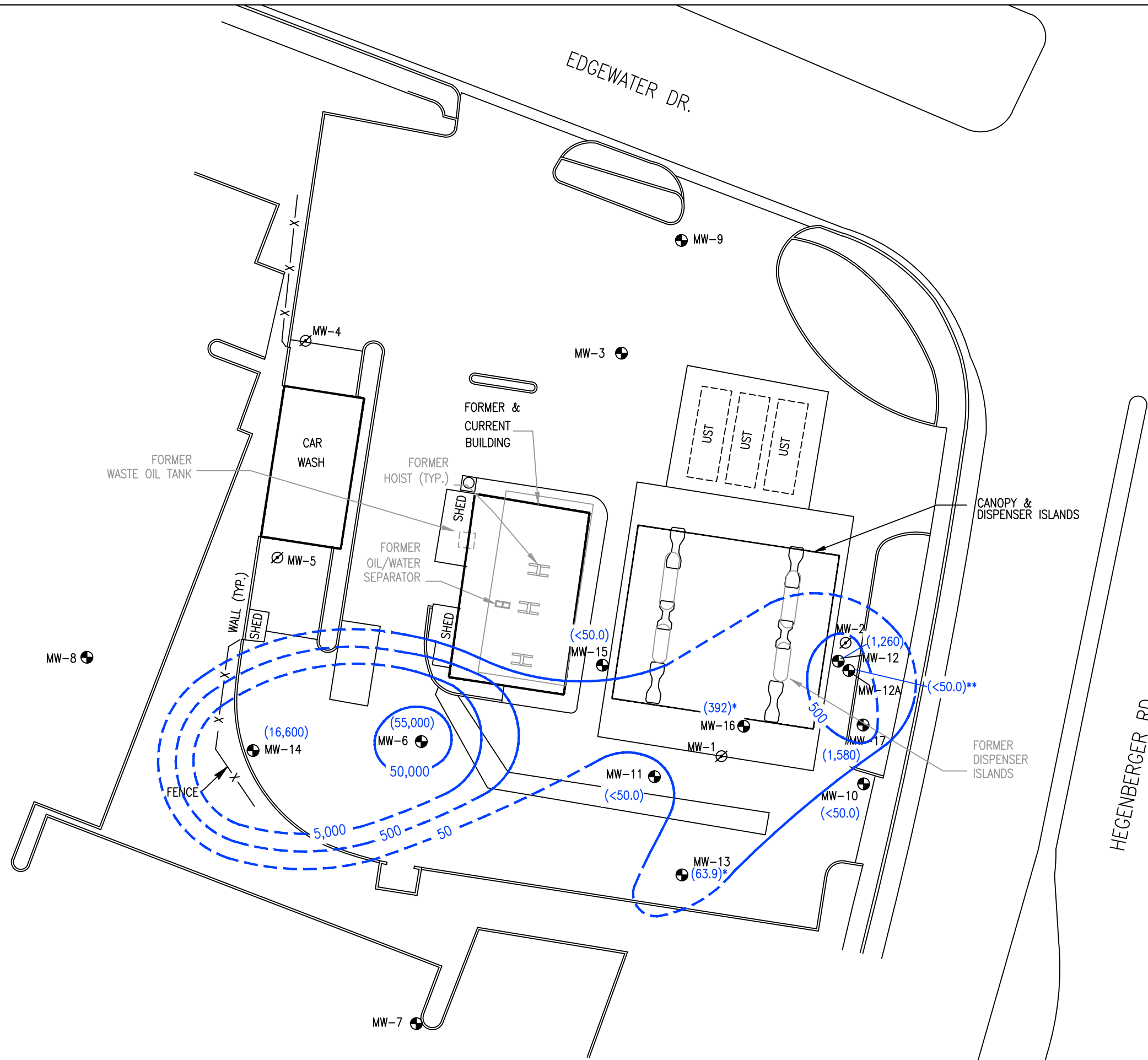


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
 MARCH 6, 2012
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. I42705191	PREPARED BY DD	DRAWN BY JH	
DATE 04/23/12	REVIEWED BY DD	FILE NAME 5191-SiteS	



LEGEND

- MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL
- (55,000) DISSOLVED PHASE TPHg ISOCONCENTRATION (µg/L)
- 5,000 — DISSOLVED PHASE TPHg ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

- TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- µg/L = MICROGRAMS PER LITER
- <50 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
- * = TPHg DID NOT MATCH PATTERN OF LABORATORY STANDARD FOR GASOLINE. THIS IS LIKELY DUE TO THE PRESENCE OF MTBE.
- ** = NOT USED IN CONTOURING

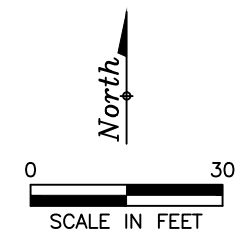
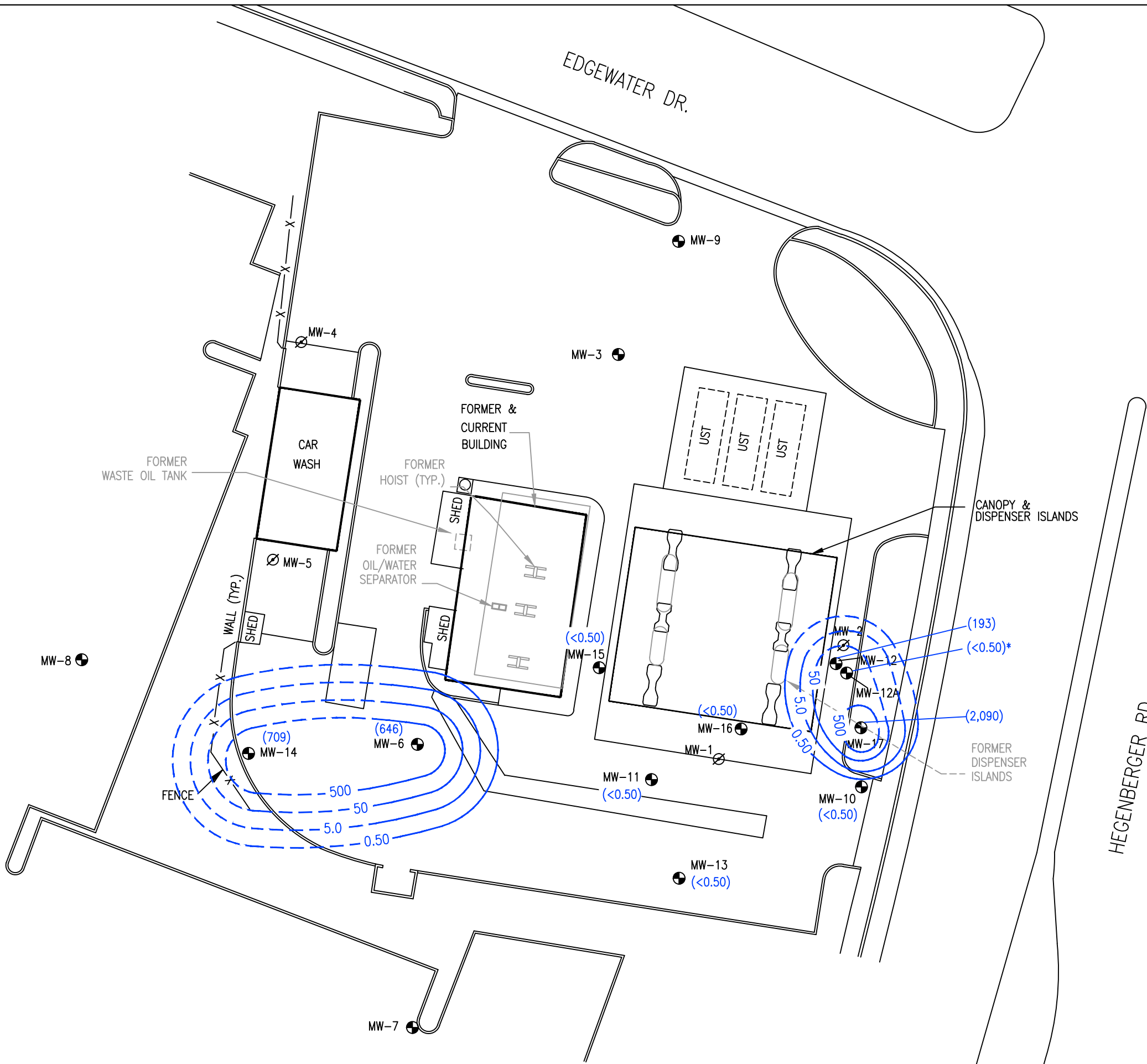


FIGURE 4
 DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
 MARCH 6, 2012
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. I42705191	PREPARED BY EW	DRAWN BY JH	
DATE 04/23/12	REVIEWED BY DD	FILE NAME 5191-SiteS	



LEGEND

- MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL
- (2090) DISSOLVED PHASE BENZENE ISOCONCENTRATION (µg/L)
- 500 — DISSOLVED PHASE BENZENE ISOCONTOUR (µg/L) -DASHED WHERE INFERRED

NOTES:

- µg/L = MICROGRAMS PER LITER
- <0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
- * = NOT USED IN CONTOURING

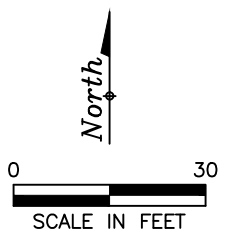
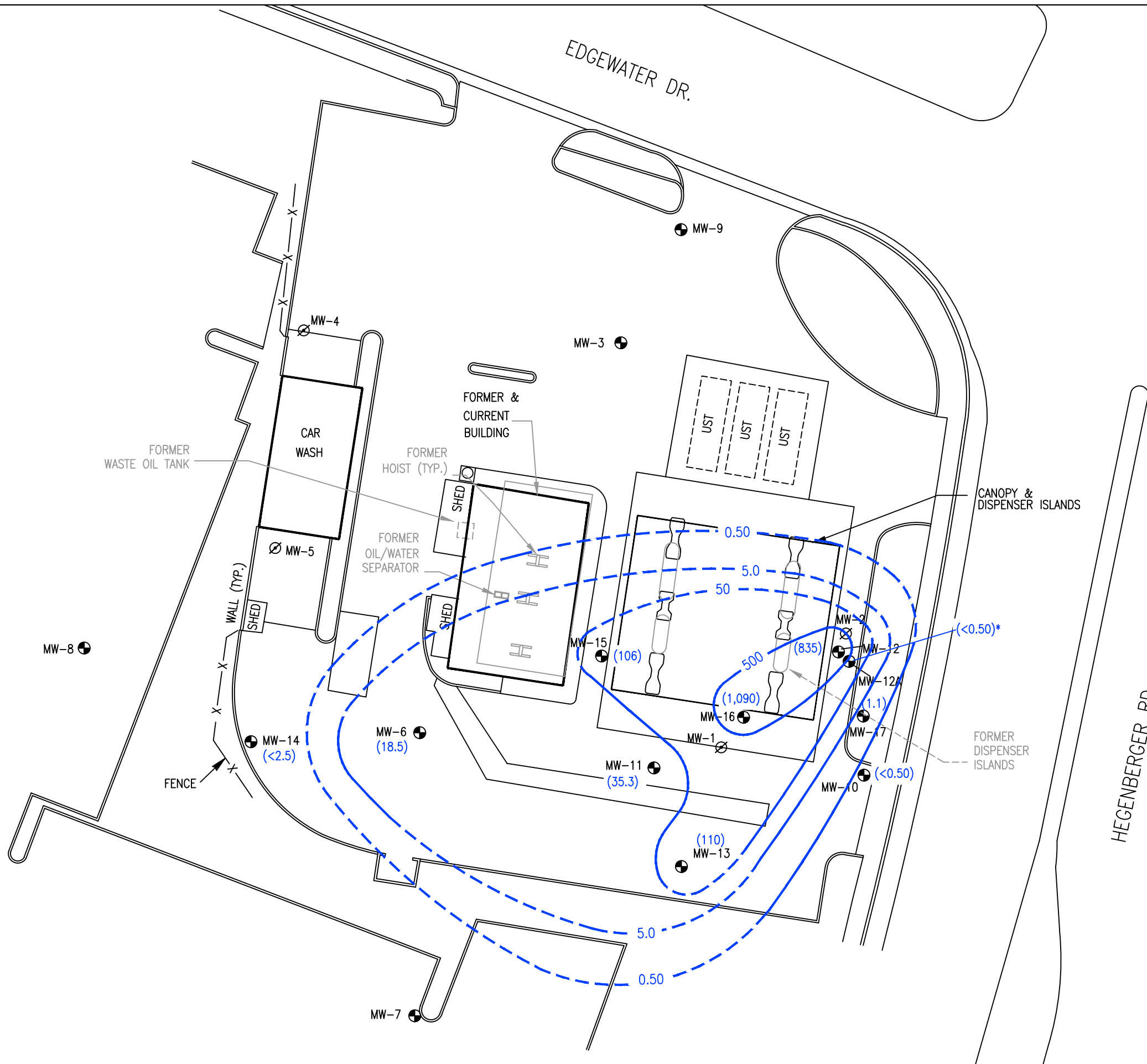


FIGURE 5
 DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
 MARCH 6, 2012
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. I42705191	PREPARED BY EW	DRAWN BY JH
DATE 4/23/12	REVIEWED BY DD	FILE NAME 5191-SiteS





LEGEND

- MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL
- (142) DISSOLVED PHASE MTBE ISOCONCENTRATION ($\mu\text{g/L}$)
- 50 — DISSOLVED PHASE MTBE ISOCONTOUR ($\mu\text{g/L}$)
-DASHED WHERE INFERRED

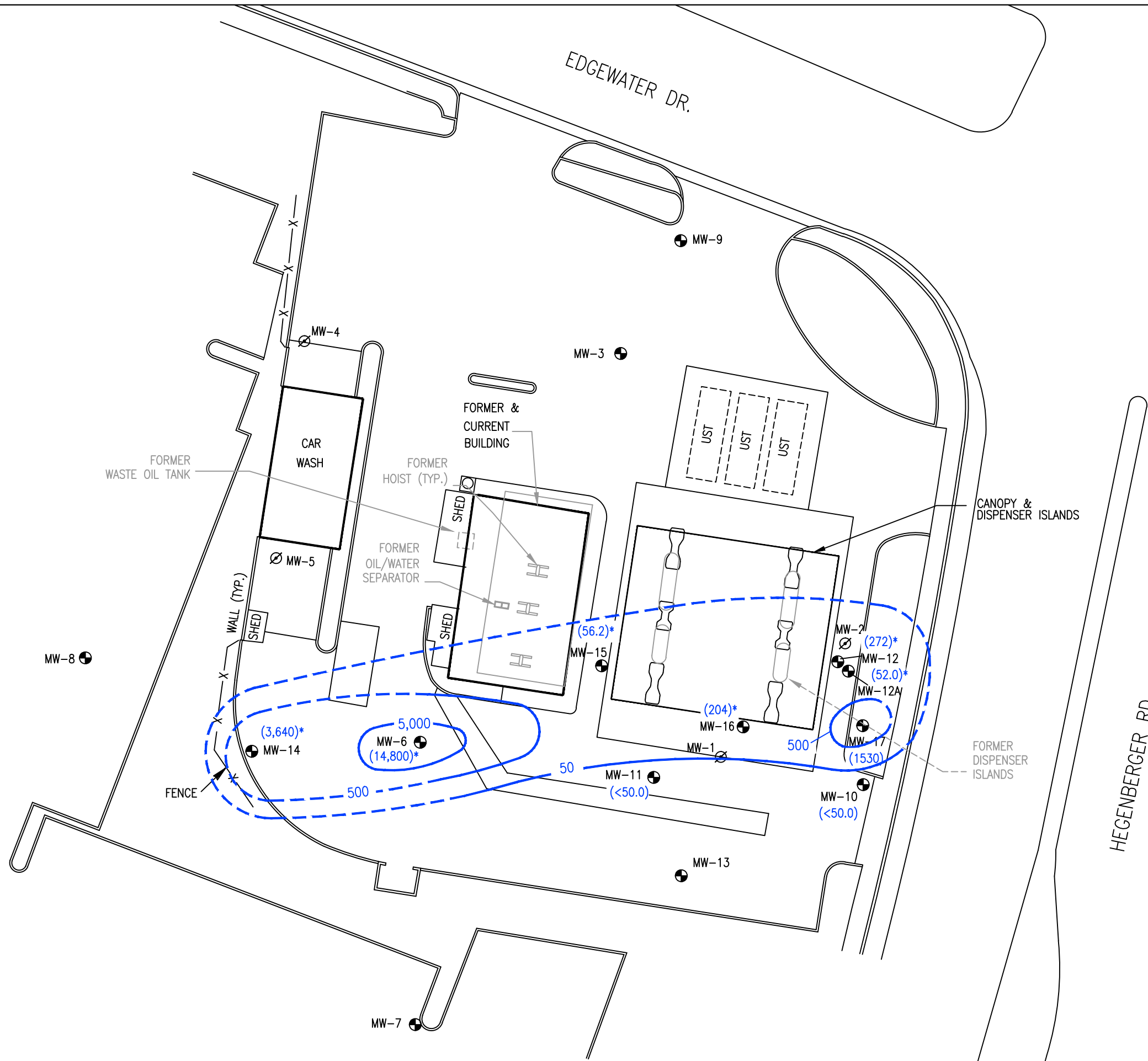
NOTES:

MTBE = METHYL TERTIARY BUTYL ETHER
 $\mu\text{g/L}$ = MICROGRAMS PER LITER
 <0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
 * = NOT USED IN CONTOURING

FIGURE 6
 DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
 MARCH 6, 2012
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. I42705191	PREPARED BY EW	DRAWN BY JH
DATE 4/23/12	REVIEWED BY DD	FILE NAME 5191-SiteS





LEGEND

- MW- MONITORING WELL
- ⊘ MW- ABANDONED MONITORING WELL
- (272)* DISSOLVED PHASE DRO ISOCONCENTRATION (µg/L)
- 500 — DISSOLVED PHASE DRO ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

DRO = DIESEL RANGE ORGANICS
 µg/L = MICROGRAMS PER LITER
 <50.0 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
 * = DRO DID NOT MATCH THE PATTERN OF THE LABORATORY STANDARD FOR DIESEL.

