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May 1, 2014

Mr. Keith Nowell
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Quarterly Summary Report, First Quarter 2014**

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

Dear Mr. Nowell;

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:

Walter T. Sprague
Pacific Convenience & Fuel
7180 Koll Center Parkway, Suite 100
Pleasanton, California 94566
Tel: (925) 931-5714
Fax: (925) 905-2746
WSprague@pcandf.com

Sincerely,

PACIFIC CONVENIENCE & FUEL

WALTER SPRAGUE
Director of Retail Services

Attachment

Quarterly Summary Report, First Quarter 2014

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

Alameda County Health Care Services
Agency Fuel Leak Case No. RO0000219

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

GeoTracker Global ID No.T0600101476

Antea Group Project No. I42705191

May 1, 2014

Prepared for:
Mr. Keith Nowell
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Prepared by:
Antea™Group
11050 White Rock Road, Suite 110
Rancho Cordova, CA 95670
+1 800 477 7411

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1.0 INTRODUCTION

Antea™Group is pleased to submit this *Quarterly Summary Report, First Quarter 2014*, 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, CA. 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 4, 2014. Included herein are site figures, 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 2014]

1. Antea Group submitted the *Quarterly Summary Report, Fourth Quarter 2013*, dated January 30, 2014 to the Alameda County Health Care Services Agency (ACHCSA).
2. Ante Group submitted the *Site Investigation Report*, dated January 9, 2014 to the ACHCSA.
3. Blaine Tech Services, Inc. (Blaine Tech) conducted the first quarter 2014 groundwater monitoring and sampling event on March 4, 2014.

1.2 Work Proposed [Second Quarter 2014]

1. Antea Group will submit the *Quarterly Summary Report, First Quarter 2014* (contained herein) to the ACHCSA.
2. Antea Group will mail out the Public Notice Fact Sheet detailing the proposed soil excavation work.
3. Antea Group will conduct the site investigation activities as outlined by the *Work Plan - Monitoring Well Installation*, dated November 21, 2013.
4. Antea Group will prepare and submit to the ACHCSA a *Work Plan – Monitoring Well Destruction* in preparation for on-site excavation activities.
5. Blaine Tech will conduct the second quarter 2014 monitoring and sampling event.

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 Case No. 01-1601
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: 9.70 (MW-9, Q3 2012)
Local receptors:	See **Appendix A**
Current remediation technique	None

2.1 Regulatory Correspondence

Antea Group received an email from ACHCSA dated February 11, 2014. The email detailed ACHCSAs technical comments in response to the revised site plan with proposed boring locations. The email also outlined a timeline for submitting documents requested in the email. Antea Group requested an extension for the submittal of the requested corrective action plan on November 5, 2013. Antea Group received approval of the extension from ACHCSA.

2.2 Remedial Activities

No remedial activities took place during the first quarter 2014.

2.3 Groundwater Monitoring

During the first quarter 2014 groundwater monitoring and sampling event, fourteen monitoring wells were gauged and ten monitoring 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, 3c, and 3d**.

Well gauging and sampling date:	March 4, 2014
Wells gauged:	MW-3, MW-6 through MW-12, MW-12A, and MW-13 through MW-17
Wells sampled:	MW-6, MW-10 through MW-12, MW-12A, and MW-13 through MW-17
Purge method:	3 well casing volumes via electric, submersible pump
Sample collection method:	Disposable bailers
Groundwater parameters measured (**Attachment C**):	Temperature, pH, Conductivity, Dissolved Oxygen (DO), Oxidation Reduction Potential (ORP), and Turbidity
Wells with measurable LNAPL:	None
Current depth to water range (ft BTOC):	Min: 1.75 (MW-11) Max: 3.99 (MW-17)
Current groundwater elevation range (ft):	Min: 7.53 (MW-17) Max: 9.01 (MW-9)
Change in water depths from previous event (average change for all gauged wells):	0.45 foot decrease
Groundwater flow direction and gradient in foot per foot (ft/ft):	Southeast at 0.01 ft/ft

2.3.1 Groundwater Flow Gradient and Directional Trends

The first quarter 2014 groundwater monitoring and sampling event was performed by Blaine Tech on March 4, 2014. The average groundwater elevation increased 0.45 feet from the December 2013 event. Depth to groundwater in the site monitoring wells ranged from 1.75 feet (MW-11) to 3.99 feet (MW-17) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the southeast at 0.01 ft/ft during the current event (**Table 4**).

2.3.2 Groundwater Quality Data

Groundwater samples collected during the first quarter 2014 monitoring and sampling event were submitted with chain-of-custody (COC) documentation to Kiff Analytical LLC (Kiff), a state of California Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification No. 08263CA). 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 diesel (TPHd) [silica gel treated] by Environmental Protection Agency (EPA) Method 8015M;
- Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), and ethanol by EPA Method 8260B;
- Volatile organic compounds (VOCs) by EPA Method 624;

- Arsenic, cadmium, chromium, copper, nickel, silver, zinc, iron, and lead by EPA Method 6010;
- Mercury by EPA Method 7470A;
- Cyanide by Standard Method SM4500;
- Phenolic Compounds by EPA Method 420.1;
- pH by EPA Method 150.2; and
- Hexane Extractable Oil and Grease by EPA Method 1664.

The additional analysis of VOCs, metals, cyanide, phenolic compounds, pH, and hexane extractable oil and grease of the groundwater samples collected during the current sampling event is in preparation for characterizing waste water that may be generated during proposed future soil excavation activities.