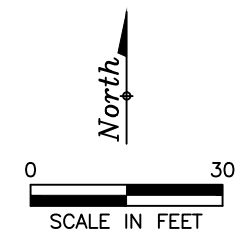
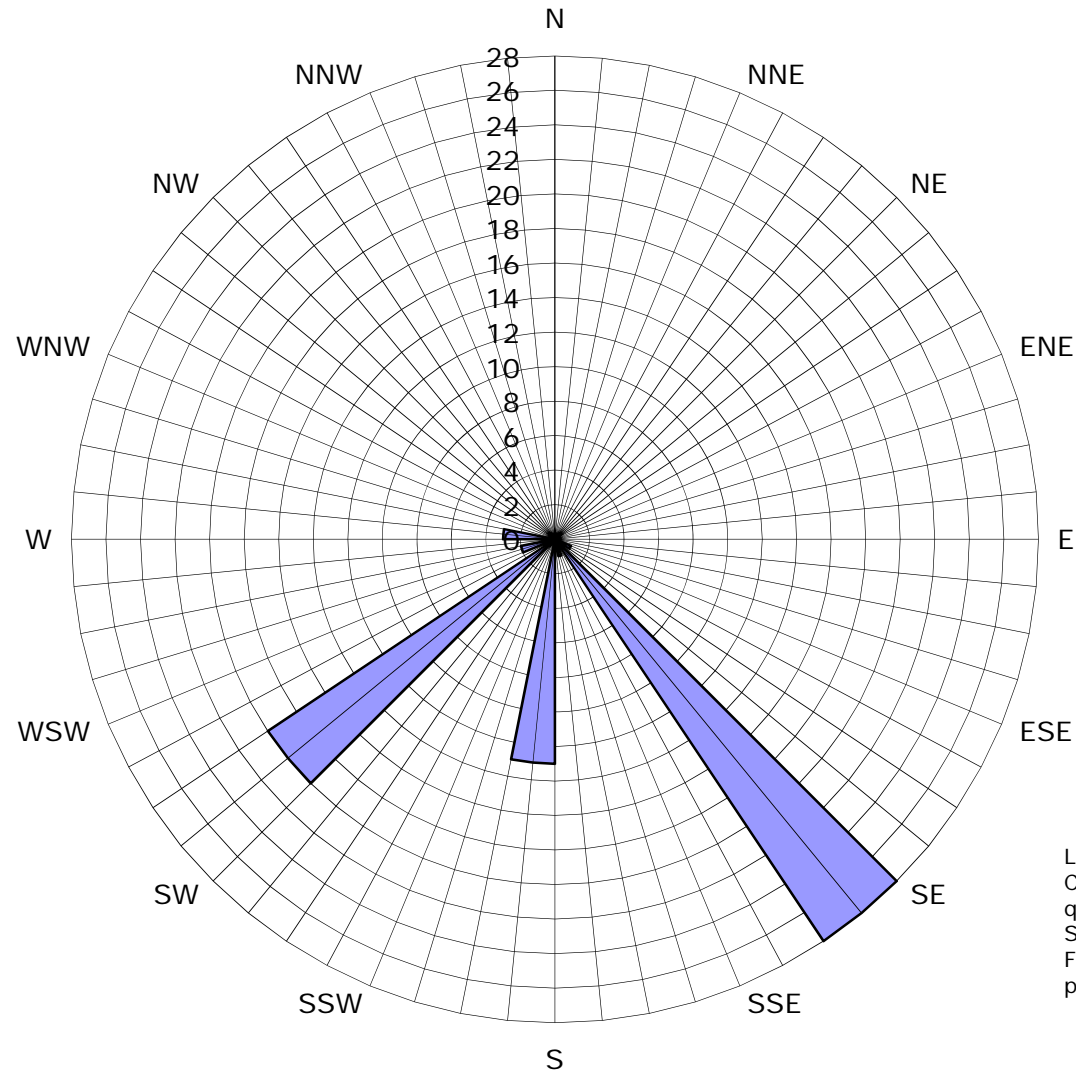


FIGURE 7
 DISSOLVED PHASE DRO ISOCONCENTRATION MAP
 MARCH 6, 2012
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. I42705191	PREPARED BY EW	DRAWN BY JH	
DATE 4/23/12	REVIEWED BY DD	FILE NAME 5191-SiteS	

Figure 8
Historical Groundwater Flow Directions
76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California



Legend
Concentric circles represent
quarterly monitoring events
Second Quarter 1992 through
First Quarter 2012. 68 data
points shown

■ Groundwater Flow Direction

Tables

Table 1	Well Construction Details
Table 2	Current Groundwater Gauging and Analytical Data
Table 3	Historical Groundwater Gauging and Analytical Data
Table 3a	Additional Historical Groundwater Analytical Data
Table 3b	Additional Historical Groundwater Analytical Data
Table 3c	Additional Historical Groundwater Analytical Data
Table 4	Historical Groundwater Gradient and Flow Direction Data

Table 1
Well Construction Details
 76 Station No. 5191/5043
 449 Hegenberger Road
 Oakland, CA

Well I.D.	Drill Date	Well		Screen		Screen Length (feet)	Comments
		Depth (feet bgs)	Diameter (inches)	Top (feet bgs)	Bottom (feet bgs)		
Monitoring Wells							
MW-1	02/05/91	13.5	2	2.0	13.0	11.0	Abandoned
MW-2	02/05/91	15.0	2	3.0	15.0	12.0	Abandoned
MW-3	02/05/91	14.0	2	2.0	14.0	12.0	
MW-4	08/21/92	13.5	2	2.5	13.5	11.0	Abandoned
MW-5	08/21/92	13.5	2	2.5	13.5	11.0	Abandoned
MW-6	08/21/92	13.5	2	2.5	13.5	11.0	
MW-7	04/21/97	13.0	2	3.0	13.0	10.0	
MW-8	04/21/97	15.0	2	3.0	15.0	12.0	
MW-9	01/25/95	13.0	2	3.0	13.0	10.0	
MW-10	01/25/95	13.0	2	3.0	13.0	10.0	
MW-11	06/22/10	20.0	4	5.0	20.0	15.0	
MW-12	06/22/10	20.0	4	5.0	20.0	15.0	
MW-12A	06/23/10	34.0	2	30.0	34.0	4.0	
MW-13	06/22/10	15.0	2	5.0	15.0	10.0	
MW-14	05/17/11	13.0	2	3.0	13.0	10.0	
MW-15	05/17/11	13.0	2	3.0	13.0	10.0	
MW-16	05/17/11	13.0	2	3.0	13.0	10.0	
MW-17	05/18/11	13.0	2	3.0	13.0	10.0	
Explanation							
Wells are of poly-vinyl-chloride (PVC) construction							
bgs = Below ground surface							

TABLE 2
CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	TBA (ug/L)	Ethanol (ug/L)
MW-3	3/6/2012	10.81	2.63	NP	8.18	--	--	--	--	--	--	--	--	--
MW-6	3/6/2012	11.55	3.43	NP	8.12	14,800 T4	55,000	1,020	131	1,320	4,730	18.5	316	<1250
MW-7	3/6/2012	11.64	4.54	NP	7.10	--	--	--	--	--	--	--	--	--
MW-8	3/6/2012	11.32	3.07	NP	8.25	--	--	--	--	--	--	--	--	--
MW-9	3/6/2012	10.94	3.03	NP	7.91	--	--	--	--	--	--	--	--	--
MW-10	3/6/2012	10.97	3.74	NP	7.23	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	58.7	<250
MW-11	3/6/2012	10.53	2.31	NP	8.22	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	35.3	5.7	<250
MW-12	3/6/2012	11.01	4.01	NP	7.00	272 T4	1,260	193	22.6	28.8	80.5	835	78.4	<250
MW-12A	3/6/2012	11.29	4.32	NP	6.97	52.0 T4	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<250
MW-13	3/6/2012	11.08	5.37	NP	5.71	<50.0	63.9 1n	<0.50	<0.50	<0.50	<1.5	110	38.5	<250
MW-14	3/6/2012	12.00	3.94	NP	8.06	3,640 T4	16,600	959	15.0	2,330	3,830	<2.5	28.1	<1250
MW-15	3/6/2012	11.11	2.69	NP	8.42	56.2 T4	<50.0	<0.50	<0.50	<0.50	<1.5	106	101	<250
MW-16	3/6/2012	10.98	2.91	NP	8.07	204 T4	392 1n	<0.50	<0.50	<0.50	<1.5	1,090	134	<250
MW-17	3/6/2012	11.52	4.64	NP	6.88	1,530 T4	1,580	2,090	23.8	39.3	166	1.1	481	<250

Gauging Notes:

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

Analytical Notes:

< - Below the laboratory's indicated reporting limit
Bold - Above the laboratory's indicated reporting limit
ug/L - micrograms/liter
DRO- diesel range organics
TPHg- total petroleum hydrocarbons as gasoline
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
1n- The TPHg results for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of MTBE in the sample.
T4- Result reported for the hydrocarbons within the method-specific range that do not match pattern of laboratory standard.

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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	1/14/1998	8.04	2.16	NP	5.88	340	310	ND	ND	0.62	0.65	140	--	--	--	--	--	--	--
	4/1/1998	8.04	2.20	NP	5.84	320	370	5.7	ND	ND	ND	93	--	--	--	--	--	--	--
	7/15/1998	8.04	3.38	NP	4.66	510	460	ND	ND	ND	ND	230	--	--	--	--	--	--	--
	10/16/1998	8.04	2.30	NP	5.74	67	330	4.7	ND	ND	ND	60	--	--	--	--	--	--	--
	1/25/1999	8.04	2.42	NP	5.62	120	420	1.5	ND	ND	ND	180	--	--	--	--	--	--	--
	4/15/1999	8.04	2.16	NP	5.88	170	290	0.54	ND	ND	ND	160	--	--	--	--	--	--	--
	7/14/1999	8.04	2.35	NP	5.69	420	290	3.2	ND	ND	ND	160	--	--	--	--	--	--	--
	10/21/1999	8.04	2.49	NP	5.55	350	360	0.77	ND	ND	ND	82	--	--	--	--	--	--	--
	1/20/2000	8.04	2.38	NP	5.66	2060	ND	0.81	ND	ND	ND	54	--	--	--	--	--	--	--
	4/13/2000	8.04	2.76	NP	5.28	200	250	0.69	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND
	7/14/2000	8.04	3.26	NP	4.78	423	345	ND	ND	ND	ND	94.7	--	--	--	--	--	--	--
	10/26/2000	8.04	3.12	NP	4.92	330	480	6.0	ND	ND	ND	120	--	--	--	--	--	--	--
	1/3/2001	8.04	3.65	NP	4.39	287	364	1.59	ND	ND	ND	118	--	--	--	--	--	--	--
	4/4/2001	8.04	3.98	NP	4.06	360	417	1.24	ND	ND	0.802	237	--	--	--	--	--	--	--
	7/17/2001	8.04	3.12	NP	4.92	270	480	ND	ND	ND	ND	150	--	--	--	--	--	--	--
	10/1/2001	8.04	3.25	NP	4.79	270	310	1.0	<0.50	<0.50	<0.50	53	--	--	--	--	--	--	--
	1/31/2002	8.04	2.27	NP	5.77	250	250	3.5	<1.0	<1.0	<1.0	110	--	--	--	--	--	--	--
	4/18/2002	8.04	3.55	NP	4.49	320	300	<2.0	<2.0	<2.0	<2.0	59	--	--	--	--	--	--	--
	7/28/2002	8.04	2.55	NP	5.49	310	500	<0.50	<0.50	<0.50	<1.0	130	--	--	--	--	--	--	--
	10/9/2002	8.04	2.47	NP	5.57	700	690	<5	<5	<5	<10	120	--	--	--	--	--	--	--
	1/2/2003	8.04	1.70	NP	6.34	210	310	<0.50	<0.50	<0.50	<1.0	110	<2.0	<2.0	<2.0	<100	<500	<2.0	<2.0
	4/1/2003	8.04	3.48	NP	4.56	200	250	<1.0	<1.0	<1.0	<2.0	210	--	--	--	--	--	--	--
	7/1/2003	8.04	2.65	NP	5.39	380	450	<2.5	<2.5	<2.5	<5.0	70	--	--	--	--	<2500	--	--
	10/2/2003	8.04	3.12	NP	4.92	300	<250	<2.5	<2.5	<2.5	<5.0	210	--	--	--	--	<2500	--	--
	1/9/2004	8.04	2.39	NP	5.65	200	300	<0.50	0.53	0.53	1.5	66	--	--	--	--	<500	--	--
	4/26/2004	8.04	3.11	NP	4.93	160	440	2.5	5.5	2.9	9.4	81	--	--	--	--	<50	--	--
	7/22/2004	8.04	2.51	NP	5.53	330	420	<0.5	<0.5	<0.5	<1	72	--	--	--	--	<1000	--	--
	10/29/2004	8.04	2.00	NP	6.04	200	460	5.6	15	10	46	48	--	--	--	--	<50	--	--
	1/10/2005	8.04	1.52	NP	6.52	250	280	<0.50	0.62	<0.50	2.4	64	--	--	--	--	<50	--	--
	6/15/2005	8.04	2.00	NP	6.04	360	460	<0.50	0.70	0.56	1.9	110	--	--	--	--	<50	--	--
	9/27/2005	8.04	1.90	NP	6.14	<200	210	<0.50	0.60	<0.50	<1.0	100	<0.50	<0.50	<0.50	79	<250	--	--
	12/13/2005	8.04	2.35	NP	5.69	230	230	<0.50	<0.50	<0.50	<1.0	92	--	--	--	--	<250	--	--
	3/23/2006	8.04	1.84	NP	6.20	260	290	<0.50	<0.50	<0.50	<1.0	88	--	--	--	--	<250	--	--
	6/23/2006	8.04	2.26	NP	5.78	330	500	<0.50	<0.50	<0.50	<1.0	75	--	--	--	--	<250	--	--
	9/26/2006	8.04	2.08	NP	5.96	260	270	<0.50	<0.50	<0.50	<0.50	73	--	--	--	--	<250	--	--
	12/22/2006	8.04	1.88	NP	6.16	250	260	<0.50	<0.50	<0.50	1.2	71	--	--	--	--	<250	--	--
	3/30/2007	8.04	2.47	NP	5.57	210	390	<0.50	<0.50	<0.50	<0.50	120	--	--	--	--	<250	--	--
	6/28/2007	8.04	2.54	NP	5.50	290	370	<0.50	<0.50	<0.50	<0.50	55	--	--	--	--	<250	--	--
	9/25/2007	8.04	2.56	NP	5.48	210	350	<0.50	<0.50	<0.50	<0.50	61	--	--	--	--	<250	--	--
	12/28/2007	8.04	2.29	NP	5.75	150	260	<0.50	<0.50	<0.50	<1.0	66	--	--	--	--	<250	--	--
3/22/2008	8.04	3.26	NP	4.78	230	390	<0.50	<0.50	<0.50	<1.0	39	--	--	--	--	<250	--	--	
6/23/2008	8.04	2.60	NP	5.44	130	200	<0.50	<0.50	<0.50	<1.0	46	--	--	--	--	<250	--	--	
9/19/2008	8.04	3.45	NP	4.59	93	180	<0.50	<0.50	<0.50	<1.0	120	--	--	--	--	<250	--	--	
12/31/2008	8.04	2.55	NP	5.49	110	190	<0.50	<0.50	<0.50	<1.0	38	--	--	--	--	<250	--	--	
3/27/2009	8.04	2.37	NP	5.67	130	150	<0.50	<0.50	<0.50	<1.0	50	--	--	--	--	<250	--	--	
5/28/2009	8.04	3.32	NP	4.72	120	190	<0.50	<0.50	<0.50	<1.0	60	--	--	--	--	<250	--	--	
9/17/2009	8.04	2.63	NP	5.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2009	8.04	2.13	NP	5.91	338	300	<0.50	<0.50	0.78	<1.5	43.1	--	--	--	--	<250	--	--	
3/29/2010	8.04	2.22	NP	5.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/30/2010	10.81	2.91	NP	7.90	89.7	261	<0.50	<0.50	<0.50	<1.5	89.0	--	--	--	--	<250	--	--	
7/6/2010	10.81	2.66	NP	8.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/20/2010	10.81	3.12	NP	7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2010	10.81	2.37	NP	8.44	137	306	<0.50	<0.50	<0.50	<1.5	58.8	--	--	--	--	<250	--	--	

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76 Station No. 5191/5043
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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)	TPHg (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	3/17/1997	8.87	4.50	0.89	5.04	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/31/1997	8.87	4.65	1.00	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/15/1997	8.87	4.90	1.03	4.74	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/28/1997	8.87	4.78	0.03	4.11	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/15/1997	8.87	4.60	0.25	4.46	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/27/1997	8.87	4.50	0.25	4.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/9/1997	8.87	4.60	0.20	4.42	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/24/1997	8.87	4.50	0.25	4.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/9/1997	8.87	4.80	0.60	4.52	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/15/1997	8.87	4.63	0.42	4.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/21/1997	8.87	4.75	0.25	4.31	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/6/1997	8.87	4.50	0.10	4.45	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/20/1997	8.87	4.55	0.10	4.40	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/2/1997	8.87	4.75	0.05	4.16	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/9/1997	8.87	4.84	0.04	4.06	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/14/1998	8.87	3.90	0.94	5.68	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/12/1998	8.87	3.35	0.64	6.00	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/3/1998	8.87	4.51	0.02	4.38	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/1/1998	8.87	3.67	1.60	6.40	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/26/1998	8.87	4.11	0.50	5.14	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/15/1998	8.87	5.03	0.30	4.07	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/15/1998	8.87	4.56	0.05	4.35	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/21/1998	8.87	4.77	0.02	4.12	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/30/1998	8.87	5.08	0.03	3.81	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/16/1998	8.87	4.31	2.40	6.36	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/6/1998	8.87	3.98	0.17	5.02	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/25/1998	8.87	3.92	0.10	5.03	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/28/1998	8.87	3.90	0.20	5.12	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/25/1999	8.87	4.18	0.60	5.14	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/22/1999	8.87	4.07	0.22	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/22/1999	8.87	4.32	0.15	4.66	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/15/1999	8.87	4.23	0.95	5.35	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/28/1999	8.87	4.38	0.39	4.78	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/29/1999	8.87	4.12	0.02	4.77	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/14/1999	8.87	4.20	0.03	4.69	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/23/1999	8.87	4.51	0.24	4.54	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/30/1999	8.87	4.17	0.17	4.83	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/21/1999	8.87	4.27	0.12	4.69	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/29/1999	8.87	4.18	NP	4.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/20/1999	8.87	4.26	0.01	4.62	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
1/20/2000	8.87	4.31	NP	4.56	67600	130000	2900	8600	2000	16000	ND	--	--	--	--	--	--	--	
2/26/2000	8.87	3.98	NP	4.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
3/31/2000	8.87	4.14	NP	4.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/13/2000	8.87	4.04	NP	4.83	8700	140000	5000	14000	3600	27000	7700	--	--	--	--	--	--	--	
5/26/2000	8.87	4.41	NP	4.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/17/2000	8.87	4.35	NP	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
7/14/2000	8.87	4.47	NP	4.40	133000	259000	7670	13700	6860	40700	ND	--	--	--	--	--	--	--	
8/24/2000	8.87	3.71	NP	5.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/2000	8.87	4.33	NP	4.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/26/2000	8.87	4.32	NP	4.55	61000	110000	7000	6200	3700	12000	670	--	--	--	--	--	--	--	
1/3/2001	8.87	4.52	NP	4.35	929	84700	3950	4130	3650	11800	ND	--	--	--	--	--	--	--	
4/4/2001	8.87	4.29	NP	4.58	18000	69800	2060	2840	3650	10900	47.8	ND	ND	ND	ND	ND	ND	ND	
7/17/2001	8.87	4.37	NP	4.50	20000	100000	3200	3300	3400	12000	ND	--	--	--	--	--	--	--	

TABLE 3
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76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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	10/1/2001	8.87	4.45	NP	4.42	24000	110000	3200	2400	4500	13000	<1000	--	--	--	--	--	--	--	
	1/31/2002	8.87	4.03	NP	4.84	11000	230000	2400	1800	5400	16000	<2500	--	--	--	--	--	--	--	
	4/18/2002	8.87	3.45	NP	5.42	3500	94000	6800	13000	3000	19000	<500	--	--	--	--	--	--	--	
	7/28/2002	8.87	2.24	NP	6.63	27000	110000	530	170	3200	7300	<100	--	--	--	--	--	--	--	
	10/9/2002	8.87	3.53	NP	5.34	170000	970000	10000	39000	13000	94000	<2000	--	--	--	--	--	--	--	--
	1/2/2003	8.87	2.34	NP	6.53	66000	270000	6100	15000	5400	37000	<200	--	--	--	--	--	--	--	--
	4/1/2003	8.87	3.17	NP	5.70	35000	3000000	8000	39000	37000	260000	<2000	--	--	--	--	--	--	--	--
	7/1/2003	8.87	3.55	NP	5.32	11000	38000	2100	990	2700	6500	<100	--	--	--	--	<25000	--	--	--
	10/2/2003	8.87	3.82	NP	5.05	<50	100000	5600	6900	4700	18000	<800	--	--	--	--	<200000	--	--	--
	1/9/2004	8.87	2.80	NP	6.07	20000	170000	2800	3300	4700	16000	<200	--	--	--	--	<50000	--	--	--
	4/26/2004	8.87	3.40	NP	5.47	13000	97000	5900	9000	5100	23000	<50	--	--	--	--	<5000	--	--	--
	7/22/2004	8.87	3.54	NP	5.33	33000	110000	4100	5100	4000	16000	<200	--	--	--	--	<300000	--	--	--
	10/29/2004	8.87	3.03	NP	5.84	78000	100000	5200	6100	4200	15000	<50	--	--	--	--	<5000	--	--	--
	1/10/2005	8.87	2.35	NP	6.52	12000	71000	1600	3700	2100	9900	<50	--	--	--	--	<5000	--	--	--
	6/15/2005	8.87	2.47	NP	6.40	16000	130000	800	1800	2200	9300	<50	--	--	--	--	<5000	--	--	--
	9/27/2005	8.87	2.55	NP	6.32	2500	13000	82	120	430	990	0.56	1.8	<0.50	<0.50	<10	<250	--	--	--
	12/13/2005	8.87	3.28	NP	5.59	18000	68000	1500	1100	2200	7700	<50	--	--	--	--	<25000	--	--	--
	3/23/2006	8.87	2.87	NP	6.00	73000	41000	290	140	1500	2700	<50	--	--	--	--	<25000	--	--	--
	6/23/2006	8.87	3.15	NP	5.72	35000	50000	2200	1400	1900	5700	<12	--	--	--	--	<6200	--	--	--
	9/26/2006	8.87	3.08	NP	5.79	22000	130000	2200	1000	2900	8800	<50	--	--	--	--	<25000	--	--	--
	12/22/2006	8.87	2.90	NP	5.97	62000	90000	940	610	1900	4700	<50	--	--	--	--	<25000	--	--	--
	3/30/2007	8.87	3.26	NP	5.61	62000	210000	1100	560	3400	12000	<10	--	--	--	--	<5000	--	--	--
	6/28/2007	8.87	3.46	NP	5.41	71000	67000	2200	1300	2700	10000	<25	--	--	--	--	<12000	--	--	--
	9/25/2007	8.87	3.52	NP	5.35	58000	56000	2900	720	2400	9000	<25	--	--	--	--	<12000	--	--	--
	12/28/2007	8.87	3.27	NP	5.60	18000	78000	28000	2700	4000	8100	16000	--	--	--	--	<12000	--	--	--
	3/22/2008	8.87	2.48	NP	6.39	68000	66000	380	150	1500	2400	<25	--	--	--	--	<12000	--	--	--
	6/23/2008	8.87	3.54	NP	5.33	68000	59000	1600	130	1800	4100	25	--	--	--	--	<12000	--	--	--
	9/19/2008	8.87	4.06	NP	4.81	180000	65000	2000	230	2000	4500	<12	--	--	--	--	<6200	--	--	--
	12/31/2008	8.87	3.45	NP	5.42	68000	91000	2000	320	5300	13000	<50	--	--	--	--	<25000	--	--	--
	3/27/2009	8.87	3.09	NP	5.78	170000	150000	1300	240	2800	7200	<50	--	--	--	--	<25000	--	--	--
	5/28/2009	8.87	3.49	NP	5.38	78000	53000	1700	200	2300	5400	<50	--	--	--	--	<25000	--	--	--
	9/17/2009	8.87	3.64	NP	5.23	250000 T4	77000	2100	1400	2600	8500	<12	--	--	--	--	<6200	--	--	--
	12/17/2009	8.87	3.14	NP	5.73	30300	59100	1730	199	2260	5460	20.3	--	--	--	--	<250	--	--	--
3/29/2010	8.87	3.16	NP	5.71	106000	48400	1980	208	3070	8070	12.1	--	--	--	--	<250	--	--	--	
6/30/2010	11.55	3.50	NP	8.05	170000	78700	2130	281	2860	8400	5.8	--	--	--	--	<250	--	--	--	
7/6/2010	11.55	3.49	NP	8.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/20/2010	11.55	3.75	NP	7.80	18800	64500	2300	170	2770	6260	19.3	--	--	--	--	<250	--	--	--	
12/8/2010	11.55	8.42	NP	3.13	28700	78400	1300	1680	3490	20600	11.3	--	--	--	--	<250	--	--	--	
3/14/2011	11.55	3.40	NP	8.15	93000	44600	912	338	728	3670	16.3	--	--	--	134	<250	--	--	--	
6/2/2011	11.55	2.76	NP	8.79	33700 T4	56200	780	262	651	3890	6.7	--	--	--	81.0	<250	--	--	--	
9/7/2011	11.55	2.83	NP	8.72	6780 T4	16600	15.6	10.6	89.6	339	<0.50	--	--	--	--	<250	--	--	--	
12/5/2011	11.55	3.56	NP	7.99	20200 T4	64600	646	95.4	924	4050	14.9	--	--	--	--	<250	--	--	--	
3/6/2012	11.55	3.43	NP	8.12	14800 T4	55000	1020	131	1320	4730	18.5	--	--	--	316	<1250	--	--	--	
MW-7	5/27/1997	8.83	4.50	NP	4.33	--	68	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	6/1/1997	8.83	4.54	NP	4.29	69	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/15/1997	8.83	4.70	NP	4.13	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/9/1997	8.83	4.30	NP	4.53	190	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/14/1998	8.83	2.88	NP	5.95	65	ND	ND	ND	ND	ND	36	--	--	--	--	--	--	--	
	4/1/1998	8.83	3.13	NP	5.70	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	7/15/1998	8.83	4.45	NP	4.38	74	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/16/1998	8.83	3.45	NP	5.38	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/25/1999	8.83	3.22	NP	5.61	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	4/15/1999	8.83	3.11	NP	5.72	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
7/14/1999	8.83	3.34	NP	5.49	69	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--		

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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	10/21/1999	8.83	3.43	NP	5.40	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	1/20/2000	8.83	3.29	NP	5.54	ND	ND	ND	ND	ND	ND	4.2	--	--	--	--	--	--	--
	4/13/2000	8.83	3.39	NP	5.44	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	7/14/2000	8.83	4.42	NP	4.41	68.0	ND	ND	ND	ND	ND	7.83	--	--	--	--	--	--	--
	7/17/2001	8.83	5.06	NP	3.77	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	10/1/2001	8.83	4.98	NP	3.85	<51	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--	--	--	--
	1/31/2002	8.83	3.88	NP	4.95	90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--
	4/18/2002	8.83	4.03	NP	4.80	78	<50	<0.50	<0.50	<0.50	<0.50	5.7	--	--	--	--	--	--	--
	7/28/2002	8.83	3.59	NP	5.24	<50	<50	<0.50	<0.50	<0.50	<1.0	3.9	--	--	--	--	--	--	--
	10/9/2002	8.83	4.53	NP	4.30	<96	<50	<0.50	<0.50	<0.50	<1.0	3.9	--	--	--	--	--	--	--
	1/3/2003	8.83	3.36	NP	5.47	78	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	4/1/2003	8.83	3.94	NP	4.89	67	71	<0.50	<0.50	0.71	<1.0	3.4	--	--	--	--	--	--	--
	7/1/2003	8.83	4.60	NP	4.23	68	64	<0.50	<0.50	0.77	2.0	35	--	--	--	--	<500	--	--
	10/2/2003	8.83	5.46	NP	3.37	82	<50	<0.50	<0.50	<0.50	<1.0	4.9	--	--	--	--	<500	--	--
	1/9/2004	8.83	3.55	NP	5.28	75	54	<0.50	<0.50	<0.50	<1.0	2.4	--	--	--	--	<500	--	--
	4/26/2004	8.83	4.49	NP	4.34	<50	<50	<0.50	<0.50	<0.50	1.5	2.3	--	--	--	--	<50	--	--
	7/22/2004	8.83	4.93	NP	3.90	<200	82	0.90	2.0	3.5	9.9	1.4	--	--	--	--	<1000	--	--
	10/29/2004	8.83	3.71	NP	5.12	54	210	0.67	1.6	1.7	5.8	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.83	2.77	NP	6.06	<50	74	0.51	2.2	1.7	7.0	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.83	3.40	NP	5.43	<50	<50	<0.50	<0.50	<0.50	<1.0	0.88	--	--	--	--	<50	--	--
	9/27/2005	8.83	3.44	NP	5.39	<200	<50	0.59	1.2	<0.50	<1.0	0.96	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.83	3.98	NP	4.85	<200	<50	<0.50	<0.50	<0.50	<1.0	0.65	--	--	--	--	<250	--	--
	3/23/2006	8.83	3.37	NP	5.46	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	6/23/2006	8.83	5.25	NP	3.58	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	9/26/2006	8.83	4.13	NP	4.70	<50	<50	<0.50	<0.50	<0.50	<0.50	0.77	--	--	--	--	<250	--	--
	12/22/2006	8.83	3.63	NP	5.20	630	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	3/30/2007	8.83	4.31	NP	4.52	94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	6/28/2007	8.83	4.62	NP	4.21	<50	<50	<0.50	<0.50	<0.50	<0.50	0.54	--	--	--	--	<250	--	--
	9/25/2007	8.83	4.65	NP	4.18	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	12/28/2007	8.83	3.99	NP	4.84	75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	3/22/2008	8.83	4.08	NP	4.75	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	6/23/2008	8.83	4.10	NP	4.73	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	9/19/2008	8.83	4.86	NP	3.97	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
12/31/2008	8.83	4.17	NP	4.66	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
3/27/2009	8.83	4.00	NP	4.83	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
5/28/2009	8.83	4.71	NP	4.12	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
9/17/2009	8.83	4.87	NP	3.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
3/29/2010	8.83	WI	WI	WI	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/30/2010	11.64	4.45	NP	7.19	66.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
7/6/2010	11.64	4.63	NP	7.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/20/2010	11.64	4.85	NP	6.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2010	11.64	3.99	NP	7.65	57.7	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
3/14/2011	11.64	3.81	NP	7.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/2/2011	11.64	3.90	NP	7.74	63.0 T4	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--	
9/7/2011	11.64	3.72	NP	7.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/5/2011	11.64	4.60	NP	7.04	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
3/6/2012	11.64	4.54	NP	7.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	5/27/1997	8.52	3.42	NP	5.10	--	310	0.88	0.67	15	70	ND	--	--	--	--	--	--	
	6/1/1997	8.52	3.46	NP	5.06	320	--	--	--	--	--	--	--	--	--	--	--	--	
	7/15/1997	8.52	3.49	NP	5.03	ND	ND	ND	ND	2.7	3.8	ND	--	--	--	--	--	--	
	10/9/1997	8.52	3.73	NP	4.79	390	590	1.4	ND	32	4.1	ND	--	--	--	--	--	--	
	1/14/1998	8.52	1.92	NP	6.60	230	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	
	4/1/1998	8.52	2.38	NP	6.14	510	ND	ND	ND	ND	ND	4.7	--	--	--	--	--	--	
	7/15/1998	8.52	3.53	NP	4.99	140	ND	ND	ND	0.56	1.1	ND	--	--	--	--	--	--	