Groundwater analytical results are presented in **Table 2** (current) and **Tables 3, 3a, 3b, 3c, and 3d** (historical). The following ranges of contaminant concentrations were reported in the specified site wells, groundwater samples collected on March 4, 2014. 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	4 of 10	60 (MW-16)	40,000 (MW-14)
TPHd	3 of 10	250 (MW-14)	580 (MW-6)
Benzene	5 of 10	1.5 (MW-10)	1,600 (MW-14 & MW-17)
Toluene	3 of 10	19 (MW-6)	270 (MW-17)
Ethylbenzene	3 of 10	260 (MW-17)	2,900 (MW-14)
Total Xylenes	3 of 10	540 (MW-17)	6,700 (MW-14)
MTBE	6 of 10	12 (MW-11)	990 (MW-12)
TBA	5 of 10	30 (MW-13)	400 (MW-16)
Ethanol	1 of 10	48 (MW-17)	48 (MW-17)

Explanations:
µg/L = Micrograms per liter LRL = Laboratory reporting limit

2.3.3 Groundwater Contaminant Trends

During the first quarter 2014, analytical results from the groundwater sample collected from monitoring well MW-6 indicated that TPHd, TPHg, BTEX, MTBE, and TBA increased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-10 indicated that benzene decreased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-11 indicated that MTBE decreased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-12 indicated that benzene and MTBE increased in concentration and TBA decreased in concentration. MTBE and

TBA concentrations decreased in monitoring well MW-13. Analytical results from the groundwater sample collected from monitoring well MW-14 indicated an increase in TPHd, TPHg, and BTEX concentrations. Analytical results from the groundwater sample collected from monitoring well MW-15 indicated a decrease in MTBE and TBA concentrations. Analytical results from the groundwater sample collected from monitoring well MW-16 indicated a decrease in TBA concentration and an increase in TPHg and MTBE concentrations. Analytical results from the groundwater sample collected from monitoring well MW-17 indicated an increase in TPHd, TBA, and ethanol concentrations and a decrease in TPHg and BTEX concentrations. Isoconcentration maps for TPHg, benzene, MTBE, and TPHd are presented on **Figures 4** through **7** and historical groundwater flow directions are shown on **Figure 8**. Concentration vs. Time graphs for monitoring wells MW-6, MW-12, MW-13, MW-14, and MW-17 are presented as **Appendix E**. Based on the graphs, concentrations of TPHd, TPHg, and benzene in monitoring wells MW-6 and MW-12 are decreasing over time and MTBE is stable. Concentrations of TPHd, TPHg, and MTBE are decreasing in monitoring well MW-13 and benzene is stable. Concentrations of TPHg, benzene, and MTBE are relatively stable in monitoring well MW-14 and TPHd is decreasing. Concentrations of TPHg and benzene are increasing in monitoring well MW-17 while TPHd concentrations are decreasing and MTBE concentrations are stable.

2.3.4 Waste Disposal Summary

Approximately 127 gallons of waste water were generated during well purging/sampling and equipment cleaning during the fourth quarter event. The waste water was transported to Blaine Tech's bulk facility in San Jose, California. After the batching process, the wastewater will be 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 Kiff laboratory analytical results for the March 2014 sampling event. Antea Group's laboratory data validation checklist and the Kiff laboratory report are presented as **Appendix D**.

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

*The Method Reporting Limit (MRL) for Styrene has been increased due to the presence of an interfering compound for sample MW-6_20140331.

*The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-6_20140331.

*Matrix Spike/Matrix Spike Duplicate results associated with samples for some analytes were affected by the analyte concentrations already present in the un-spiked sample.

*Samples MW-12_20140331, MW-14_20140331, MW-17_20140331, MW-6_20140331, and FD1_20140331 were analyzed outside of hold time for Method EPA 8260B. The hydrochloric acid (HCl) preservation was insufficient to maintain a pH of 2.0 or less required to extend sample hold time from 7 to 14 days.

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 all monitoring wells MW-3 and MW-6 through MW-17 be purged and sampled on a semi-annual basis during the second and fourth quarters of each year. Additional groundwater sampling may be required for the work proposed in the CAP.

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.
Project Professional

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:

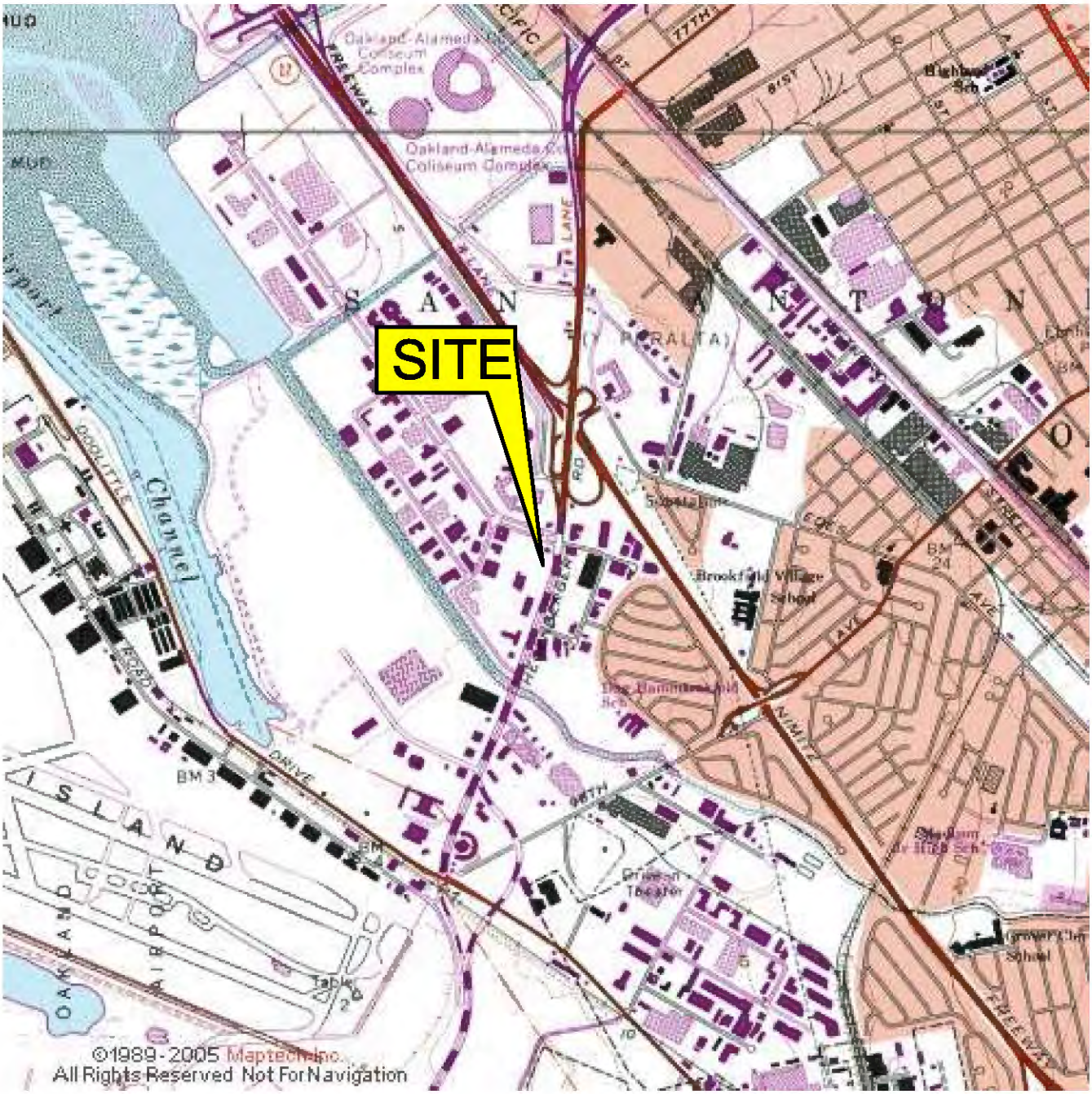
PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