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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	10/16/1998	8.52	3.04	NP	5.48	170	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	1/25/1999	8.52	2.92	NP	5.60	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	4/15/1999	8.52	2.40	NP	6.12	91	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	7/14/1999	8.52	3.03	NP	5.49	120	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	10/21/1999	8.52	3.11	NP	5.41	110	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	1/20/2000	8.52	3.06	NP	5.46	583	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	4/13/2000	8.52	2.84	NP	5.68	80	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	7/14/2000	8.52	3.39	NP	5.13	113	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	7/17/2001	8.52	3.46	NP	5.06	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	10/1/2001	8.52	3.51	NP	5.01	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--	--	--	--
	1/31/2002	8.52	2.75	NP	5.77	260	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--
	4/18/2002	8.52	2.98	NP	5.54	160	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--
	7/28/2002	8.52	2.41	NP	6.11	140	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	10/9/2002	8.52	2.09	NP	6.43	120	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	1/2/2003	8.52	1.98	NP	6.54	210	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	4/1/2003	8.52	2.66	NP	5.86	220	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	7/1/2003	8.52	3.08	NP	5.44	170	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	<500	--	--
	10/2/2003	8.52	3.89	NP	4.63	350	540	3.9	15	29	80	<2.0	--	--	--	--	<500	--	--
	1/9/2004	8.52	2.38	NP	6.14	180	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	<500	--	--
	4/26/2004	8.52	2.89	NP	5.63	100	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<50	--	--
	7/22/2004	8.52	3.25	NP	5.27	250	<50	<0.5	<0.5	<0.5	<1	<0.5	--	--	--	--	<1000	--	--
	10/29/2004	8.52	3.06	NP	5.46	120	<50	<0.50	<0.50	0.82	2.5	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.52	1.92	NP	6.60	140	58	<0.50	0.61	1.2	4.0	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.52	2.22	NP	6.30	140	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<50	--	--
	9/27/2005	8.52	2.43	NP	6.09	<200	<50	<0.50	<0.50	1.2	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.52	2.89	NP	5.63	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	3/23/2006	8.52	2.12	NP	6.40	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	6/23/2006	8.52	2.65	NP	5.87	<230	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	9/26/2006	8.52	2.75	NP	5.77	110	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	12/22/2006	8.52	2.58	NP	5.94	100	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	3/30/2007	8.52	2.74	NP	5.78	120	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	6/28/2007	8.52	2.90	NP	5.62	140	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	9/25/2007	8.52	3.26	NP	5.26	110	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
12/28/2007	8.52	2.64	NP	5.88	110	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
3/22/2008	8.52	2.31	NP	6.21	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
6/23/2008	8.52	3.13	NP	5.39	<58	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
9/19/2008	8.52	3.72	NP	4.80	79	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
12/31/2008	8.52	2.98	NP	5.54	110	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
3/27/2009	8.52	2.49	NP	6.03	89	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
5/28/2009	8.52	3.12	NP	5.40	91	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
9/17/2009	8.52	3.63	NP	4.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
3/29/2010	8.52	WI	WI	WI	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/30/2010	11.32	2.60	NP	8.72	182	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
7/6/2010	11.32	3.03	NP	8.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/20/2010	11.32	3.33	NP	7.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/8/2010	11.32	2.82	NP	8.50	116	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
3/14/2011	11.32	3.84	NP	7.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/2/2011	11.32	2.77	NP	8.55	168 T4	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--	
9/7/2011	11.32	2.84	NP	8.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/5/2011	11.32	2.68	NP	8.64	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
3/6/2012	11.32	3.07	NP	8.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	2/21/1995	8.29	1.98	NP	6.31	71	70	ND	ND	ND	ND	--	--	--	--	--	--	--	
	5/18/1995	8.29	3.47	NP	4.82	ND	52	ND	1.1	ND	1.9	--	--	--	--	--	--	--	
	8/17/1995	8.29	1.49	NP	6.80	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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	12/17/2009	8.29	1.52	NP	6.77	105	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
	3/29/2010	8.29	2.21	NP	6.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/30/2010	10.94	2.32	NP	8.62	95.0	<50.0	<0.50	<0.50	<0.50	<1.5	0.85	--	--	--	--	<250	--	--
	7/6/2010	10.94	2.02	NP	8.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	10.94	2.03	NP	8.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/2010	10.94	1.77	NP	9.17	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
	3/14/2011	10.94	2.24	NP	8.70	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--
	6/2/2011	10.94	2.24	NP	8.70	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--
	9/7/2011	10.94	2.46	NP	8.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	10.94	2.43	NP	8.51	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	4.0	--	--	--	--	<250	--	--
3/6/2012	10.94	3.03	NP	7.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	2/21/1995	8.62	4.69	NP	3.93	270	1500	250	26	9.1	160	--	--	--	--	--	--	--	--
	5/18/1995	8.62	4.92	NP	3.70	75	810	520	ND	18	23	--	--	--	--	--	--	--	--
	8/17/1995	8.62	4.05	NP	4.57	ND	67	25	ND	2.4	ND	--	--	--	--	--	--	--	--
	7/26/1996	8.62	4.08	NP	4.54	ND	ND	3.7	ND	ND	ND	--	--	--	--	--	--	--	--
	10/28/1996	8.62	4.09	NP	4.53	ND	ND	1.1	ND	ND	ND	--	--	--	--	--	--	--	--
	1/29/1997	8.62	2.94	NP	5.68	ND	210	41	0.67	7.2	4.8	11	--	--	--	--	--	--	--
	4/15/1997	8.62	4.07	NP	4.55	ND	110	12	ND	0.77	ND	9.7	--	--	--	--	--	--	--
	5/27/1997	8.62	4.40	NP	4.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/1997	8.62	4.19	NP	4.43	ND	ND	2.1	ND	0.67	0.73	ND	--	--	--	--	--	--	--
	10/9/1997	8.62	4.75	NP	3.87	ND	190	38	0.92	6.6	7.6	ND	--	--	--	--	--	--	--
	1/14/1998	8.62	2.66	NP	5.96	--	59	9.5	0.85	1.2	1.7	4.5	--	--	--	--	--	--	--
	4/1/1998	8.62	3.45	NP	5.17	62	230	66	1.7	12	17	6.4	--	--	--	--	--	--	--
	7/15/1998	8.62	4.21	NP	4.41	78	290	98	45	21	38	21	--	--	--	--	--	--	--
	10/16/1998	8.62	4.11	NP	4.51	ND	160	44	0.96	2.5	10	17	--	--	--	--	--	--	--
	1/25/1999	8.62	3.26	NP	5.36	ND	140	27	ND	2.8	6.8	23	--	--	--	--	--	--	--
	4/15/1999	8.62	3.63	NP	4.99	ND	120	18	ND	1.8	5.1	14	--	--	--	--	--	--	--
	7/14/1999	8.62	3.89	NP	4.73	180	280	55	3.2	11	31	6.1	--	--	--	--	--	--	--
	10/21/1999	8.62	4.09	NP	4.53	96	140	22	0.59	1.7	7.7	5.3	--	--	--	--	--	--	--
	1/20/2000	8.62	3.92	NP	4.70	252	ND	0.73	0.86	ND	ND	5.2	--	--	--	--	--	--	--
	4/13/2000	8.62	3.85	NP	4.77	69	67	54	ND	2.6	ND	3.8	--	--	--	--	--	--	--
	7/14/2000	8.62	4.18	NP	4.44	149	ND	0.547	ND	ND	ND	ND	--	--	--	--	--	--	--
	10/26/2000	8.62	3.96	NP	4.66	83	ND	3.3	ND	0.83	1.5	ND	--	--	--	--	--	--	--
	1/3/2001	8.62	4.14	NP	4.48	126	52.7	5.15	ND	0.823	1.57	ND	--	--	--	--	--	--	--
	4/4/2001	8.62	3.88	NP	4.74	75	129	28.1	1.67	4.97	10.1	ND	--	--	--	--	--	--	--
	7/17/2001	8.62	4.08	NP	4.54	ND	ND	4.1	ND	1.0	1.8	ND	--	--	--	--	--	--	--
	10/1/2001	8.62	4.22	NP	4.40	100	140	30	0.51	4.0	12	<5.0	--	--	--	--	--	--	--
	1/31/2002	8.62	3.68	NP	4.94	170	110	16	<0.50	2.3	5.6	<2.5	--	--	--	--	--	--	--
	4/18/2002	8.62	4.01	NP	4.61	130	<50	11	<0.50	1.4	4.5	<2.5	--	--	--	--	--	--	--
	7/28/2002	8.62	4.11	NP	4.51	58	67	15	<0.50	0.94	7.3	<2.0	--	--	--	--	--	--	--
	10/9/2002	8.62	3.97	NP	4.65	<94	<50	0.67	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	1/2/2003	8.62	3.03	NP	5.59	64	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	4/1/2003	8.62	3.83	NP	4.79	76	<50	11	<0.50	<0.50	<1.0	<2.0	--	--	--	--	--	--	--
	7/1/2003	8.62	4.13	NP	4.49	87	<50	<0.50	<0.50	<0.50	<1.0	<2.0	--	--	--	--	<500	--	--
	10/2/2003	8.62	4.05	NP	4.57	160	77	9.9	0.78	2.3	4.9	<2.0	--	--	--	--	<500	--	--
	1/9/2004	8.62	3.40	NP	5.22	74	53	1.2	<0.50	0.70	1.6	<2.0	--	--	--	--	<500	--	--
	4/26/2004	8.62	3.89	NP	4.73	<50	<50	2.8	1.3	1.0	2.9	<0.50	--	--	--	--	<50	--	--
	7/22/2004	8.62	3.73	NP	4.89	<200	<50	<0.5	<0.5	<0.5	<1	<0.5	--	--	--	--	<1000	--	--
	10/29/2004	8.62	3.41	NP	5.21	<50	100	2.0	1.2	1.1	3.6	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.62	2.68	NP	5.94	94	84	7.8	2.7	2.2	8.9	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.62	4.63	NP	3.99	62	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<50	--	--
9/27/2005	8.62	3.96	NP	4.66	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<10	<250	--	--	
12/13/2005	8.62	3.75	NP	4.87	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
3/23/2006	8.62	3.13	NP	5.49	<200	50	13	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
6/23/2006	8.62	3.90	NP	4.72	<200	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--	
9/26/2006	8.62	3.66	NP	4.96	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--	

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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-10	12/22/2006	8.62	3.56	NP	5.06	81	<50	<0.50	<0.50	<0.50	1.8	<0.50	--	--	--	--	<250	--	--
	3/30/2007	8.62	3.93	NP	4.69	82	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	6/28/2007	8.62	4.03	NP	4.59	57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	9/25/2007	8.62	3.91	NP	4.71	82	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	<250	--	--
	12/28/2007	8.62	3.64	NP	4.98	62	<50	2.1	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	3/22/2008	8.62	4.00	NP	4.62	<50	64	13	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	6/23/2008	8.62	3.90	NP	4.72	<50	94	30	0.53	3.4	3.5	<0.50	--	--	--	--	<250	--	--
	9/19/2008	8.62	3.85	NP	4.77	<50	130	15	1.7	5.7	11	<0.50	--	--	--	--	<250	--	--
	12/31/2008	8.62	3.69	NP	4.93	<50	82	11	<0.50	0.81	1.7	<0.50	--	--	--	--	<250	--	--
	3/27/2009	8.62	3.75	NP	4.87	730	210	28	1.4	1.2	3.9	<0.50	--	--	--	--	<250	--	--
	5/28/2009	8.62	3.66	NP	4.96	<50	<50	0.91	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	9/17/2009	8.62	3.85	NP	4.77	65	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<250	--	--
	12/17/2009	8.62	3.00	NP	5.62	57.7	<50.0	1.2	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
	3/29/2010	8.62	3.81	NP	4.81	82.2	<50.0	0.77	<0.50	<0.50	3.4	<0.50	--	--	--	--	<250	--	--
	6/30/2010	10.97	3.90	NP	7.07	53.4	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
	7/6/2010	10.97	3.73	NP	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	10.97	3.85	NP	7.12	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
	12/8/2010	10.97	3.63	NP	7.34	<50.0	<50.0	1.8	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
3/14/2011	10.97	3.46	NP	7.51	63.3	<50.0	1.1	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--	
6/2/2011	10.97	3.92	NP	7.05	<50.0	58.7	4.8	4.2	0.96	5.1	<0.50	--	--	--	<5.0	<250	--	--	
9/7/2011	10.97	4.06	NP	6.91	<50.0	<50.0	4.1	<0.50	0.66	2.4	<0.50	--	--	--	--	<250	--	--	
12/5/2011	10.97	3.82	NP	7.15	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--	
3/6/2012	10.97	3.74	NP	7.23	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	58.7	<250	--	--	
MW-11	7/6/2010	10.53	2.44	NP	8.09	226	99.2 1n	<0.50	<0.50	<0.50	<1.5	165	<0.50	<0.50	<0.50	174	<250	<1.0	<1.0
	9/20/2010	10.53	2.80	NP	7.73	<50.0	76.4 1n	<0.50	<0.50	<0.50	<1.5	82.7	--	--	--	--	<250	--	--
	12/8/2010	10.53	1.90	NP	8.63	52.7	<50.0	<0.50	<0.50	<0.50	<1.5	59.1	--	--	--	--	<250	--	--
	3/14/2011	10.53	1.89	NP	8.64	67.8	<50.0	<0.50	<0.50	<0.50	<1.5	44.0	--	--	--	<5.0	<250	--	--
	6/2/2011	10.53	1.75	NP	8.78	69.0 T4	<50.0	<0.50	0.61	<0.50	<1.5	24.9	--	--	--	7.1	<250	--	--
	9/7/2011	10.53	1.56	NP	8.97	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	3.8	--	--	--	--	<250	--	--
	12/5/2011	10.53	2.05	NP	8.48	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	26.4	--	--	--	--	<250	--	--
3/6/2012	10.53	2.31	NP	8.22	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	35.3	--	--	--	5.7	<250	--	--	
MW-12	7/6/2010	11.01	4.00	NP	7.01	990	20300	1030	955	311	2450	1650	<0.50	<0.50	1.0	1430	<250	<1.0	<1.0
	9/20/2010	11.01	4.18	NP	6.83	5220	73700	6020	6390	2970	18300	894	--	--	--	--	<250	--	--
	12/8/2010	11.01	3.92	NP	7.09	428	3350	249	117	89.8	558	1470	--	--	--	--	<2500	--	--
	3/14/2011	11.01	3.70	NP	7.31	283	2420	287	80.9	49.1	243	1020	--	--	--	69.6	<250	--	--
	6/2/2011	11.01	4.40	NP	6.61	1330 T4	12200	688	70.5	225	619	824	--	--	--	110	<250	--	--
	9/7/2011	11.01	4.37	NP	6.64	1270 T4	7900	920	25.4	187	267	896	--	--	--	--	<2500	--	--
	12/5/2011	11.01	4.32	NP	6.69	286 T4	2240	296	38.3	38.0	122	1040	--	--	--	--	<250	--	--
3/6/2012	11.01	4.01	NP	7.00	272 T4	1260	193	22.6	28.8	80.5	835	--	--	--	78.4	<250	--	--	
MW-12A	7/6/2010	11.29	4.22	NP	7.07	89.3	664	18.3	0.78	2.3	50.2	14.3	<0.50	<0.50	<0.50	11.9	<250	<1.0	<1.0
	9/20/2010	11.29	4.39	NP	6.90	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	8.5	--	--	--	--	<250	--	--
	12/8/2010	11.29	4.00	NP	7.29	76.4	<50.0	<0.50	<0.50	<0.50	<1.5	9.4	--	--	--	--	<250	--	--
	3/14/2011	11.29	3.81	NP	7.48	61.5	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--
	6/2/2011	11.29	4.20	NP	7.09	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--
	9/7/2011	11.29	4.42	NP	6.87	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	0.74	--	--	--	--	<250	--	--
	12/5/2011	11.29	4.30	NP	6.99	<50.0	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	--	<250	--	--
3/6/2012	11.29	4.32	NP	6.97	52 T4	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	--	--	<5.0	<250	--	--	
MW-13	7/6/2010	11.08	4.26	NP	6.82	469	122 1n	<0.50	<0.50	<0.50	<1.5	217	<0.50	<0.50	<0.50	199	<250	<1.0	<1.0
	9/20/2010	11.08	4.81	NP	6.27	<50.0	250 1n	<0.50	<0.50	<0.50	<1.5	272	--	--	--	--	<250	--	--
	12/8/2010	11.08	5.02	NP	6.06	97.0	177 1n	<0.50	<0.50	<0.50	<1.5	390	--	--	--	--	<250	--	--
	3/14/2011	11.08	4.32	NP	6.76	162	127 1n	<0.50	<0.50	<0.50	<1.5	241	--	--	--	125	<250	--	--
	6/2/2011	11.08	3.98	NP	7.10	89.9 T4	260 1n	<0.50	<0.50	<0.50	<1.5	228	--	--	--	44.7	<250	--	--
	9/7/2011	11.08	5.74	NP	5.34	<50.0	167	<0.50	<0.50	<0.50	<1.5	207	--	--	--	--	<250	--	--
	12/5/2011	11.08	5.00	NP	6.08	<50.0	166 1n	<0.50	<0.50	<0.50	<1.5	215	--	--	--	--	<250	--	--
3/6/2012	11.08	5.37	NP	5.71	<50.0	63.9 1n	<0.50	<0.50	<0.50	<1.5	110	--	--	--	38.5	<250	--	--	

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
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)	TPHg (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-14	6/2/2011	12.00	3.58	NP	8.42	4180 T4	51600	2750	67.9	1790	13400	1.9	--	--	--	27.2	<250	--	--
	9/7/2011	12.00	3.02	NP	8.98	2970 T4	42600	1050	28.1	2990	7300	<25.0	--	--	--	--	<12500	--	--
	12/5/2011	12.00	4.05	NP	7.95	3980 T4	14000	709	9.1	1420	2530	0.97	--	--	--	--	<250	--	--
	3/6/2012	12.00	3.94	NP	8.06	3640 T4	16600	959	15.0	2330	3830	<2.5	--	--	--	28.1	<1250	--	--
MW-15	6/2/2011	11.11	2.50	NP	8.61	124 T4	357	<0.50	<0.50	<0.50	<1.5	15.2	--	--	--	6.4	<250	--	--
	9/7/2011	11.11	2.54	NP	8.57	<50.0	412	6.2	<0.50	42.8	<1.5	128	--	--	--	--	<250	--	--
	12/5/2011	11.11	2.70	NP	8.41	50.5 T4	201	6.6	<0.50	0.93	<1.5	142	--	--	--	--	<250	--	--
	3/6/2012	11.11	2.69	NP	8.42	56.2 T4	<50.0	<0.50	<0.50	<0.50	<1.5	106	--	--	--	101	<250	--	--
MW-16	6/2/2011	10.98	3.00	NP	7.98	509 T4	1420 1n	79.4	<0.50	4.2	<1.5	1200	--	--	--	257	<250	--	--
	9/7/2011	10.98	2.65	NP	8.33	90 T4	934	<0.50	<0.50	<0.50	<1.5	1240	--	--	--	--	<250	--	--
	12/5/2011	10.98	3.18	NP	7.80	196 T4	948 1n	<0.50	<0.50	<0.50	<1.5	1320	--	--	--	--	<250	--	--
	3/6/2012	10.98	2.91	NP	8.07	204 T4	392 1n	<0.50	<0.50	<0.50	<1.5	1090	--	--	--	134	<250	--	--
MW-17	6/2/2011	11.52	5.78	NP	5.74	687 T4	9130	2530	960	35.1	907	0.74	--	--	--	366	<250	--	--
	9/7/2011	11.52	4.56	NP	6.96	1900 T4	47200	9620	5510	1210	4510	<25.0	--	--	--	--	<12500	--	--
	12/5/2011	11.52	4.70	NP	6.82	1790 T4	17300	4720	511	238	747	<2.5	--	--	--	--	<1250	--	--
	3/6/2012	11.52	4.64	NP	6.88	1530 T4	1580	2090	23.8	39.3	166	1.1	--	--	--	481	<250	--	--

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
WD - Well Destroyed
WI - Well Inaccessable
WO - Well Obstruction
NSVD - Not surveyed
-- - No information available

Analytical Notes:

-- - No information available
Bold - Above the laboratory's indicated reporting limit
< - Below the laboratory's indicated reporting limit
LPH - Liquid Phase Hydrocarbons
MO - 209.
ND - Not detected, and detection limit is not known
NS - Well not sampled.
UG/L - micrograms/liter
WD - Well Destroyed
WI - Well Inaccessable
WO - Well Obstruction
DRO- diesel range organics
TPHg- total petroleum hydrocarbons as gasoline
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether
1n- The TPHg results for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of MTBE in the sample.
T4- Result reported for the hydrocarbons within the method-specific range that do not match pattern of laboratory standard.

TABLE 3a
 ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
 76 Station No. 5191/5043
 449 HEGENBERGER RD
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA																			
		Acetone (ug/L)	Alkalinity, Bicarbonate (mg/L)	Alkalinity, Hydroxide (CaCO) (mg/L)	Alkalinity, Total A2320B (mg/L)	Alkalinity, Total as CaCO3 (mg/L)	Antimony SW6010 D (ug/L)	Arsenic SW6010 D (ug/L)	Barium SW6010 D (ug/L)	Beryllium SW6010 D (ug/L)	Biochemical Oxygen Demand (ug/L)	Bromate (mg/L)	Bromide (mg/L)	Cadmium SW6010 D (ug/L)	Chemical Oxygen Demand (ug/L)	Chloride (ug/L)	Chromium (ug/L)	Chromium, Hexavalent (ug/L)	Cobalt SW6010 D (ug/L)	Coliform, Total (MPN/100ML)	E. Coli (MPN/100ML)
MW-6	3/14/2011	18.4	--	--	--	--	<60.0	22.7	216	<5.0	32200	--	--	<5.0	173000	204000	--	--	<50.0	--	--
	6/2/2011	<5.0	828	<1	828	<1	<60.0	22.0	191	<5.0	45100	<0.005	2.1	<5.0	121000	149000	4.3	<2	<50.0	42000	<100
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/14/2011	<5.0	--	--	--	--	<60.0	<20.0	<100	<5.0	7160	--	--	<5.0	11500	34700	--	--	<50.0	--	--
	6/2/2011	<5.0	226	<1	226	<1	<60.0	<20.0	<100	<5.0	4170	<0.005	2	<5.0	15100	32400	2.4	<0.2	<50.0	2	<1
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	3/14/2011	<5.0	--	--	--	--	<60.0	<20.0	<100	<5.0	<2000	--	--	<5.0	80100	8240000	--	--	<50.0	--	--
	6/2/2011	<5.0	905	<1	905	<1	<60.0	<20.0	<100	<5.0	7240	<0.05	33	<5.0	191000	7260000	3.3	<2	<50.0	210	<1
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analytical Notes:
 -- - No information available
 Bold - Above the laboratory's indicated reporting limit
 < - Below the laboratory's indicated reporting limit
 LPH - Liquid Phase Hydrocarbons
 mg/L - milligrams per liter
 MPN/100ML - most probable number per 100 ml
 NS - Well not sampled.
 ug/L - micrograms/liter

TABLE 3b
 ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
 76 Station No. 5191/5043
 449 HEGENBERGER RD
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA																			
		Inorganic Carbon (mg/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Iron, Ferric (ug/L)	Iron, Ferrous A3500D (ug/L)	Lead SW6010 D (ug/L)	Manganese SW6010 D (ug/L)	Mercury (ug/L)	Methane (ug/L)	Molybdenum SW6010 D (ug/L)	Nickel SW6010 D (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, Ammonia (mg/L)	Nitrogen, NO2 plus NO3 (ug/L)	Nitrogen, Total Kjeldahl (mg/L)	Oil and Grease (ug/L)	Salinity (mg/L)	Selenium SW6010 D (ug/L)
MW-17	6/2/2011	--	--	109000	--	--	--	--	--	--	--	--	<50.0	--	29.7	--	<50.0	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analytical Notes:
 -- - No information available
Bold - Above the laboratory's indicated reporting limit
 < - Below the laboratory's indicated reporting limit
 LPH - Liquid Phase Hydrocarbons
 mg/L - milligrams per liter
 ND - Not detected, and detection limit is not known
 NS - Well not sampled.
 ug/L - micrograms/liter

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA						
		Silver SW6010 D (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium SW6010 D (ug/L)	Total Organic Carbon (mg/L)	Vanadium SW6010 D (ug/L)	Zinc SW6010 D (ug/L)
MW-3	12/17/2009	--	--	<0.5	--	--	--	--
	3/29/2010	--	--	--	--	--	--	--
	6/30/2010	--	<5000	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	--	--	--	--	--	--
	6/2/2011	--	<5000	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--
MW-6	9/17/2009	--	<1.0	<0.0010	--	--	--	--
	12/17/2009	--	--	<0.5	--	--	--	--
	3/29/2010	--	<1000	--	--	--	--	--
	6/30/2010	--	<5000	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	<1000	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	<10.0	35400	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	38900	--	<20.0	41	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-7	6/30/2010	--	191000	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	--	--	--	--	--	--
	6/2/2011	--	48900	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA						
		Silver SW6010 D (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium SW6010 D (ug/L)	Total Organic Carbon (mg/L)	Vanadium SW6010 D (ug/L)	Zinc SW6010 D (ug/L)
MW-8	6/30/2010	--	2360000	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	--	--	--	--	--	--
	6/2/2011	--	2830000	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-9	12/17/2009	--	--	11	--	--	--	--
	3/29/2010	--	--	--	--	--	--	--
	6/30/2010	--	19000	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	<10.0	8980	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	18600	--	<20.0	4.7	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-10	9/17/2009	--	84	0.084	--	--	--	--
	12/17/2009	--	--	86	--	--	--	--
	3/29/2010	--	73600	--	--	--	--	--
	6/30/2010	--	70800	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	82000	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
MW-10	3/14/2011	--	68600	--	--	--	--	--
	6/2/2011	--	71700	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA						
		Silver SW6010 D (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium SW6010 D (ug/L)	Total Organic Carbon (mg/L)	Vanadium SW6010 D (ug/L)	Zinc SW6010 D (ug/L)
MW-11	7/6/2010	--	82100	--	--	--	--	--
	9/20/2010	--	58300	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	59900	--	--	--	--	--
	6/2/2011	--	62900	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-12	7/6/2010	--	3030000	--	--	--	--	--
	9/20/2010	--	1970000	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	<10.0	2500000	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	2330000	--	<20.0	9.1	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-12A	7/6/2010	--	100000	--	--	--	--	--
	9/20/2010	--	82500	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	81000	--	--	--	--	--
	6/2/2011	--	101000	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	
MW-13	7/6/2010	--	450000	--	--	--	--	--
	9/20/2010	--	241000	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--
	3/14/2011	--	375000	--	--	--	--	--
	6/2/2011	--	188000	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
3/6/2012	--	--	--	--	--	--	--	

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 Station No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA						
		Silver SW6010 D (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium SW6010 D (ug/L)	Total Organic Carbon (mg/L)	Vanadium SW6010 D (ug/L)	Zinc SW6010 D (ug/L)
MW-14	6/2/2011	--	56300	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--
MW-15	6/2/2011	--	62700	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--
MW-16	6/2/2011	--	8740	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--
MW-17	6/2/2011	--	3920000	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--

Analytical Notes:

-- - No information available

Bold - Above the laboratory's indicated reporting limit

< - below the laboratory's indicated reporting limit

LPH - Liquid Phase Hydrocarbons

mg/L - milligrams per liter

NS - Well not sampled.

ug/L - micrograms/liter

Quarterly Summary Report, First Quarter 2012
76 Station No. 5191/5043
Oakland, CA
Antea Group Project No. I42705191



Appendix A

Previous Investigation and Site History Summary

PREVIOUS INVESTIGATION AND SITE HISTORY SUMMARY

October 1991 - Four soil samples were collected from the product pipe trenches at depths of approximately 3 feet below ground surface (bgs) during a dispenser island modification. The product pipe trenches were subsequently excavated to the groundwater depth at 4 to 4.5 feet bgs.

February 1992 - Three monitoring wells, MW-1 through MW-3, were installed at the site to depths ranging from 13.5 to 15 feet bgs.

August 1992 - Three additional monitoring wells, MW-4 through MW-6, were installed at the site to a depth of 13.5 feet bgs.

September 1994 - One 280-gallon waste-oil UST was removed from the site. The UST was made of steel, and no apparent holes or cracks were observed in the UST. One soil sample was collected from beneath the former UST at a depth of approximately 9 feet bgs. No petroleum hydrocarbons were reported.

January 1995 - Two additional monitoring wells, MW-9 and MW-10, were installed to depths of 13 and 15 feet bgs. In addition, monitoring wells MW-4 and MW-5 were destroyed by over-drilling the wells and backfilling with neat cement.

March 1995 - Two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. Groundwater was encountered in the tank cavity at a depth of approximately 8.5 feet bgs. Soil samples contained total petroleum hydrocarbons as diesel (TPHd) and benzene, and TPH as gasoline (TPHg). Approximately 125,000 gallons of groundwater were pumped from the site for remediation and properly disposed off-site. Four fuel dispenser islands and associated product piping were also removed. Based on the results of the confirmation samples, the product dispenser islands were over excavated to approximately 6 feet bgs.

March-April 1995 - During demolition activities of the former station building, soil samples were collected from two excavations, which were subsequently over excavated. Confirmation samples contained petroleum hydrocarbons. An additional area on the south side of the former station building was excavated based on photo-ionization detector (PID) readings. Two monitoring wells, MW-1 and MW-2, were destroyed in order to allow for over excavation activities to extend to an area adjacent to the dispenser islands in the southeastern quadrant of the site. The excavated areas were subsequently backfilled with clean-engineered fill.

April 1997 - Two additional monitoring wells, MW-7 and MW-8, were installed off-site to the south and east on the neighboring property to a depth of 13 feet bgs. In addition, monitoring well MW-3, which was damaged during site renovation activities, was fully drilled out and reconstructed in the same borehole.

October 2003 - Site environmental consulting responsibilities were transferred to TRC.

April 8-9, 2005 - TRC conducted a 24-hour dual phase extraction (DPE) test at the site using monitoring well MW-6. The 24-hour DPE test was only moderately successful at removing vapor-phase petroleum hydrocarbons from the subsurface; therefore, TRC recommended DPE no longer be considered a viable remedial alternative for the site.

October 2007 - Site environmental consulting responsibilities were transferred to Delta Consultants.

December 2009 - Delta advanced two borings, B-4 and B-5, to depths of 20 feet bgs and 32 feet bgs, respectively. Analytical results from the soil and groundwater samples collected from these two borings indicated that the soil and the groundwater were impacted by petroleum hydrocarbons at these locations.

June 2010 – Delta installed two 4-inch diameter monitoring/extraction wells, MW-11 and MW-12, and two 2-inch diameter monitoring wells, MW-12A and MW-13, at the site. Analytical results from the soil and groundwater samples collected from the MW-12 and MW-12A boring locations indicated that the soil and the groundwater were impacted by petroleum hydrocarbons at these locations.

May 2011 – Antea Group (formally Delta Consultants) installed four 2-inch diameter monitoring wells, MW-14 through MW-17, and advanced one soil boring, B-6, at the site. All four monitoring wells were installed with ten feet of screen from 3 feet bgs to 13 feet bgs. Analytical results of soil samples collected during the monitoring well installation reported TPHg concentrations ranging from 1.0 milligrams per kilogram (mg/kg) (MW-14d13) to 2,490 mg/kg (B-6d9), benzene concentrations ranging from 0.67 mg/kg (B-6d21) to 26.4 mg/kg (B-6d9), toluene concentrations ranging from 0.2 mg/kg (MW-14d10) to 73.9 mg/kg (B-6d9), ethylbenzene concentrations ranging from 0.037 mg/kg (MW-14d13) to 58.1 mg/kg (B-6d9), total xylenes concentrations ranging from 0.066 mg/kg (MW-14d13) to 230 mg/kg (B-6d9), methyl tertiary-butyl ether (MTBE) concentrations ranging from 0.015 mg/kg (MW-15d13) to 0.19 mg/kg (MW-15d8), tertiary-butyl alcohol (TBA) concentrations ranging from 0.014 mg/kg (MW-16d8 and B-6d21) to 0.16 mg/kg (MW-15d8), and lead concentrations ranging from 5.5 mg/kg (MW-16d13) to 16.3 mg/kg (MW-17d9). Diesel range organics (DRO) and DRO with silica gel concentrations were reported; however, all of the results did not match the laboratory standard for diesel. Concentrations of DRO ranged from 2.9 mg/kg (MW-17d13) to 258 mg/kg (B-6d14) and DRO with silica gel concentrations ranged from 2.5 mg/kg (MW-17d13) to 250 mg/kg (B-6d14).

March 2012 – Antea Group advanced five soil borings (HPB-1 through HPB-5) at the site. The borings were advanced using direct push technology. The borings were used to obtain a hydraulic profile of the substrate beneath the site. The data obtained during the investigation will be used to determine the best path forward in terms of remediation.

SENSITIVE RECEPTORS

April 24, 2006, TRC completed a sensitive receptor survey for the site. According to the Department of Water Resources (DWR) records, three water supply wells are located within one-half mile of the site. The closest well is an irrigation well, reported to be, approximately 1,080 feet southeast of the site. In addition, two surface water bodies were observed within a one-half mile radius of the site. San Leandro Creek is located approximately 1,400 feet southwest of the site and flows into the San Leandro Bay. Elmhurst Creek is located approximately 2,220 feet north of the site and also flows into the San Leandro Bay.

Current Consultant: **Antea Group**

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Oakland, CA
Antea Group Project No. I42705191



Appendix B

Blaine Tech Services Groundwater Sampling Procedures

BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for DELTA comply with safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40 hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any DELTA COP/ELT site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic sounders which are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of Immiscibles or sheen and when free product is suspected, it is confirmed using an electronic interface probe (e.g. MMC). No samples are collected from a well containing free product.

EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well. Small volumes of purgewater are often removed by hand bailing with a disposable bailer.

PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less

than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewateres and does not recharge.

Wells known to dewater are evacuated as early as possible during each site visit in order to allow for the greatest amount of recovering. Any well that does not recharge to 80% of its original volume will be sampled prior to the departure of our personnel from the site in order to eliminate the need of a return visit.

In jurisdictions where a certain percentage of recovery is included in the local completion standard, our personnel follow the regulatory expectation.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non hazardous purgewater is transported under standard Bill of Lading or Non-Hazardous manifest to a Blaine Tech Services, Inc. facility before being transported to an approved disposal facility.

SAMPLE COLLECTION DEVICES

All samples are collected using disposable bailers.

SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory which will analyze the samples. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

TRIP BLANKS

Upon request, a Trip Blank is carried to each site and is kept inside the cooler for the duration of the sampling event. It is turned over to the laboratory for analysis with the samples from that site.

DUPLICATES

Upon request, one Duplicate sample is collected at each site. It is up to the Field Technician to choose the well at which the Duplicate is collected. Typically, a duplicate is collected from one of the most contaminated wells. The Duplicate sample is labeled DUP thus rendering the sample blind.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the analytical laboratory that will perform the intended analytical procedures. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

Each and every sample container has a label affixed to it. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time at which the sample was collected and the initials of the person collecting the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer which is then operated with high quality deionized water which is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps

and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, sounder etc.) that cannot be washed using the hot high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

EXAMPLE: The sounder is cleaned between wells using the non-phosphate soap and deionized water solution followed by deionized water rinses. The sounder is then washed with the steam cleaner between sites or as necessitated by use in a particularly contaminated well.

DISSOLVED OXYGEN READINGS

All Dissolved Oxygen readings are taken using YSI meters (e.g. YSI Model 550 meter). These meters are equipped with membrane probe that enables them to collect accurate in-situ readings.

The probe and reel is decontaminated between wells as described above. The meter is calibrated as per the instructions in the operating manual. The probe is lowered into the water column allowed to stabilize before use.

OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual. In use the probe is placed in a cup of freshly obtained monitoring well water and allowed to stabilize.

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76 Station No. 5191/5043
Oakland, CA
Antea Group Project No. I42705191



Appendix C

Blaine Tech Services Groundwater Sampling Field Data Sheets

Well-Head Inspection & Well Gauging Form

Antea Group Project No: 2705191 Site Address: 449 Hegenberger Rd. ; Oakland, CA

Field Technician: Gregory Roberts, Blaine Tech Services Date: 3/06/12 Weather: clear, windy
(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-3	G	P	P	G	G	Y	2	0856	2.63	13.91			1/2 tabs stripped
12	MW-6	G	G	G	P	G	Y	2	0941	3.43	12.63			replaced dolphin lock
	MW-7	G	G	G	G	G	N	2	0829	4.54	12.94			
	MW-8	G	G	G	G	G	N	2	0822	3.07	14.68			
	MW-9	P	P	P	G	G	Y	2	0850	3.03	12.68			1/3 tabs broken/missing
7	MW-10	G	G	G	G	G	N	2	0909	3.74	12.61			
6	MW-11	G	G	G	G	G	N	4	0902	2.31	19.53			
11	MW-12	G	G	G	G	G	N	4	0935	4.01	19.45			
3	MW-12A	G	G	G	G	G	Y	2	0841	4.32	32.65			
8	MW-13	G	G	G	G	G	N	2	0917	5.37	14.53			
13	MW-14	G	G	G	G	G	N	2	0948	3.94	12.75			
9	MW-15	G	G	G	G	G	N	2	0925	2.69	12.70			
10	MW-16	G	G	G	G	G	N	2	0930	2.91	12.66			
14	MW-17	G	G	G	G	G	N	2	0955	4.64	12.65			

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:	449 Hegenberger Rd.; Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-6	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	3.43	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.63	Water Column Height (ft):	9.20

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailor <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <u>Disposable Bailor w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>9.20</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.5</u> Casing Volume (gal): <u>1.5</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>4.5</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: 1349 Stop Time: 1355

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				—				
1350	17.40	6.42	24099		10	0.75	0.75	
1351	16.89	6.38	24179		8	1.19	1.5	
1352	16.28	6.96	2281		108	1.55	2.25	
1353	15.81	7.00	3051		27	0.61	3.0	
1354	15.42	6.97	2926		17	0.53	3.75	
1355	15.38	6.92	3041		15	0.47	4.5	
1355	well dewatered						5.25	10.95
Post-Purge				—				

Did Well dewater? Yes No Total Purge volume (gal): 4.5

Other Comments: 80% - 5.27 * Purged through flow cell
DTW - 6.82

Sample Info:

Sample ID:	MW-6-20120331	Sample Date and Time:	3/06/2012 @ 1557 (72hrs)
Selected Analysis:	see COC		

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

Signature: [Signature] Date: 3/06/2012



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:	449 Hezenberger Rd., Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-10	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	3.74	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.61	Water Column Height (ft):	8.87

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>8.87</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.5</u> Casing Volume (gal): <u>1.5</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>4.5</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: 1155 Stop Time: 1202

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				—				
1156	16.68	7.43	1119		5	0.90	0.75	
1157	16.03	7.32	1135		5	2.80	1.5	
1158	16.26	6.92	2427		18	1.22	2.25	
1159	16.48	6.89	2308		7	0.67	3.0	
1200	15.69	6.89	2119		6	0.55	3.75	
1201	16.87	6.90	1984		4	0.52	4.5	
1202	16.89	6.93	1905		3	0.51	5.25	4.03
Post-Purge				—				

Did Well dewater? Yes No Total Purge volume (gal): 5.25

Other Comments: 80% - 5.51 * Purged through flow cell
DTW - 4.03

Sample Info:
 Sample ID: MW-10_2012_0331 Sample Date and Time: 3/06/2012@ 12:08
 Selected Analysis: see CO2

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

Signature: Date: 3/06/2012



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

Groundwater Sampling Form

Site Address: <u>449 Hezenberger Rd., Oakland, CA</u>	
Project No: <u>2705191</u>	Field Technician: <u>G. Roberts</u>
Field Point: <u>MW-11</u>	Date: <u>3/06/2012</u>
Depth to Water (DTW) (ft bgs): <u>2.31</u>	Well Diameter (in): <u>2</u> (4) 6 8
Depth to LNAPL (ft bgs):	Thickness of LNAPL (ft):
Total Depth of Well (ft bgs): <u>19.53</u>	Water Column Height (ft): <u>17.22</u>

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> <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>17.22</u>	X Conversion Factor (gal/ft): <u>0.66</u>	= Casing Volume (gal): <u>11.4</u>
Casing Volume (gal): <u>11.4</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>34.2</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: 11:26 Stop Time: 11:31

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>1128</u>	<u>17.09</u>	<u>7.33</u>	<u>1114</u>		<u>37</u>	<u>0.57</u>	<u>5.75</u>	
<u>1130</u>	<u>17.42</u>	<u>7.32</u>	<u>1161</u>		<u>17</u>	<u>0.43</u>	<u>11.5</u>	
<u>1132</u>	<u>17.60</u>	<u>7.31</u>	<u>1144</u>		<u>10</u>	<u>0.36</u>	<u>17.25</u>	
<u>1134</u>	<u>17.68</u>	<u>7.30</u>	<u>1136</u>		<u>7</u>	<u>0.33</u>	<u>23.0</u>	
<u>1136</u>	<u>17.71</u>	<u>7.29</u>	<u>1126</u>		<u>7</u>	<u>0.31</u>	<u>28.75</u>	
<u>1138</u>	<u>17.72</u>	<u>7.28</u>	<u>1121</u>		<u>7</u>	<u>0.31</u>	<u>34.5</u>	<u>4.93</u>
Post-Purge				—				