Dennis S. Dettloff 5/1/14

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

cc: GeoTracker (upload)

Figures



North

0 900 1800 FT

SCALE

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE (1973)

FIGURE 1
SITE LOCATION MAP

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

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	DR/JH
DATE	REVIEWED BY	FILE NAME
1/31/11	DD	5043-SiteLocator

anteagroup

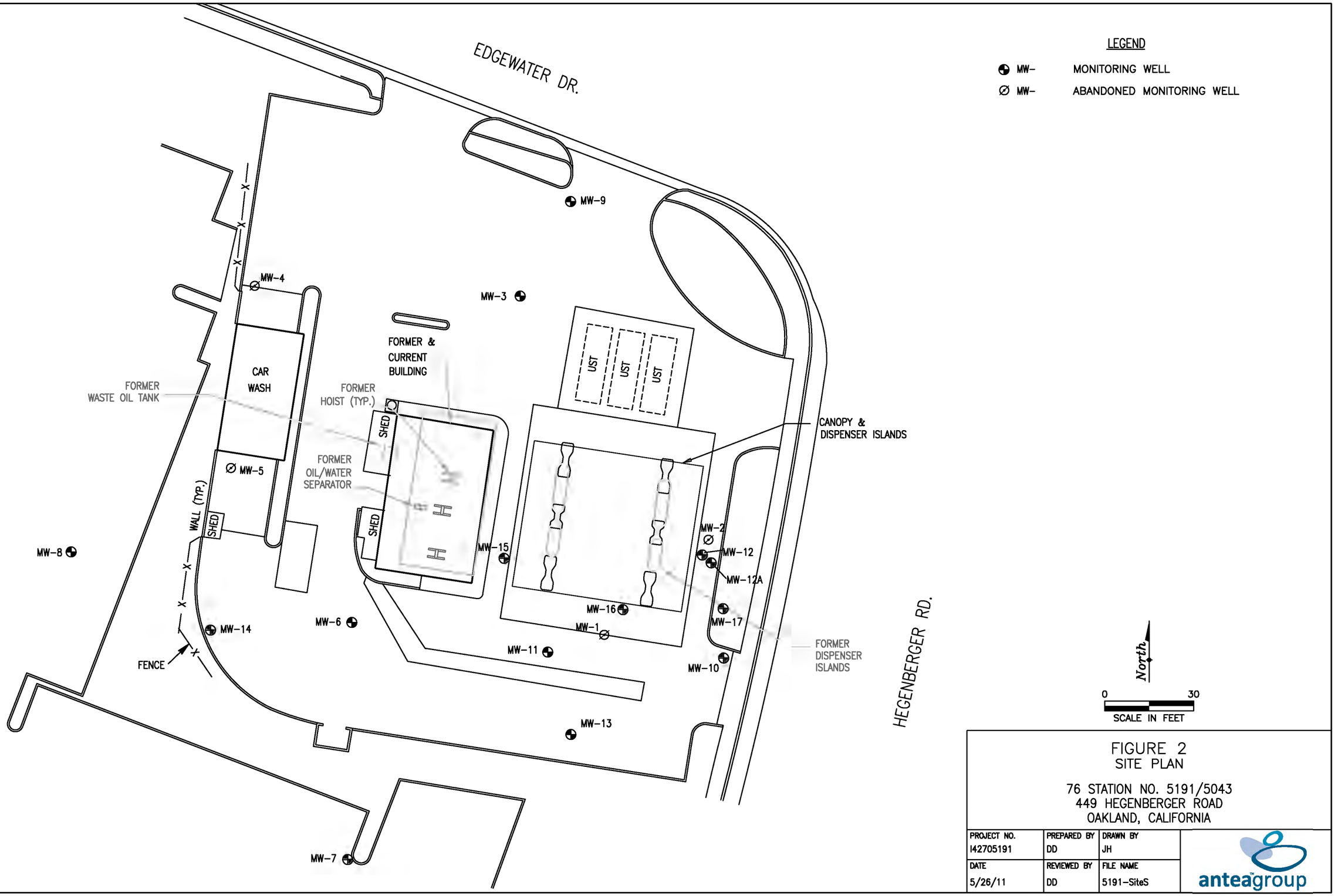


FIGURE 2
SITE PLAN

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

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

antea group

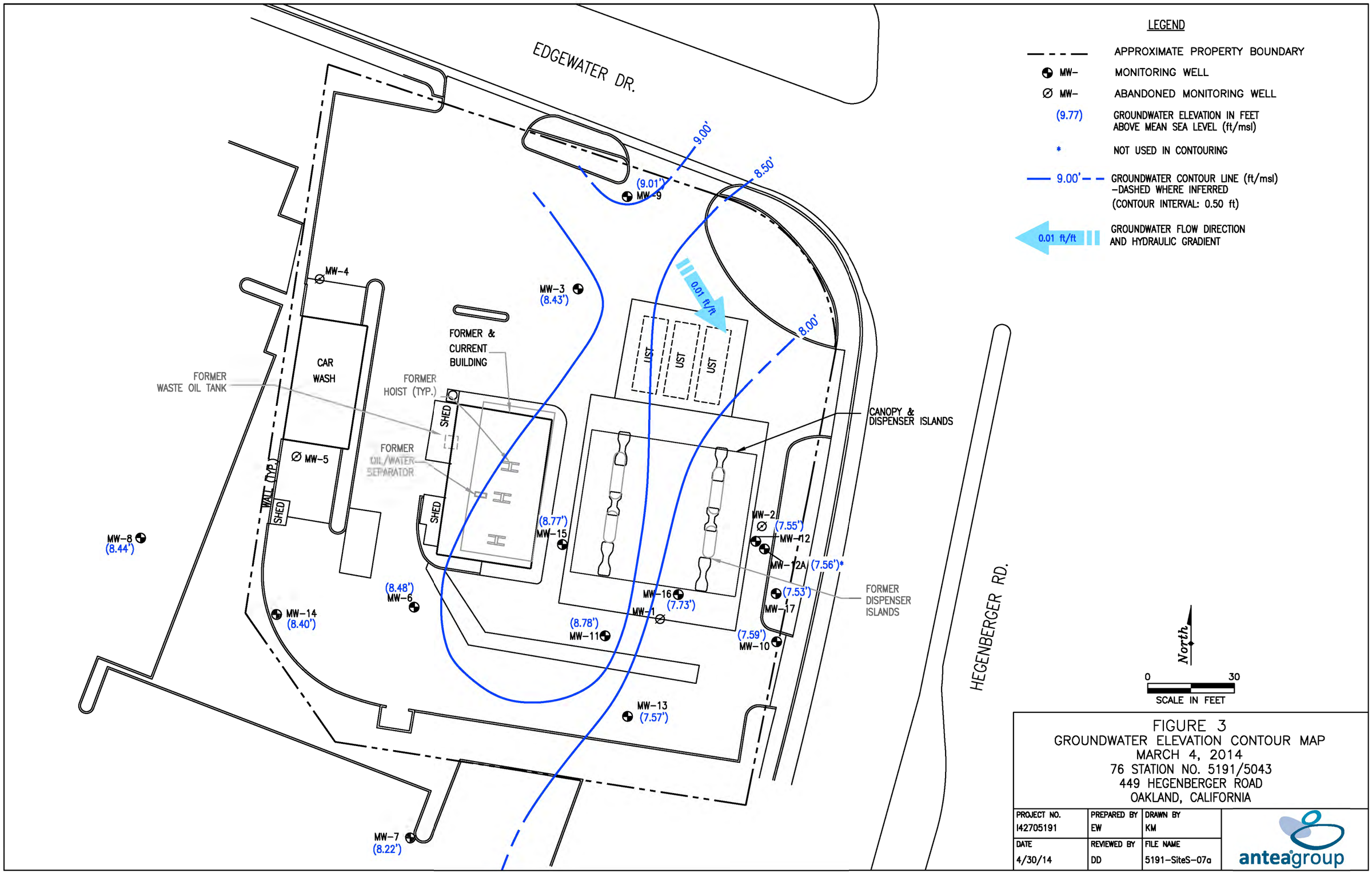
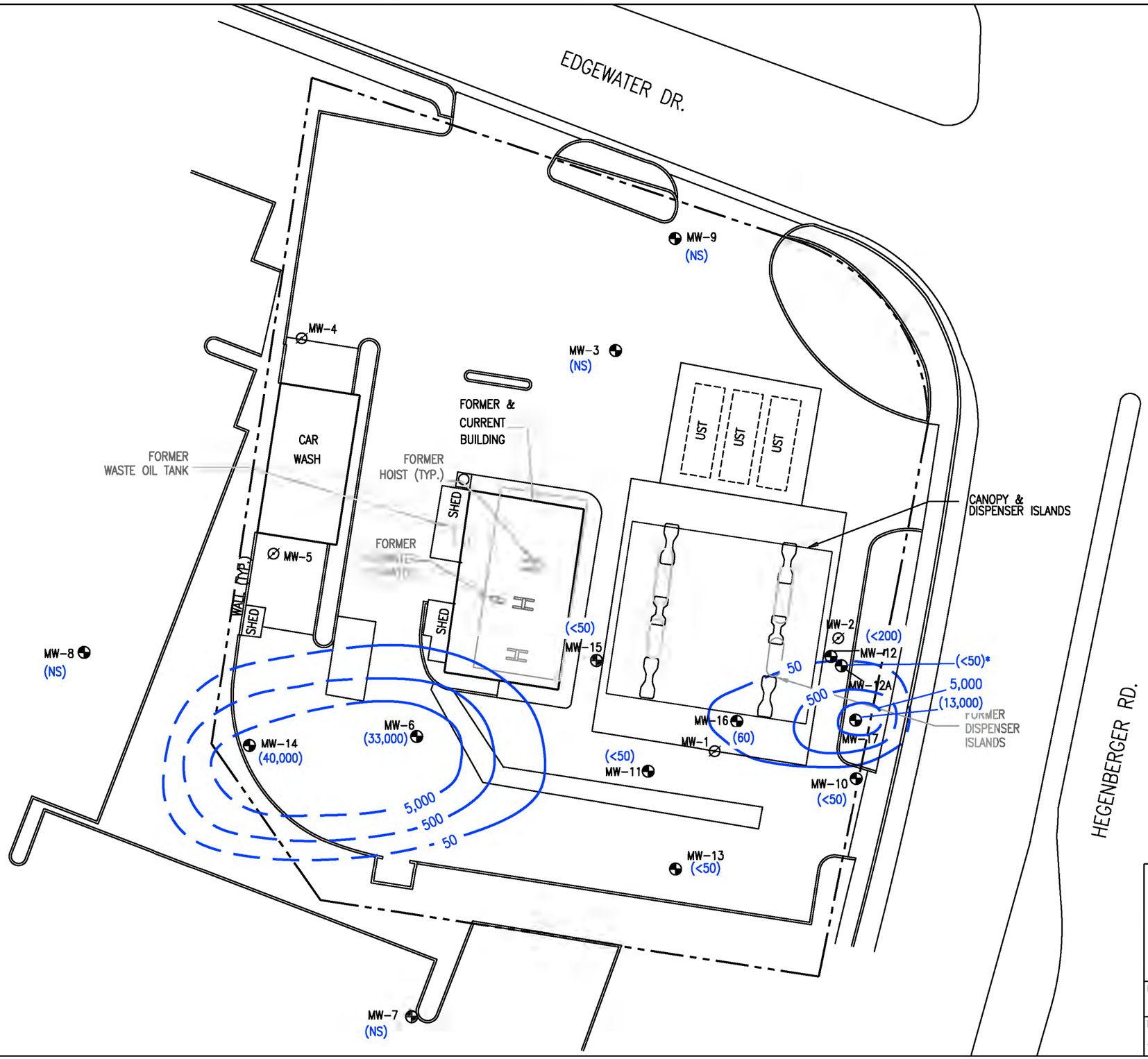


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
MARCH 4, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	KM
DATE	REVIEWED BY	FILE NAME
4/30/14	DD	5191-SiteS-07a

antea group



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW– MONITORING WELL
- MW– ABANDONED MONITORING WELL
- (40,000) DISSOLVED PHASE TPHg ISOOCONCENTRATION (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
NS = NOT SAMPED
* = NOT USED IN CONTOURING

North

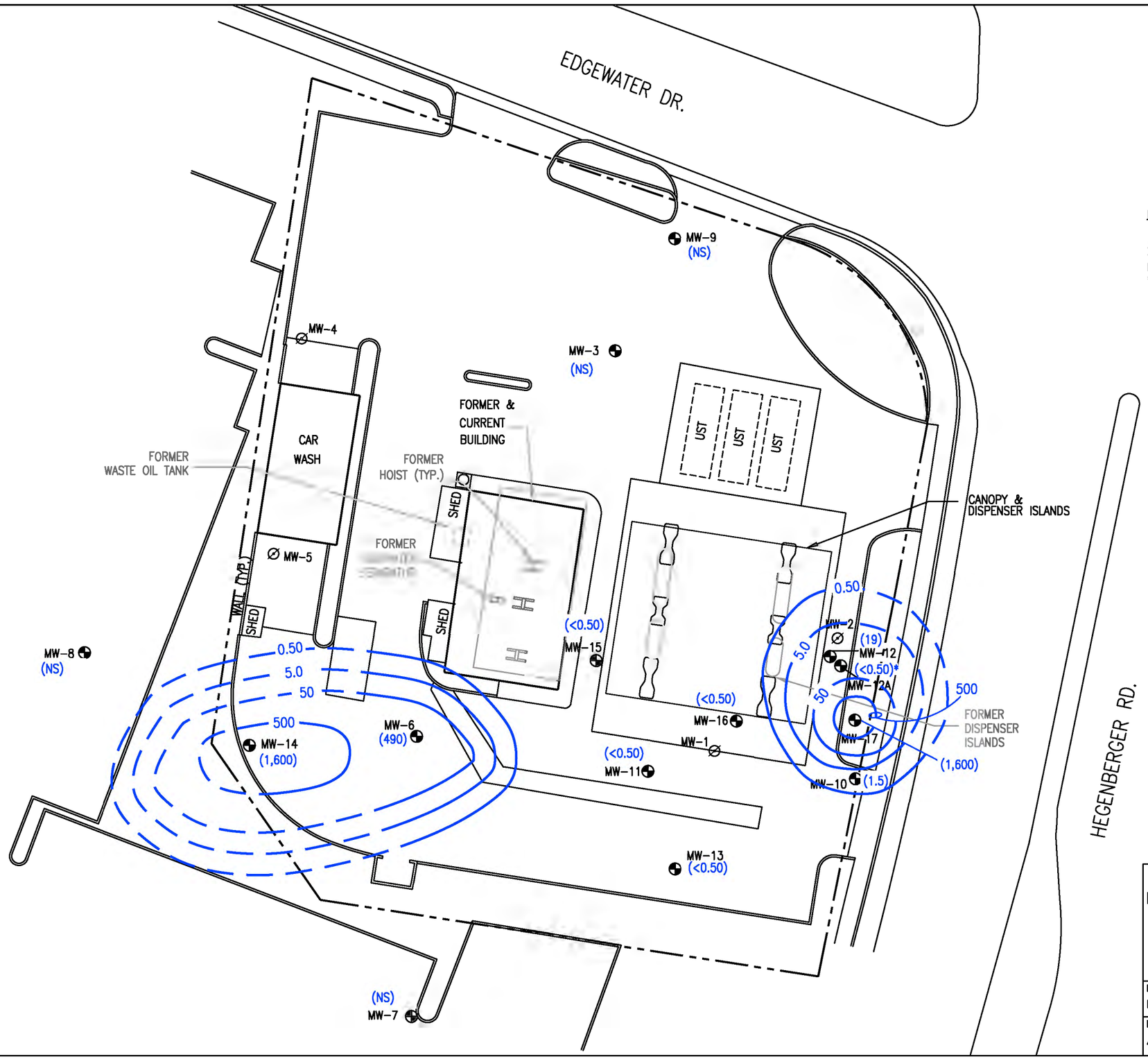
0 30

SCALE IN FEET

FIGURE 4
DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
MARCH 4, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	KM
DATE	REVIEWED BY	FILE NAME
4/30/14	DD	5191-SiteS-07a

anteagroup



LEGEND

— - - —	APPROXIMATE PROPERTY BOUNDARY
MW-	MONITORING WELL
MW-	ABANDONED MONITORING WELL
(220)	DISSOLVED PHASE BENZENE ISOOCONCENTRATION (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
NS = NOT SAMPLED
* = NOT USED IN CONTOURING

North

0 30

SCALE IN FEET

FIGURE 5
DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
MARCH 4, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	KM
DATE	REVIEWED BY	FILE NAME
4/30/14	DD	5191-SiteS-07a

antea group

EDGEWATER DR.