Did Well dewater? Yes No Total Purge volume (gal): 34.5

Other Comments: 80% - 5.75 * Purged through flow cell
DTW - 4.93

Sample Info:
 Sample ID: MW-11-20120331 Sample Date and Time: 3/06/2012 @ 1144
 Selected Analysis: see CO2

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

Signature: [Signature] Date: 3/06/2012



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:	449 Hezenberger Rd., Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-12	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	4.01	Well Diameter (in):	2 (4) 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.45	Water Column Height (ft):	15.44

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>15.44</u> X Conversion Factor (gal/ft): <u>0.66</u> = Casing Volume (gal): <u>10.2</u> Casing Volume (gal): <u>10.2</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>30.6</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				—				
1328	17.14	6.38	23195		30	0.69	5.25	
1330	16.97	6.59	20722		12	0.59	10.5	
1332	16.85	6.60	21328		30	0.55	15.75	
1334	16.82	6.60	20581		24	0.57	21.0	
1336	16.84	6.59	20791		14	0.56	26.25	
1338	16.80	6.57	21710		4	0.59	31.5	16.24
Post-Purge				—				

Did Well dewater? Yes NO Total Purge volume (gal): 31.5

Other Comments: 80% - 7.10 * Purged through flow cell
DTW - 4.81

Sample Info:

Sample ID:	MW-12_2012_0331	Sample Date and Time:	3/06/2012@1527
Selected Analysis:	see COC		

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

Signature: [Signature] Date: 3/06/2012

Groundwater Sampling Form

Site Address: <u>449 Hezenberger Rd., Oakland, CA</u>	
Project No: <u>2705191</u>	Field Technician: <u>G. Roberts</u>
Field Point: <u>MW-12A</u>	Date: <u>3/06/2012</u>
Depth to Water (DTW) (ft bgs): <u>4.32</u>	Well Diameter (in): <u>(2) 4 6 8</u>
Depth to LNAPL (ft bgs):	Thickness of LNAPL (ft):
Total Depth of Well (ft bgs): <u>32.65</u>	Water Column Height (ft): <u>28.33</u>

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 w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>28.33</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>4.8</u> Casing Volume (gal): <u>4.8</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>14.4</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: 1053 Stop Time: 1059

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				—				
1054	16.42	6.47	2408		>1000	1.99	2.5	
1055	17.47	6.53	2933		847	0.93	5.0	
1056	17.77	6.63	2914		432	0.75	7.5	
1057	17.95	6.68	2946		281	0.65	10.0	
1058	18.04	6.71	2983		151	0.58	12.5	
1059	18.08	6.73	3010		118	0.55	15.0	4.38
Post-Purge				—				

Did Well dewater? Yes No Total Purge volume (gal): 15.0

Other Comments: 80% - 9.99 * Purged through flow cell
DTW - 4.38 * collected ms/msd

Sample Info

Sample ID: <u>MW-12A 2012 0331</u>	Sample Date and Time: <u>3/06/2012 @ 1110</u>
Selected Analysis: <u>see COL</u>	

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

Signature: [Signature] Date: 3/06/2012



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:	449 Hezenberger Rd.; Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-13	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	5.37	Well Diameter (in):	② 4 6 8 —
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	14.53	Water Column Height (ft):	9.16

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 9.16	X Conversion Factor (gal/ft): 0.17	= Casing Volume (gal): 1.5
Casing Volume (gal): 1.5	X Specified Volumes: 3	= Calculated Purge (gal): 4.5
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 12:31 Stop Time: 1:25

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				—		—		
1222	16.98	7.17	1806		4	0.85	0.75	
1223	17.08	7.09	1710		3	0.99	1.5	
1224	16.81	7.34	4069		382	1.69	2.25	
1225	16.07	7.41	3969		299	0.73	3.0	
1226	15.66	7.40	3697		136	0.65	3.75	
1227	15.43	7.36	3735		86	0.55	4.5	
1228	15.49	7.30	4034		63	0.48	5.25	
1229	15.50	7.25	4100		51	0.46	6.0	8.25
Post-Purge				—		—		

Did Well dewater? Yes No Total Purge volume (gal): 6.0

Other Comments: 80% - 7.20 * Purged through flow cell
DTW - 7.15

Sample Info:

Sample ID: MW-13_2012_0331	Sample Date and Time: 3/06/2012@1237 (short wait)
Selected Analysis: see COC	

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

Signature: Date: 3/06/2012

Groundwater Sampling Form

Site Address:	449 Heyenberger Rd. ; Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-14	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	3.94	Well Diameter (in):	② 4 6 8 —
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.75	Water Column Height (ft):	8.81

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>8.81</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.5</u> Casing Volume (gal): <u>1.5</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>4.5</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: 1405 Stop Time: 1411

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				—		—		
1406	15.50	6.93	3451		14	1.00	0.75	
1407	15.33	6.98	4993		28	1.49	1.5	
1408	15.07	7.01	11242		111	1.39	2.25	
1409	14.02	6.93	7408		177	0.92	3.0	
1410	13.61	6.87	7667		95	0.69	3.75	
1411	13.65	6.91	8153		91	0.58	4.5	
1411		well	dewatered				4.5	10.94
Post-Purge				—		—		

Did Well dewater? Yes No Total Purge volume (gal): 4.5

Other Comments: 80% - 5.70 * Purged through flow cell
DTW - 6.81

Sample Info:	
Sample ID:	MW-14_2012_0331
Sample Date and Time:	3/06/2012 @ 1416 (>2hrs)
Selected Analysis:	see COC

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

Signature: [Signature] Date: 3/06/2012



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: 449 Hegenberger Rd. ; Oakland, CA	
Project No: 2705191	Field Technician: G. Roberts
Field Point: MW-15	Date: 3/06/2012
Depth to Water (DTW) (ft bgs): 2.69	Well Diameter (in): ② 4 6 8
Depth to LNAPL (ft bgs):	Thickness of LNAPL (ft):
Total Depth of Well (ft bgs): 12.70	Water Column Height (ft): 10.01

Purging Info and Calculations:

Purge Method: Low-Flow <u>3 casing volumes</u> Other: _____	Purge Equipment: Disposable Bailor <u>Electric Submersible</u> Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <u>Disposable Bailor W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>10.01</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>1.7</u>
Casing Volume (gal): <u>1.7</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>5.1</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 12:55 Stop Time: 1:01

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				—		—		
1255	16.06	7.39	5239		73	0.87	1.0	
1256	17.26	7.03	6642		193	1.58	2.0	
1257	17.17	6.73	1904		38	0.76	3.0	
1258	17.05	6.63	1815		41	0.67	4.0	
1259	17.16	6.61	2630		56	0.77	5.0	
1300	well dewatered						6.0 <u>5.7</u>	10.85
1501	17.55	7.12	2673		105	0.81	Grab	
Post-Purge				—		—		

Did Well dewater? Yes No Total Purge volume (gal): 5.7

Other Comments: 80% - 4.69 * Purged through flow cell
DTW - 8.98

Sample Info:

Sample ID: MW-15_2012_0331	Sample Date and Time: 3/06/2012 @ 1501 (>2hrs)
Selected Analysis: see COC	

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

Signature: [Signature] Date: 3/06/2012

Groundwater Sampling Form

Site Address:	449 Hezenberger Rd.; Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-16	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	2.91	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.66	Water Column Height (ft):	9.75

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>9.75</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.6</u> Casing Volume (gal): <u>1.6</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>4.8</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:	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				—		—		
1311	17.43	6.97	6852		123	0.98	1.0	
1312	17.71	7.02	3852		71000	1.60	2.0	
1313	17.65	6.96	2992		219	0.74	3.0	
1314	17.67	6.91	2969		148	0.65	4.0	
1315	17.67	6.89	3090		161	0.58	5.0	
1316	17.71	6.90	3258		167	0.55	6.0	9.87
Post-Purge				—		—		
Did Well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total Purge volume (gal): <u>6.0</u>						

Other Comments: 80% - 4.86 * Purged through flow cell
 DTW - 6.62

Sample Info:	
Sample ID: MW-16-2012-0331	Sample Date and Time: 3/06/2012 @ 1517 (>2hrs)
Selected Analysis: see COC	

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

Signature: Date: 3/06/2012

Antea™ Group Antea™ Group, 1-800-477-7411	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:	449 Hezenberger Rd., Oakland, CA		
Project No:	2705191	Field Technician:	G. Roberts
Field Point:	MW-17	Date:	3/06/2012
Depth to Water (DTW) (ft bgs):	4.64	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.65	Water Column Height (ft):	8.01

Purging Info and Calculations:

Purge Method: Low-Flow 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: Disposable Bailer <u>w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 8.01	X Conversion Factor (gal/ft): 0.17	= Casing Volume (gal): 1.4
Casing Volume (gal): 1.4	X Specified Volumes: 3	= Calculated Purge (gal): 4.2
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 1:15 Stop Time: 1:25

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				—				
1420	14.15	6.93	12609		135	1.17	0.75	
1421	14.62	6.92	16520		63	1.43	1.5	
1422	15.44	6.33	34582		225	1.31	2.25	
1423	15.70	6.62	27083		80	0.73	3.0	
1424	15.55	6.66	25758		49	0.58	3.75	
1424	15.67	6.60	28058		56	0.47	4.5	
1425		well dewatered					4.5	10.54
Post-Purge				—				

Did Well dewater? Yes No Total Purge volume (gal): 4.5

Other Comments: 80% - 6.24 * Purged through flow cell
DTW - 9.40

Sample Info:

Sample ID:	MW-17_2012_0331	Sample Date and Time:	3/06/2012 @ 1630 (72hrs)
Selected Analysis:	see COC		

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

Signature: Date: 3/06/2012

Quarterly Summary Report, First Quarter 2012
76 Station No. 5191/5043
Oakland, CA
Antea Group Project No. I42705191



Appendix D

Certified Laboratory Analytical Report and Data Validation Form

Is the Data Set Valid?

(circle)

Yes / No

Preservation Temperature

(if known): 2.2 + 3.8 °C

Antea™ Group Laboratory Data Validation Sheet

Project/Client: 76 Station No. 5191 / COP-ELT

Project #: I42705191

Date of Validation: 4/12/12 **Date of Analysis:** 3/10 to 3/20

Sample Date: 3/6/12 **Completed By:** ETW

Signature: [Signature]

Circle
or
Highlight
Yes / No
(below)

Analytical Lab Used and Report # (if any): Pass # 251150

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:

#9. NS/MSD 107165 + 107166 Ethylbenzene + Xylene (mw-14)
 107161 + 107162 TPH_g
 mw-17 surrogate outside control limits

#11. NS/MSD 107454 + 107455 Ethylbenzene + Toluene
 Min total Qualifiers listed in the report



March 22, 2012

Dennis Dettloff
Antea USA
11050 White Rock Rd. #110
Rancho Cordova, CA 95670

RE: Project: 2705191
Pace Project No.: 2511150

Dear Dennis Dettloff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Bonnie McKee for
Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Tara Bosch, Antea USA
Jonathon Fillingame, Antea USA
Lia Holden, Antea USA
Dan Kellner, Antea USA
Josh Mahoney, Antea USA
Tony Perini, Antea USA
Nicole Persaud, Antea USA
Don Pinkerton, Antea USA
Doug Umland, Antea USA
Ed Weyrens, Antea USA



REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: 2705191
Pace Project No.: 2511150

Washington Certification IDs

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

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

REPORT OF LABORATORY ANALYSIS

Page 2 of 28

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SAMPLE ANALYTE COUNT

Project: 2705191
Pace Project No.: 2511150

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2511150001	MW-10_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150002	MW-11_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LNH, LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150003	MW-12_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LNH, LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150004	MW-12A_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150005	MW-13_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LNH, LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150006	MW-14_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	ERB, LNH	11	PASI-S
		CA LUFT	LNH	2	PASI-S
2511150007	MW-15_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LNH, LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150008	MW-16_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150009	MW-17_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	LPM	11	PASI-S
		CA LUFT	LPM	2	PASI-S
2511150010	MW-6_20120331	EPA 8015B	DMT	3	PASI-S
		EPA 5030B/8260	ERB, LNH	11	PASI-S
		CA LUFT	ERB	2	PASI-S

REPORT OF LABORATORY ANALYSIS

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HITS ONLY

Project: 2705191
Pace Project No.: 2511150

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2511150001	MW-10_20120331					
EPA 5030B/8260	tert-Butyl Alcohol	58.7	ug/L	5.0	03/12/12 17:04	
2511150002	MW-11_20120331					
EPA 5030B/8260	tert-Butyl Alcohol	5.7	ug/L	5.0	03/15/12 14:51	
EPA 5030B/8260	Methyl-tert-butyl ether	35.3	ug/L	0.50	03/10/12 21:32	
2511150003	MW-12_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	272	ug/L	50.0	03/14/12 21:28	T4
EPA 5030B/8260	Benzene	193	ug/L	0.50	03/12/12 17:22	
EPA 5030B/8260	tert-Butyl Alcohol	78.4	ug/L	5.0	03/12/12 17:22	
EPA 5030B/8260	Ethylbenzene	28.8	ug/L	0.50	03/12/12 17:22	
EPA 5030B/8260	Methyl-tert-butyl ether	835	ug/L	5.0	03/20/12 20:08	
EPA 5030B/8260	Toluene	22.6	ug/L	0.50	03/12/12 17:22	
EPA 5030B/8260	Xylene (Total)	80.5	ug/L	1.5	03/12/12 17:22	
CA LUFT	TPH-Gasoline (C05-C12)	1260	ug/L	50.0	03/12/12 17:22	
2511150004	MW-12A_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	52.0	ug/L	50.0	03/14/12 21:45	T4
2511150005	MW-13_20120331					
EPA 5030B/8260	tert-Butyl Alcohol	38.5	ug/L	5.0	03/15/12 15:14	
EPA 5030B/8260	Methyl-tert-butyl ether	110	ug/L	0.50	03/10/12 22:26	
CA LUFT	TPH-Gasoline (C05-C12)	63.9	ug/L	50.0	03/15/12 15:14	2n
2511150006	MW-14_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	3640	ug/L	50.0	03/14/12 23:28	T4
EPA 5030B/8260	Benzene	959	ug/L	2.5	03/20/12 02:43	
EPA 5030B/8260	tert-Butyl Alcohol	28.1	ug/L	25.0	03/20/12 02:43	
EPA 5030B/8260	Ethylbenzene	2330	ug/L	12.5	03/20/12 20:41	M1
EPA 5030B/8260	Toluene	15.0	ug/L	2.5	03/20/12 02:43	
EPA 5030B/8260	Xylene (Total)	3830	ug/L	37.5	03/20/12 20:41	M1
CA LUFT	TPH-Gasoline (C05-C12)	16600	ug/L	250	03/20/12 02:43	
2511150007	MW-15_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	56.2	ug/L	50.0	03/14/12 23:45	T4
EPA 5030B/8260	tert-Butyl Alcohol	101	ug/L	5.0	03/15/12 14:14	
EPA 5030B/8260	Methyl-tert-butyl ether	106	ug/L	0.50	03/10/12 22:45	
2511150008	MW-16_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	204	ug/L	50.0	03/15/12 00:03	T4
EPA 5030B/8260	tert-Butyl Alcohol	134	ug/L	5.0	03/12/12 19:17	
EPA 5030B/8260	Methyl-tert-butyl ether	1090	ug/L	5.0	03/12/12 16:25	
CA LUFT	TPH-Gasoline (C05-C12)	392	ug/L	50.0	03/12/12 19:17	2n
2511150009	MW-17_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	1530	ug/L	50.0	03/15/12 00:20	T4
EPA 5030B/8260	Benzene	2090	ug/L	5.0	03/15/12 18:22	
EPA 5030B/8260	tert-Butyl Alcohol	481	ug/L	5.0	03/12/12 19:53	
EPA 5030B/8260	Ethylbenzene	39.3	ug/L	0.50	03/12/12 19:53	
EPA 5030B/8260	Methyl-tert-butyl ether	1.1	ug/L	0.50	03/12/12 19:53	

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HITS ONLY

Project: 2705191
 Pace Project No.: 2511150

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2511150009	MW-17_20120331					
EPA 5030B/8260	Toluene	23.8	ug/L	0.50	03/12/12 19:53	
EPA 5030B/8260	Xylene (Total)	166	ug/L	1.5	03/12/12 19:53	
CA LUFT	TPH-Gasoline (C05-C12)	1580	ug/L	50.0	03/12/12 19:53	
2511150010	MW-6_20120331					
EPA 8015B	TPH-DRO (C10-C24) SG	14800	ug/L	50.0	03/15/12 00:37	T4
EPA 5030B/8260	Benzene	1020	ug/L	2.5	03/20/12 03:02	
EPA 5030B/8260	tert-Butyl Alcohol	316	ug/L	25.0	03/20/12 03:02	
EPA 5030B/8260	Ethylbenzene	1320	ug/L	2.5	03/20/12 03:02	
EPA 5030B/8260	Methyl-tert-butyl ether	18.5	ug/L	2.5	03/20/12 03:02	
EPA 5030B/8260	Toluene	131	ug/L	2.5	03/20/12 03:02	
EPA 5030B/8260	Xylene (Total)	4730	ug/L	75.0	03/20/12 20:58	
CA LUFT	TPH-Gasoline (C05-C12)	55000	ug/L	2500	03/20/12 20:58	1n,CH,M1

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ANALYTICAL RESULTS

Project: 2705191
Pace Project No.: 2511150

Sample: MW-10_20120331	Lab ID: 2511150001	Collected: 03/06/12 12:08	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	03/13/12 09:25	03/14/12 20:53		
Surrogates								
o-Terphenyl (S) SG	100 %		46-125	1	03/13/12 09:25	03/14/12 20:53	84-15-1	
n-Octacosane (S) SG	108 %		57-128	1	03/13/12 09:25	03/14/12 20:53	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		03/12/12 17:04	71-43-2	
tert-Butyl Alcohol	58.7 ug/L		5.0	1		03/12/12 17:04	75-65-0	
Ethanol	ND ug/L		250	1		03/12/12 17:04	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/12/12 17:04	100-41-4	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/12/12 17:04	1634-04-4	
Toluene	ND ug/L		0.50	1		03/12/12 17:04	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/12/12 17:04	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	94 %		79-121	1		03/12/12 17:04	460-00-4	
Dibromofluoromethane (S)	110 %		81-119	1		03/12/12 17:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	105 %		72-127	1		03/12/12 17:04	17060-07-0	
Toluene-d8 (S)	95 %		77-120	1		03/12/12 17:04	2037-26-5	
CA LUFT MSV GRO								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		03/12/12 17:04		
Surrogates								
4-Bromofluorobenzene (S)	94 %		76-121	1		03/12/12 17:04	460-00-4	