MW-9
(0.56)*

0.50

5.0

MW-4

MW-3
(2.2)*

FORMER &
CURRENT
BUILDING

CAR
WASH

FORMER
WASTE OIL TANK

FORMER
HOIST (TYP.)

SHED

UST

UST

UST

CANOPY &
DISPENSER ISLANDS

MW-5

FORMER

WALL (TYP.)

SHED

SHED

50

(96)
MW-15

MW-2

(990)
MW-12

500

(<0.50)**

MW-12A

MW-8
(<0.50)*

MW-6
(13)

MW-16

MW-14
(<9.0)

MW-1

(440)

MW-17
(<3.0)

FORMER
DISPENSER
ISLANDS

(12)
MW-11

(<0.50)

MW-10

HEGENBERGER RD.

MW-13
(54)

MW-7
(<0.50)*

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW- MONITORING WELL
- MW- ABANDONED MONITORING WELL
- (990) DISSOLVED PHASE MTBE ISOOCONCENTRATION (µg/L)
- 500 DISSOLVED PHASE MTBE ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:

MTBE = METHYL TERTIARY BUTYL ETHER
µg/L = MICROGRAMS PER LITER
<0.50= LESS THAN LABORATORY INDICATED REPORTING LIMIT
** = NOT USED IN CONTOURING
* = CONCENTRATION REPORTED FROM THE DECEMBER 12, 2013 SAMPLING EVENT

North

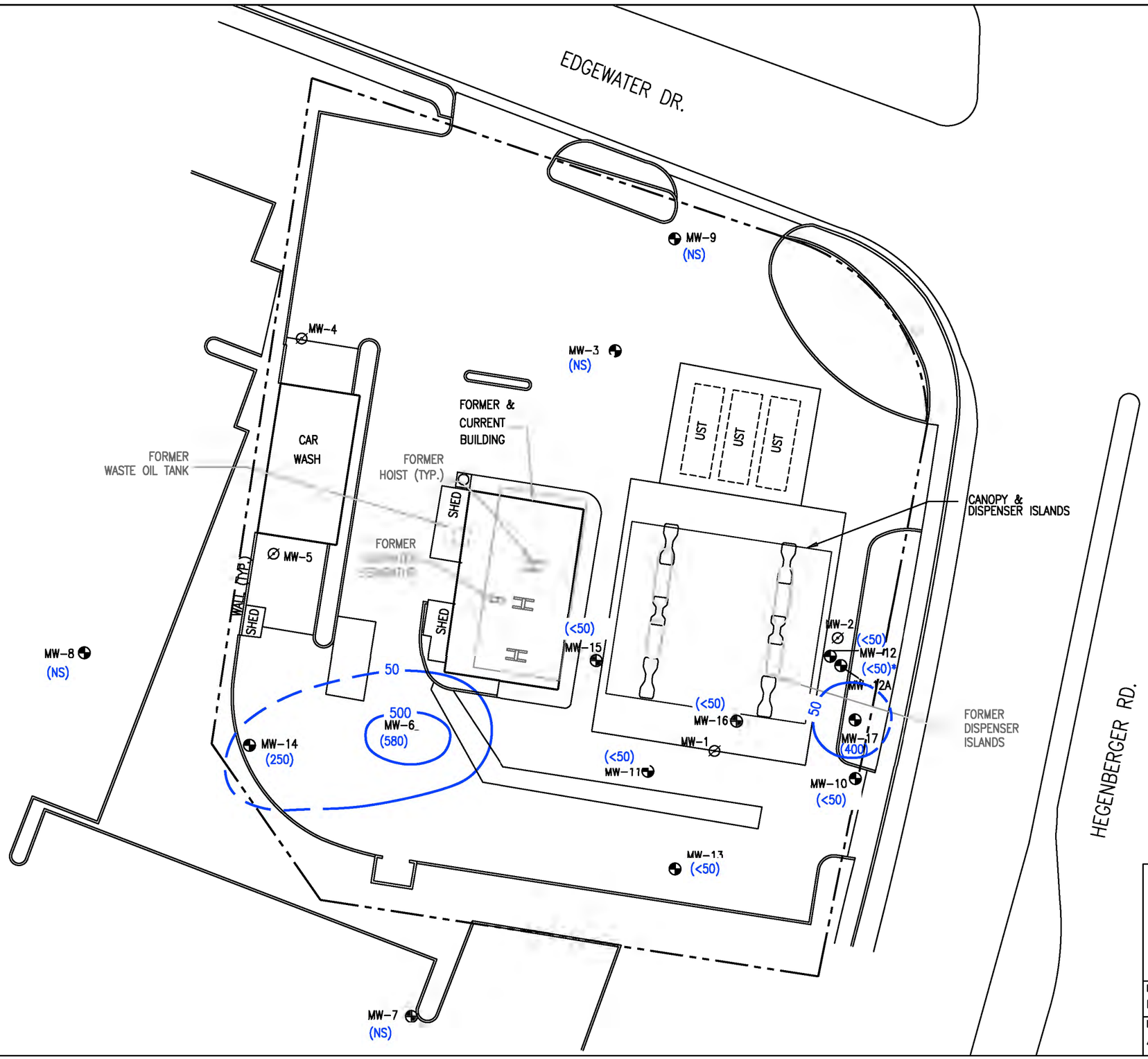
0 30

SCALE IN FEET

FIGURE 6
DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
MARCH 4, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	KM
DATE	REVIEWED BY	FILE NAME
4/30/14	DD	5191-SiteS-07a

antea group



LEGEND

— - - —	APPROXIMATE PROPERTY BOUNDARY
MW-	MONITORING WELL
∅ MW-	ABANDONED MONITORING WELL
(580)	DISSOLVED PHASE TPHd ISOOCONCENTRATION (µg/L)
—— 50 — —	DISSOLVED PHASE TPHd ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:

TPHd = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
µg/L = MICROGRAMS PER LITER
<50 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
NS = NOT SAMPLED
* = NOT USED IN CONTOURING

North

0 30

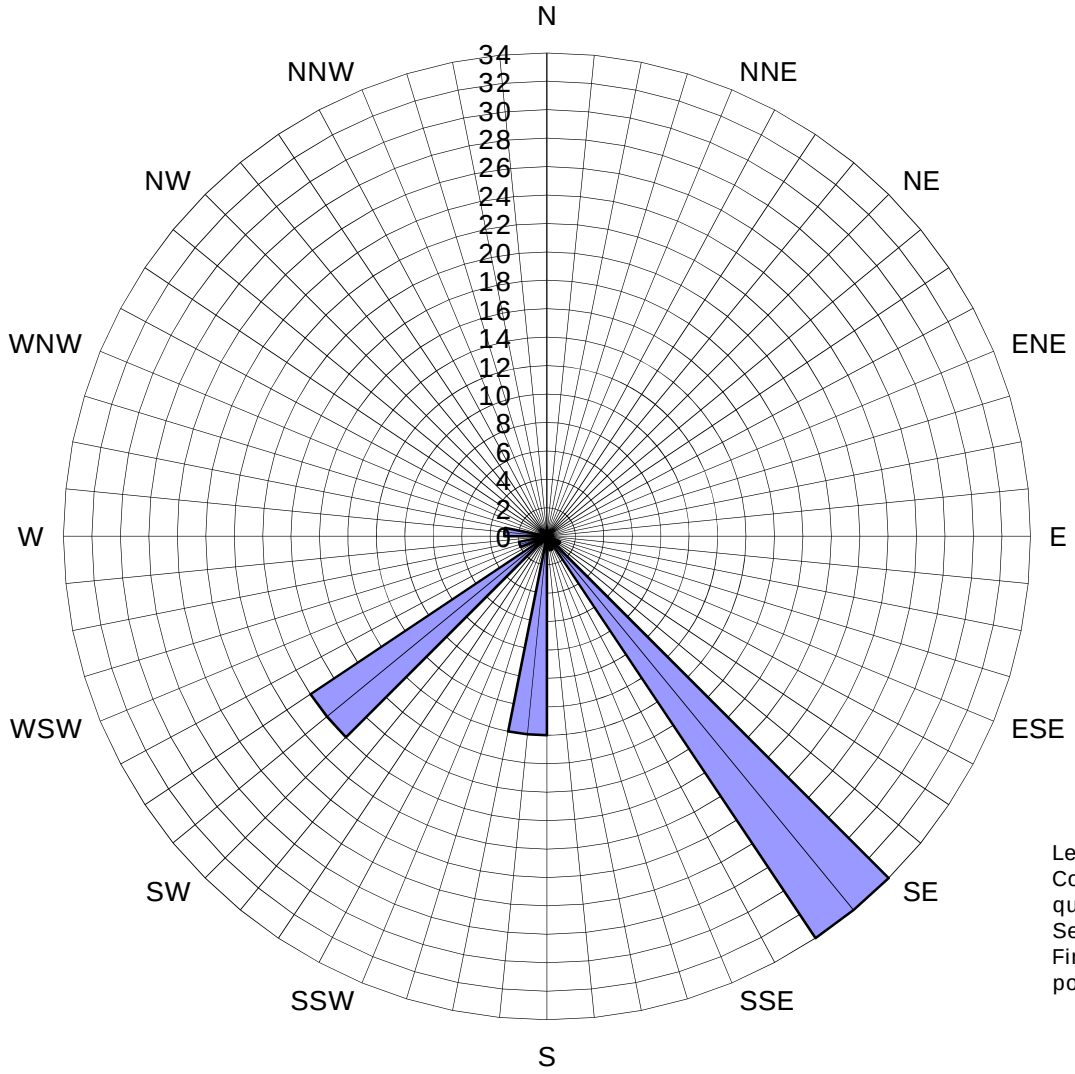
SCALE IN FEET

FIGURE 7
DISSOLVED PHASE TPHd ISOCONCENTRATION MAP
MARCH 4, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	KM
DATE	REVIEWED BY	FILE NAME
4/30/14	DD	5191-SiteS-07a

antea group

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



Legend
Concentric circles represent quarterly montoring events Second Quarter 1992 through First Quarter 2014. 75 data points shown