Sample: MW-11_20120331	Lab ID: 2511150002	Collected: 03/06/12 11:44	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	03/13/12 09:25	03/14/12 21:10		
Surrogates								
o-Terphenyl (S) SG	100 %		46-125	1	03/13/12 09:25	03/14/12 21:10	84-15-1	
n-Octacosane (S) SG	108 %		57-128	1	03/13/12 09:25	03/14/12 21:10	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		03/10/12 21:32	71-43-2	
tert-Butyl Alcohol	5.7 ug/L		5.0	1		03/15/12 14:51	75-65-0	
Ethanol	ND ug/L		250	1		03/10/12 21:32	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/10/12 21:32	100-41-4	
Methyl-tert-butyl ether	35.3 ug/L		0.50	1		03/10/12 21:32	1634-04-4	
Toluene	ND ug/L		0.50	1		03/10/12 21:32	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/10/12 21:32	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	99 %		79-121	1		03/10/12 21:32	460-00-4	
Dibromofluoromethane (S)	106 %		81-119	1		03/10/12 21:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	97 %		72-127	1		03/10/12 21:32	17060-07-0	

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ANALYTICAL RESULTS

Project: 2705191
Pace Project No.: 2511150

Sample: MW-11_20120331		Lab ID: 2511150002	Collected: 03/06/12 11:44	Received: 03/08/12 09:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Surrogates								
Toluene-d8 (S)	96 %		77-120	1		03/10/12 21:32	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		03/15/12 14:51		
Surrogates								
4-Bromofluorobenzene (S)	101 %		76-121	1		03/15/12 14:51	460-00-4	

Sample: MW-12_20120331		Lab ID: 2511150003	Collected: 03/06/12 15:27	Received: 03/08/12 09:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	272 ug/L		50.0	1	03/13/12 09:25	03/14/12 21:28		T4
Surrogates								
o-Terphenyl (S) SG	101 %		46-125	1	03/13/12 09:25	03/14/12 21:28	84-15-1	
n-Octacosane (S) SG	111 %		57-128	1	03/13/12 09:25	03/14/12 21:28	630-02-4	
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	193 ug/L		0.50	1		03/12/12 17:22	71-43-2	
tert-Butyl Alcohol	78.4 ug/L		5.0	1		03/12/12 17:22	75-65-0	
Ethanol	ND ug/L		250	1		03/12/12 17:22	64-17-5	
Ethylbenzene	28.8 ug/L		0.50	1		03/12/12 17:22	100-41-4	
Methyl-tert-butyl ether	835 ug/L		5.0	10		03/20/12 20:08	1634-04-4	
Toluene	22.6 ug/L		0.50	1		03/12/12 17:22	108-88-3	
Xylene (Total)	80.5 ug/L		1.5	1		03/12/12 17:22	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	86 %		79-121	1		03/12/12 17:22	460-00-4	
Dibromofluoromethane (S)	106 %		81-119	1		03/12/12 17:22	1868-53-7	
1,2-Dichloroethane-d4 (S)	105 %		72-127	1		03/12/12 17:22	17060-07-0	
Toluene-d8 (S)	93 %		77-120	1		03/12/12 17:22	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	1260 ug/L		50.0	1		03/12/12 17:22		
Surrogates								
4-Bromofluorobenzene (S)	86 %		76-121	1		03/12/12 17:22	460-00-4	

Sample: MW-12A_20120331		Lab ID: 2511150004	Collected: 03/06/12 11:10	Received: 03/08/12 09:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	52.0 ug/L		50.0	1	03/13/12 09:25	03/14/12 21:45		T4
Surrogates								
o-Terphenyl (S) SG	108 %		46-125	1	03/13/12 09:25	03/14/12 21:45	84-15-1	

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ANALYTICAL RESULTS

Project: 2705191
 Pace Project No.: 2511150

Sample: MW-12A_20120331	Lab ID: 2511150004	Collected: 03/06/12 11:10	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
Surrogates								
n-Octacosane (S) SG	119 %		57-128	1	03/13/12 09:25	03/14/12 21:45	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		03/10/12 22:08	71-43-2	
tert-Butyl Alcohol	ND ug/L		5.0	1		03/10/12 22:08	75-65-0	
Ethanol	ND ug/L		250	1		03/10/12 22:08	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/10/12 22:08	100-41-4	
Methyl-tert-butyl ether	ND ug/L		0.50	1		03/10/12 22:08	1634-04-4	
Toluene	ND ug/L		0.50	1		03/10/12 22:08	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/10/12 22:08	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	98 %		79-121	1		03/10/12 22:08	460-00-4	
Dibromofluoromethane (S)	107 %		81-119	1		03/10/12 22:08	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		72-127	1		03/10/12 22:08	17060-07-0	
Toluene-d8 (S)	96 %		77-120	1		03/10/12 22:08	2037-26-5	
CA LUFT MSV GRO								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		03/12/12 17:40		
Surrogates								
4-Bromofluorobenzene (S)	99 %		76-121	1		03/12/12 17:40	460-00-4	

Sample: MW-13_20120331	Lab ID: 2511150005	Collected: 03/06/12 12:37	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG								
ND ug/L 50.0 1 03/13/12 09:25 03/14/12 22:37								
Surrogates								
o-Terphenyl (S) SG	68 %		46-125	1	03/13/12 09:25	03/14/12 22:37	84-15-1	
n-Octacosane (S) SG	76 %		57-128	1	03/13/12 09:25	03/14/12 22:37	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		03/10/12 22:26	71-43-2	
tert-Butyl Alcohol	38.5 ug/L		5.0	1		03/15/12 15:14	75-65-0	
Ethanol	ND ug/L		250	1		03/10/12 22:26	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/10/12 22:26	100-41-4	
Methyl-tert-butyl ether	110 ug/L		0.50	1		03/10/12 22:26	1634-04-4	
Toluene	ND ug/L		0.50	1		03/10/12 22:26	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/10/12 22:26	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	101 %		79-121	1		03/10/12 22:26	460-00-4	
Dibromofluoromethane (S)	112 %		81-119	1		03/10/12 22:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	126 %		72-127	1		03/10/12 22:26	17060-07-0	
Toluene-d8 (S)	95 %		77-120	1		03/10/12 22:26	2037-26-5	

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ANALYTICAL RESULTS

Project: 2705191
Pace Project No.: 2511150

Sample: MW-13_20120331 **Lab ID: 2511150005** Collected: 03/06/12 12:37 Received: 03/08/12 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	63.9	ug/L	50.0	1		03/15/12 15:14		2n
Surrogates								
4-Bromofluorobenzene (S)	102	%	76-121	1		03/15/12 15:14	460-00-4	

Sample: MW-14_20120331 **Lab ID: 2511150006** Collected: 03/06/12 14:16 Received: 03/08/12 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	3640	ug/L	50.0	1	03/13/12 09:25	03/14/12 23:28		T4
Surrogates								
o-Terphenyl (S) SG	101	%	46-125	1	03/13/12 09:25	03/14/12 23:28	84-15-1	
n-Octacosane (S) SG	109	%	57-128	1	03/13/12 09:25	03/14/12 23:28	630-02-4	

8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	959	ug/L	2.5	5		03/20/12 02:43	71-43-2	
tert-Butyl Alcohol	28.1	ug/L	25.0	5		03/20/12 02:43	75-65-0	
Ethanol	ND	ug/L	1250	5		03/20/12 02:43	64-17-5	
Ethylbenzene	2330	ug/L	12.5	25		03/20/12 20:41	100-41-4	M1
Methyl-tert-butyl ether	ND	ug/L	2.5	5		03/20/12 02:43	1634-04-4	
Toluene	15.0	ug/L	2.5	5		03/20/12 02:43	108-88-3	
Xylene (Total)	3830	ug/L	37.5	25		03/20/12 20:41	1330-20-7	M1
Surrogates								
4-Bromofluorobenzene (S)	84	%	79-121	5		03/20/12 02:43	460-00-4	D4
Dibromofluoromethane (S)	99	%	81-119	5		03/20/12 02:43	1868-53-7	
1,2-Dichloroethane-d4 (S)	114	%	72-127	5		03/20/12 02:43	17060-07-0	
Toluene-d8 (S)	105	%	77-120	5		03/20/12 02:43	2037-26-5	

CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	16600	ug/L	250	5		03/20/12 02:43		
Surrogates								
4-Bromofluorobenzene (S)	84	%	76-121	5		03/20/12 02:43	460-00-4	

Sample: MW-15_20120331 **Lab ID: 2511150007** Collected: 03/06/12 15:01 Received: 03/08/12 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	56.2	ug/L	50.0	1	03/13/12 09:25	03/14/12 23:45		T4
Surrogates								
o-Terphenyl (S) SG	104	%	46-125	1	03/13/12 09:25	03/14/12 23:45	84-15-1	
n-Octacosane (S) SG	116	%	57-128	1	03/13/12 09:25	03/14/12 23:45	630-02-4	

8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	ND	ug/L	0.50	1		03/10/12 22:45	71-43-2	

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ANALYTICAL RESULTS

Project: 2705191
 Pace Project No.: 2511150

Sample: MW-15_20120331		Lab ID: 2511150007	Collected: 03/06/12 15:01	Received: 03/08/12 09:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
tert-Butyl Alcohol	101 ug/L		5.0	1		03/15/12 14:14	75-65-0	
Ethanol	ND ug/L		250	1		03/10/12 22:45	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/10/12 22:45	100-41-4	
Methyl-tert-butyl ether	106 ug/L		0.50	1		03/10/12 22:45	1634-04-4	
Toluene	ND ug/L		0.50	1		03/10/12 22:45	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/10/12 22:45	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	101 %		79-121	1		03/10/12 22:45	460-00-4	
Dibromofluoromethane (S)	113 %		81-119	1		03/10/12 22:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	117 %		72-127	1		03/10/12 22:45	17060-07-0	
Toluene-d8 (S)	95 %		77-120	1		03/10/12 22:45	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		03/15/12 14:14		
Surrogates								
4-Bromofluorobenzene (S)	102 %		76-121	1		03/15/12 14:14	460-00-4	

Sample: MW-16_20120331		Lab ID: 2511150008	Collected: 03/06/12 15:17	Received: 03/08/12 09:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	204 ug/L		50.0	1	03/13/12 09:25	03/15/12 00:03		T4
Surrogates								
o-Terphenyl (S) SG	81 %		46-125	1	03/13/12 09:25	03/15/12 00:03	84-15-1	
n-Octacosane (S) SG	88 %		57-128	1	03/13/12 09:25	03/15/12 00:03	630-02-4	
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		03/12/12 19:17	71-43-2	
tert-Butyl Alcohol	134 ug/L		5.0	1		03/12/12 19:17	75-65-0	
Ethanol	ND ug/L		250	1		03/12/12 19:17	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		03/10/12 23:03	100-41-4	
Methyl-tert-butyl ether	1090 ug/L		5.0	10		03/12/12 16:25	1634-04-4	
Toluene	ND ug/L		0.50	1		03/12/12 19:17	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		03/10/12 23:03	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	93 %		79-121	1		03/12/12 19:17	460-00-4	
Dibromofluoromethane (S)	108 %		81-119	1		03/12/12 19:17	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		72-127	1		03/12/12 19:17	17060-07-0	
Toluene-d8 (S)	96 %		77-120	1		03/12/12 19:17	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	392 ug/L		50.0	1		03/12/12 19:17		2n
Surrogates								
4-Bromofluorobenzene (S)	93 %		76-121	1		03/12/12 19:17	460-00-4	

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ANALYTICAL RESULTS

Project: 2705191
 Pace Project No.: 2511150

Sample: MW-17_20120331	Lab ID: 2511150009	Collected: 03/06/12 16:30	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	1530 ug/L		50.0	1	03/13/12 09:25	03/15/12 00:20		T4
Surrogates								
o-Terphenyl (S) SG	108 %		46-125	1	03/13/12 09:25	03/15/12 00:20	84-15-1	
n-Octacosane (S) SG	116 %		57-128	1	03/13/12 09:25	03/15/12 00:20	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	2090 ug/L		5.0	10		03/15/12 18:22	71-43-2	
tert-Butyl Alcohol	481 ug/L		5.0	1		03/12/12 19:53	75-65-0	
Ethanol	ND ug/L		250	1		03/12/12 19:53	64-17-5	
Ethylbenzene	39.3 ug/L		0.50	1		03/12/12 19:53	100-41-4	
Methyl-tert-butyl ether	1.1 ug/L		0.50	1		03/12/12 19:53	1634-04-4	
Toluene	23.8 ug/L		0.50	1		03/12/12 19:53	108-88-3	
Xylene (Total)	166 ug/L		1.5	1		03/12/12 19:53	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	88 %		79-121	1		03/12/12 19:53	460-00-4	
Dibromofluoromethane (S)	118 %		81-119	1		03/12/12 19:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	128 %		72-127	1		03/12/12 19:53	17060-07-0	S5
Toluene-d8 (S)	95 %		77-120	1		03/12/12 19:53	2037-26-5	
CA LUFT MSV GRO								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	1580 ug/L		50.0	1		03/12/12 19:53		
Surrogates								
4-Bromofluorobenzene (S)	88 %		76-121	1		03/12/12 19:53	460-00-4	

Sample: MW-6_20120331	Lab ID: 2511150010	Collected: 03/06/12 15:57	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	14800 ug/L		50.0	1	03/13/12 09:25	03/15/12 00:37		T4
Surrogates								
o-Terphenyl (S) SG	96 %		46-125	1	03/13/12 09:25	03/15/12 00:37	84-15-1	
n-Octacosane (S) SG	105 %		57-128	1	03/13/12 09:25	03/15/12 00:37	630-02-4	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	1020 ug/L		2.5	5		03/20/12 03:02	71-43-2	
tert-Butyl Alcohol	316 ug/L		25.0	5		03/20/12 03:02	75-65-0	
Ethanol	ND ug/L		1250	5		03/20/12 03:02	64-17-5	
Ethylbenzene	1320 ug/L		2.5	5		03/20/12 03:02	100-41-4	
Methyl-tert-butyl ether	18.5 ug/L		2.5	5		03/20/12 03:02	1634-04-4	
Toluene	131 ug/L		2.5	5		03/20/12 03:02	108-88-3	
Xylene (Total)	4730 ug/L		75.0	50		03/20/12 20:58	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	88 %		79-121	5		03/20/12 03:02	460-00-4	
Dibromofluoromethane (S)	89 %		81-119	5		03/20/12 03:02	1868-53-7	
1,2-Dichloroethane-d4 (S)	94 %		72-127	5		03/20/12 03:02	17060-07-0	

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ANALYTICAL RESULTS

Project: 2705191
 Pace Project No.: 2511150

Sample: MW-6_20120331	Lab ID: 2511150010	Collected: 03/06/12 15:57	Received: 03/08/12 09:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Surrogates								
Toluene-d8 (S)	104 %		77-120	5		03/20/12 03:02	2037-26-5	
CA LUFT MSV GRO	Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	55000 ug/L		2500	50		03/20/12 20:58		1n,CH, M1
Surrogates								
4-Bromofluorobenzene (S)	93 %		76-121	50		03/20/12 20:58	460-00-4	

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6570 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511150001, 2511150003, 2511150008, 2511150009

METHOD BLANK: 105929 Matrix: Water
Associated Lab Samples: 2511150001, 2511150003, 2511150008, 2511150009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	03/12/12 11:27	
Ethanol	ug/L	ND	250	03/12/12 11:27	
Ethylbenzene	ug/L	ND	0.50	03/12/12 11:27	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/12/12 11:27	
tert-Butyl Alcohol	ug/L	ND	5.0	03/12/12 11:27	
Toluene	ug/L	ND	0.50	03/12/12 11:27	
Xylene (Total)	ug/L	ND	1.5	03/12/12 11:27	
1,2-Dichloroethane-d4 (S)	%	96	72-127	03/12/12 11:27	
4-Bromofluorobenzene (S)	%	96	79-121	03/12/12 11:27	
Dibromofluoromethane (S)	%	102	81-119	03/12/12 11:27	
Toluene-d8 (S)	%	94	77-120	03/12/12 11:27	

LABORATORY CONTROL SAMPLE: 105930

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	14.4	72	66-123	
Ethanol	ug/L	800	756	94	40-160	
Ethylbenzene	ug/L	20	14.8	74	67-122	
Methyl-tert-butyl ether	ug/L	20	16.7	83	65-138	
tert-Butyl Alcohol	ug/L	100	88.7	89	57-153	
Toluene	ug/L	20	14.3	72	64-118	
Xylene (Total)	ug/L	60	46.1	77	68-122	
1,2-Dichloroethane-d4 (S)	%			90	72-127	
4-Bromofluorobenzene (S)	%			91	79-121	
Dibromofluoromethane (S)	%			105	81-119	
Toluene-d8 (S)	%			98	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106080 106081

Parameter	Units	2511152016		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
Benzene	ug/L	106	20	20	122	127	78	104	63-138	4		
Ethanol	ug/L	ND	800	800	807	660	101	82	40-160	20		
Ethylbenzene	ug/L	52.6	20	20	70.1	72.3	87	98	65-135	3		
Methyl-tert-butyl ether	ug/L	ND	20	20	15.6	18.5	78	93	59-143	17		
tert-Butyl Alcohol	ug/L	ND	100	100	84.2	87.1	83	86	46-156	3		
Toluene	ug/L	ND	20	20	19.3	19.6	92	94	64-128	1		
Xylene (Total)	ug/L	4.5	60	60	64.2	65.6	100	102	65-133	2		
1,2-Dichloroethane-d4 (S)	%						88	89	72-127			
4-Bromofluorobenzene (S)	%						89	93	79-121			

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QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		106080		106081									
Parameter	Units	2511152016	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Qual	
		Result	Spike	Spike	Result	Result	% Rec	% Rec					
Dibromofluoromethane (S)	%						101	102	81-119				
Toluene-d8 (S)	%						98	95	77-120				

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6577 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511150002, 2511150004, 2511150005, 2511150007, 2511150008

METHOD BLANK: 105954 Matrix: Water
Associated Lab Samples: 2511150002, 2511150004, 2511150005, 2511150007, 2511150008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	03/10/12 18:29	
Ethanol	ug/L	ND	250	03/10/12 18:29	
Ethylbenzene	ug/L	ND	0.50	03/10/12 18:29	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/10/12 18:29	
tert-Butyl Alcohol	ug/L	ND	5.0	03/10/12 18:29	
Toluene	ug/L	ND	0.50	03/10/12 18:29	
Xylene (Total)	ug/L	ND	1.5	03/10/12 18:29	
1,2-Dichloroethane-d4 (S)	%	97	72-127	03/10/12 18:29	
4-Bromofluorobenzene (S)	%	99	79-121	03/10/12 18:29	
Dibromofluoromethane (S)	%	109	81-119	03/10/12 18:29	
Toluene-d8 (S)	%	98	77-120	03/10/12 18:29	

LABORATORY CONTROL SAMPLE: 105955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.4	87	66-123	
Ethanol	ug/L	800	693	87	40-160	
Ethylbenzene	ug/L	20	17.9	90	67-122	
Methyl-tert-butyl ether	ug/L	20	18.6	93	65-138	
tert-Butyl Alcohol	ug/L	100	87.0	87	57-153	
Toluene	ug/L	20	16.9	85	64-118	
Xylene (Total)	ug/L	60	55.1	92	68-122	
1,2-Dichloroethane-d4 (S)	%			94	72-127	
4-Bromofluorobenzene (S)	%			91	79-121	
Dibromofluoromethane (S)	%			107	81-119	
Toluene-d8 (S)	%			96	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106358 106359

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		2511150004 Result	Spike Conc.	Spike Conc.	MS Result					
Benzene	ug/L	ND	20	20	24.5	21.5	122	106	63-138	13
Ethanol	ug/L	ND	800	800	1010	914	126	114	40-160	10
Ethylbenzene	ug/L	ND	20	20	25.4	22.3	126	111	65-135	13
Methyl-tert-butyl ether	ug/L	ND	20	20	24.8	22.2	122	108	59-143	11
tert-Butyl Alcohol	ug/L	ND	100	100	128	129	124	124	46-156	.3
Toluene	ug/L	ND	20	20	24.1	21.0	120	105	64-128	14
Xylene (Total)	ug/L	ND	60	60	78.0	68.0	129	113	65-133	14
1,2-Dichloroethane-d4 (S)	%						93	94	72-127	
4-Bromofluorobenzene (S)	%						91	92	79-121	

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QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		106358		106359									
Parameter	Units	2511150004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual		
Dibromofluoromethane (S)	%						107	107	81-119				
Toluene-d8 (S)	%						96	97	77-120				

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6596 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511150002, 2511150005, 2511150007, 2511150009

METHOD BLANK: 106299 Matrix: Water
Associated Lab Samples: 2511150002, 2511150005, 2511150007, 2511150009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	03/15/12 10:47	
tert-Butyl Alcohol	ug/L	ND	5.0	03/15/12 10:47	
1,2-Dichloroethane-d4 (S)	%	93	72-127	03/15/12 10:47	
4-Bromofluorobenzene (S)	%	104	79-121	03/15/12 10:47	
Dibromofluoromethane (S)	%	93	81-119	03/15/12 10:47	
Toluene-d8 (S)	%	104	77-120	03/15/12 10:47	

LABORATORY CONTROL SAMPLE: 106300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	16.5	82	66-123	
tert-Butyl Alcohol	ug/L	100	81.0	81	57-153	
1,2-Dichloroethane-d4 (S)	%			97	72-127	
4-Bromofluorobenzene (S)	%			101	79-121	
Dibromofluoromethane (S)	%			93	81-119	
Toluene-d8 (S)	%			100	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106929 106930

Parameter	Units	2511293001		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec				
Benzene	ug/L	ND	20	20	17.0	16.7	85	83	63-138	2		
tert-Butyl Alcohol	ug/L	38.5	100	100	112	88.1	73	50	46-156	24		
1,2-Dichloroethane-d4 (S)	%						100	99	72-127			
4-Bromofluorobenzene (S)	%						99	102	79-121			
Dibromofluoromethane (S)	%						97	101	81-119			
Toluene-d8 (S)	%						101	97	77-120			

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6623 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511150006, 2511150010

METHOD BLANK: 106906 Matrix: Water

Associated Lab Samples: 2511150006, 2511150010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	03/19/12 21:37	
Ethanol	ug/L	ND	250	03/19/12 21:37	
Ethylbenzene	ug/L	ND	0.50	03/19/12 21:37	
Methyl-tert-butyl ether	ug/L	ND	0.50	03/19/12 21:37	
tert-Butyl Alcohol	ug/L	ND	5.0	03/19/12 21:37	
Toluene	ug/L	ND	0.50	03/19/12 21:37	
1,2-Dichloroethane-d4 (S)	%	111	72-127	03/19/12 21:37	
4-Bromofluorobenzene (S)	%	116	79-121	03/19/12 21:37	
Dibromofluoromethane (S)	%	106	81-119	03/19/12 21:37	
Toluene-d8 (S)	%	102	77-120	03/19/12 21:37	

LABORATORY CONTROL SAMPLE: 106907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.0	100	66-123	
Ethanol	ug/L	800	1030	128	40-160	
Ethylbenzene	ug/L	20	20.5	102	67-122	
Methyl-tert-butyl ether	ug/L	20	22.5	113	65-138	
tert-Butyl Alcohol	ug/L	100	122	122	57-153	
Toluene	ug/L	20	20.0	100	64-118	
1,2-Dichloroethane-d4 (S)	%			108	72-127	
4-Bromofluorobenzene (S)	%			92	79-121	
Dibromofluoromethane (S)	%			102	81-119	
Toluene-d8 (S)	%			101	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 107454 107455

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		2511262004 Result	Spike Conc.	Spike Conc.	MS Result					
Benzene	ug/L	<0.10	20	20	15.9	19.1	79	95	63-138	18
Ethanol	ug/L	<50.0	800	800	725	702	91	88	40-160	3
Ethylbenzene	ug/L	<0.10	20	20	16.6	22.8	83	114	65-135	31 D6
Methyl-tert-butyl ether	ug/L	<0.10	20	20	18.0	21.9	90	110	59-143	20
tert-Butyl Alcohol	ug/L	<1.0	100	100	93.9	94.8	94	95	46-156	1
Toluene	ug/L	<0.10	20	20	16.3	21.5	81	108	64-128	28 D6
1,2-Dichloroethane-d4 (S)	%						107	91	72-127	
4-Bromofluorobenzene (S)	%						96	95	79-121	
Dibromofluoromethane (S)	%						103	98	81-119	
Toluene-d8 (S)	%						102	100	77-120	

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QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6639 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 2511150003

METHOD BLANK: 107157 Matrix: Water
Associated Lab Samples: 2511150003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methyl-tert-butyl ether	ug/L	ND	0.50	03/20/12 18:19	
1,2-Dichloroethane-d4 (S)	%	101	72-127	03/20/12 18:19	
4-Bromofluorobenzene (S)	%	103	79-121	03/20/12 18:19	
Dibromofluoromethane (S)	%	103	81-119	03/20/12 18:19	
Toluene-d8 (S)	%	106	77-120	03/20/12 18:19	

LABORATORY CONTROL SAMPLE: 107158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl-tert-butyl ether	ug/L	20	16.5	82	65-138	
1,2-Dichloroethane-d4 (S)	%			95	72-127	
4-Bromofluorobenzene (S)	%			98	79-121	
Dibromofluoromethane (S)	%			97	81-119	
Toluene-d8 (S)	%			98	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 107240 107241

Parameter	Units	2511298001		MS		MSD		% Rec		RPD	Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits		
Methyl-tert-butyl ether	ug/L	99.4	20	20	117	120	88	104	59-143	3	
1,2-Dichloroethane-d4 (S)	%						123	124	72-127		
4-Bromofluorobenzene (S)	%						101	100	79-121		
Dibromofluoromethane (S)	%						100	100	81-119		
Toluene-d8 (S)	%						97	95	77-120		



QUALITY CONTROL DATA

Project: 2705191
 Pace Project No.: 2511150

QC Batch: MSV/6641 Analysis Method: EPA 5030B/8260
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
 Associated Lab Samples: 2511150006, 2511150010

METHOD BLANK: 107163 Matrix: Water
 Associated Lab Samples: 2511150006, 2511150010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	0.50	03/20/12 14:04	
Xylene (Total)	ug/L	ND	1.5	03/20/12 14:04	
1,2-Dichloroethane-d4 (S)	%	94	72-127	03/20/12 14:04	
4-Bromofluorobenzene (S)	%	108	79-121	03/20/12 14:04	
Dibromofluoromethane (S)	%	96	81-119	03/20/12 14:04	
Toluene-d8 (S)	%	98	77-120	03/20/12 14:04	

LABORATORY CONTROL SAMPLE: 107164

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethylbenzene	ug/L	20	20.5	103	67-122	
Xylene (Total)	ug/L	60	58.8	98	68-122	
1,2-Dichloroethane-d4 (S)	%			84	72-127	
4-Bromofluorobenzene (S)	%			97	79-121	
Dibromofluoromethane (S)	%			95	81-119	
Toluene-d8 (S)	%			100	77-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 107165 107166

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		2511150006	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Ethylbenzene	ug/L	2330	500	500	2860	3050	106	145	65-135	7	M1	
Xylene (Total)	ug/L	3830	1500	1500	5510	5970	112	143	65-133	8	M1	
1,2-Dichloroethane-d4 (S)	%						83	82	72-127			
4-Bromofluorobenzene (S)	%						88	87	79-121			
Dibromofluoromethane (S)	%						92	92	81-119			
Toluene-d8 (S)	%						97	102	77-120			

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6586 Analysis Method: CA LUFT
QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 2511150001, 2511150003, 2511150004, 2511150008, 2511150009

METHOD BLANK: 106126 Matrix: Water
Associated Lab Samples: 2511150001, 2511150003, 2511150004, 2511150008, 2511150009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	03/12/12 11:27	
4-Bromofluorobenzene (S)	%	96	76-121	03/12/12 11:27	

LABORATORY CONTROL SAMPLE: 106127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	445	89	57-139	
4-Bromofluorobenzene (S)	%			93	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106188 106189

Parameter	Units	2511183001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result					
TPH-Gasoline (C05-C12)	ug/L	1560	500	500	2140	2100	116	107	40-150	2	
4-Bromofluorobenzene (S)	%						94	92	76-121		



QUALITY CONTROL DATA

Project: 2705191
 Pace Project No.: 2511150

QC Batch: MSV/6609 Analysis Method: CA LUFT
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
 Associated Lab Samples: 2511150002, 2511150005, 2511150007

METHOD BLANK: 106540 Matrix: Water
 Associated Lab Samples: 2511150002, 2511150005, 2511150007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	03/15/12 08:40	
4-Bromofluorobenzene (S)	%	103	76-121	03/15/12 08:40	

LABORATORY CONTROL SAMPLE: 106541

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	496	99	57-139	
4-Bromofluorobenzene (S)	%			103	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106963 106964

Parameter	Units	2511275001		2511275002		2511275003		2511275004		% Rec Limits	RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.			
TPH-Gasoline (C05-C12)	ug/L	ND	500	500	478	450	96	90	40-150	6		
4-Bromofluorobenzene (S)	%						101	102	76-121			

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6622 Analysis Method: CA LUFT
QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 2511150006

METHOD BLANK: 106904 Matrix: Water
Associated Lab Samples: 2511150006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	03/19/12 21:37	
4-Bromofluorobenzene (S)	%	116	76-121	03/19/12 21:37	

LABORATORY CONTROL SAMPLE: 106905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	468	94	57-139	
4-Bromofluorobenzene (S)	%			107	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 107460 107461

Parameter	Units	2511260003 Result	MS Spike Conc.	MSD Spike Conc.	107460		107461		% Rec Limits	RPD	Qual
					MS Result	MSD Result	MS % Rec	MSD % Rec			
TPH-Gasoline (C05-C12)	ug/L	<25.0	500	500	434	456	87	91	40-150	5	
4-Bromofluorobenzene (S)	%						106	107	76-121		

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: MSV/6640 Analysis Method: CA LUFT
QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
Associated Lab Samples: 2511150010

METHOD BLANK: 107159 Matrix: Water
Associated Lab Samples: 2511150010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	03/20/12 20:07	CH
4-Bromofluorobenzene (S)	%	113	76-121	03/20/12 20:07	

LABORATORY CONTROL SAMPLE: 107160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	675	135	57-139	CH
4-Bromofluorobenzene (S)	%			106	76-121	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 107161 107162

Parameter	Units	2511150010		MS		MSD		% Rec		RPD	Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec			
TPH-Gasoline (C05-C12)	ug/L	55000	25000	25000	95300	96000	162	164	40-150	.6	CH,M1
4-Bromofluorobenzene (S)	%						91	92	76-121		

QUALITY CONTROL DATA

Project: 2705191
Pace Project No.: 2511150

QC Batch: OEXT/5213 Analysis Method: EPA 8015B
QC Batch Method: EPA 3510 Modified Analysis Description: 8015B CA DRO Silica Gel
Associated Lab Samples: 2511150001, 2511150002, 2511150003, 2511150004, 2511150005, 2511150006, 2511150007, 2511150008, 2511150009, 2511150010

METHOD BLANK: 106195 Matrix: Water
Associated Lab Samples: 2511150001, 2511150002, 2511150003, 2511150004, 2511150005, 2511150006, 2511150007, 2511150008, 2511150009, 2511150010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	ND	50.0	03/14/12 20:19	
n-Octacosane (S) SG	%	140	57-128	03/14/12 20:19	S3
o-Terphenyl (S) SG	%	129	46-125	03/14/12 20:19	S3

LABORATORY CONTROL SAMPLE: 106196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	2500	2640	106	50-110	
n-Octacosane (S) SG	%			116	57-128	
o-Terphenyl (S) SG	%			109	46-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 106197 106198

Parameter	Units	2511150004		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
TPH-DRO (C10-C24) SG	ug/L	52.0	2500	2500	2460	2240	97	88	39-110	9		
n-Octacosane (S) SG	%						114	102	57-128			
o-Terphenyl (S) SG	%						104	94	46-125			

QUALIFIERS

Project: 2705191
Pace Project No.: 2511150

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

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

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

LABORATORIES

PASI-S Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

1n	Sample results were confirmed by an out-of-hold analysis associated with a passing CCV.
2n	The GRO result for this sample did not match the pattern of the laboratory standard for gasoline. This is likely due to the presence of MTBE in the sample.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D4	Sample was diluted due to the presence of high levels of target analytes.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
S5	Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).
T4	Result reported for hydrocarbons within the method-specific range that do not match pattern of laboratory standard.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191
 Pace Project No.: 2511150

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2511150001	MW-10_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150002	MW-11_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150003	MW-12_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150004	MW-12A_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150005	MW-13_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150006	MW-14_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150007	MW-15_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150008	MW-16_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150009	MW-17_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150010	MW-6_20120331	EPA 3510 Modified	OEXT/5213	EPA 8015B	GCSV/3373
2511150001	MW-10_20120331	EPA 5030B/8260	MSV/6570		
2511150002	MW-11_20120331	EPA 5030B/8260	MSV/6577		
2511150002	MW-11_20120331	EPA 5030B/8260	MSV/6596		
2511150003	MW-12_20120331	EPA 5030B/8260	MSV/6570		
2511150003	MW-12_20120331	EPA 5030B/8260	MSV/6639		
2511150004	MW-12A_20120331	EPA 5030B/8260	MSV/6577		
2511150005	MW-13_20120331	EPA 5030B/8260	MSV/6577		
2511150005	MW-13_20120331	EPA 5030B/8260	MSV/6596		
2511150006	MW-14_20120331	EPA 5030B/8260	MSV/6623		
2511150006	MW-14_20120331	EPA 5030B/8260	MSV/6641		
2511150007	MW-15_20120331	EPA 5030B/8260	MSV/6577		
2511150007	MW-15_20120331	EPA 5030B/8260	MSV/6596		
2511150008	MW-16_20120331	EPA 5030B/8260	MSV/6570		
2511150008	MW-16_20120331	EPA 5030B/8260	MSV/6577		
2511150009	MW-17_20120331	EPA 5030B/8260	MSV/6570		
2511150009	MW-17_20120331	EPA 5030B/8260	MSV/6596		
2511150010	MW-6_20120331	EPA 5030B/8260	MSV/6623		
2511150010	MW-6_20120331	EPA 5030B/8260	MSV/6641		
2511150001	MW-10_20120331	CA LUFT	MSV/6586		
2511150002	MW-11_20120331	CA LUFT	MSV/6609		
2511150003	MW-12_20120331	CA LUFT	MSV/6586		
2511150004	MW-12A_20120331	CA LUFT	MSV/6586		
2511150005	MW-13_20120331	CA LUFT	MSV/6609		
2511150006	MW-14_20120331	CA LUFT	MSV/6622		
2511150007	MW-15_20120331	CA LUFT	MSV/6609		
2511150008	MW-16_20120331	CA LUFT	MSV/6586		
2511150009	MW-17_20120331	CA LUFT	MSV/6586		

Date: 03/22/2012 04:00 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191
Pace Project No.: 2511150

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2511150010	MW-6_20120331	CA LUFT	MSV/6640		

Sample Container Count

2511150

CLIENT: Antea



COC PAGE 1 of 1
COC ID# _____

Trip Blank(s) Provided?
Y N

Sample Line Item	VG9H	AG1H	AG1U	BP1U	BP2U	BP3U	BP3N	BP3S	WGKU	WGFU	WG2U	DG9M	DG9B	VG9W	VSG	Comments
1	6		2													
2	↓		↓													
3	↓		↓													
4	10		6													
5	6		2													
6	↓		↓													
7	↓		↓													
8	6*		↓													*See SCUR #13.
9	6		↓													
10	6		↓													
11																
12																

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



Sample Condition Upon Receipt

Client Name: Anlea Project # 251150

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 8989 0685 0927

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

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

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

Cooler Temperature 2.2, 5.0, 3.8 Biological Tissue Is Frozen: Yes No

Temp should be above freezing $\leq 8^{\circ}\text{C}$

Comments:

Date and Initials of person examining contents: NO 3/8/12

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Follow Up / Hold Analysis Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/Analysis Matrix:	<u>Water</u>	<u>Did not receive MW-16. Received extra set of MW-15 with sampling time of MW-16.</u>
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> , coliform, TOC, O&G	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Lot # of added preservative
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blanks Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Pace Trip Blank Creation Date:		

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

Person Contacted: M. Ninkata Date/Time: 03/08/12 14:49

Comments/ Resolution: Per Blaine Tech, MW-15 containers w/ collection time of 15:17 are MW-16. RSM

Project Manager Review: RSM Date: 03/08/12

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