Groundwater Flow Direction

Tables

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

Well I.D.	Drill Date	Well		Screen		Screen Length	Comments
		Depth (feet bgs)	Diameter (inches)	Top (feet bgs)	Bottom (feet bgs)	(feet)	
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 ROAD
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)	TPHd (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	3/4/2014	10.81	2.38	NP	8.43	--	--	--	--	--	--	--	--	--
MW-6	3/4/2014	11.55	3.07	NP	8.48	**580**	**33,000**	**490**	**19**	**620**	**1,800**	**13**	**160**	<50
MW-7	3/4/2014	11.64	3.42	NP	8.22	--	--	--	--	--	--	--	--	--
MW-8	3/4/2014	11.32	2.88	NP	8.44	--	--	--	--	--	--	--	--	--
MW-9	3/4/2014	10.94	1.93	NP	9.01	--	--	--	--	--	--	--	--	--
MW-10	3/4/2014	10.97	3.38	NP	7.59	<50	<50	**1.5**	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-11	3/4/2014	10.53	1.75	NP	8.78	<50	<50	<0.50	<0.50	<0.50	<0.50	**12**	<5.0	<5.0
MW-12	3/4/2014	11.01	3.46	NP	7.55	<50	<200	**19**	<2.0	<2.0	<2.0	**990**	<9.0	<20
MW-12A	3/4/2014	11.29	3.73	NP	7.56	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-13	3/4/2014	11.08	3.51	NP	7.57	<50	<50	<0.50	<0.50	<0.50	<0.50	**54**	**30**	<5.0
MW-14	3/4/2014	12.00	3.60	NP	8.40	**250**	**40,000**	**1,600**	**41**	**2,900**	**6,700**	<9.0	<50	<90
MW-15	3/4/2014	11.11	2.34	NP	8.77	<50	<50	<0.50	<0.50	<0.50	<0.50	**96**	**45**	<5.0
MW-16	3/4/2014	10.98	3.25	NP	7.73	<50	**60**	<0.50	<0.50	<0.50	<0.50	**440**	**400**	<5.0
MW-17	3/4/2014	11.52	3.99	NP	7.53	**400**	**13,000**	**1,600**	**270**	**260**	**540**	<3.0	**330**	**48**

Gauging Notes:

TOS - Top of Screen

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 laboratory's indicated reporting limit

ug/L - micrograms/liter

TPHd- Total petroleum hydrocarbons as diesel

TPHg- Total petroleum hydrocarbons as gasoline

MTBE- Methyl tertiary-butyl ether

TBA- Tertiary-butyl alcohol

Bold - Above the laboratory's indicated reporting limit

J - TBA result may be biased slightly high due to MTBE converting to TBA during analysis

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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-1	2/18/1992	NSVD	NG	NG	NG	**13,000**	**150,000**	**17,000**	**26,000**	**5,200**	**26,000**	--	--	--	--	--	--	--	--	--
	5/20/1992	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/31/1992	NSVD	NG	NG	NG	**8,900**	**64,000**	**13,000**	**12,000**	**2,500**	**22,000**	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/4/1993	8.96	2.13	0.10	6.91	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/4/1993	8.96	2.92	0.03	6.06	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/3/1993	7.38	3.04	NP	4.34	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/7/1994	7.38	2.55	0.03	4.85	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/19/1994	7.38	2.23	0.01	5.16	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/25/1994	7.38	2.49	0.01	4.90	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/27/1994	7.38	3.10	NP	4.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	7.38	2.85	0.11	4.61	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/14/1994	7.38	2.97	0.12	4.50	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/21/1995	7.38	1.53	0.02	5.87	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/18/1995	NSVD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-2	2/18/1992	NSVD	NG	NG	NG	**4,300**	**29,000**	**1,000**	**5,300**	**260**	**7,900**	--	--	--	--	--	--	--	--	--
	5/20/1992	NSVD	NG	NG	NG	**4,300**	**24,000**	**2,200**	**7,600**	**630**	**11,000**	--	--	--	--	--	--	--	--	--
	8/31/1992	NSVD	NG	NG	NG	**1,600**	**9,000**	**1,800**	**640**	**140**	**2,000**	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**5,700**	**29,000**	**2,000**	**3,400**	**1,200**	**6,900**	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	**6,100**	**18,000**	**1,600**	**3,000**	ND	**6,900**	--	--	--	--	--	--	--	--	--
	5/4/1993	8.96	2.48	NP	6.48	**7,100**	**63,000**	**3,200**	**17,000**	**470**	**17,000**	--	--	--	--	--	--	--	--	--
	8/4/1993	8.96	3.20	NP	5.76	**1,800**	**45,000**	**2,100**	**6,600**	**1,400**	**12,000**	--	--	--	--	--	--	--	--	--
	11/3/1993	8.58	3.37	NP	5.21	**2,600**	**72,000**	**3,700**	**16,000**	**3,700**	**20,000**	--	--	--	--	--	--	--	--	--
	2/7/1994	8.58	2.40	NP	6.18	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/19/1994	8.58	2.13	NP	6.45	**3,000**	**42,000**	**2,500**	**1,300**	**2,300**	**13,000**	--	--	--	--	--	--	--	--	--
	6/25/1994	8.58	2.65	NP	5.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/27/1994	8.58	3.44	NP	5.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	8.58	3.25	NP	5.33	**2,800**	**35,000**	**2,400**	**850**	**1,700**	**15,000**	--	--	--	--	--	--	--	--	--
	11/14/1994	8.58	2.13	NP	6.45	**10,000**	**43,000**	**2,200**	**6,500**	**1,800**	**14,000**	--	--	--	--	--	--	--	--	--
	2/21/1995	8.58	1.65	NP	6.93	**2,000**	**44,000**	**2,200**	**3,200**	**1,300**	**1,500**	--	--	--	--	--	--	--	--	--
	5/18/1995	NSVD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-3	2/18/1992	NSVD	NG	NG	NG	ND	**230**	**5**	**22**	**2**	**33**	--	--	--	--	--	--	--	--	--
	5/20/1992	NSVD	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	8/31/1992	NSVD	NG	NG	NG	**92**	**210**	**1**	ND	ND	ND	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**94**	**790**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	**550**	**3,300**	**320**	ND	**96**	**6**	--	--	--	--	--	--	--	--	--
	5/4/1993	7.84	4.32	NP	3.52	**250**	**1,800**	**95**	ND	ND	ND	--	--	--	--	--	--	--	--	--
	8/4/1993	7.84	4.94	NP	2.90	**100**	**210**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	11/3/1993	7.42	4.53	NP	2.89	**160**	**640**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/7/1994	7.42	2.40	NP	5.02	**620**	**2,700**	**110**	ND	**17**	ND	--	--	--	--	--	--	--	--	--
	5/19/1994	7.42	3.60	NP	3.82	**480**	**1,800**	**83**	ND	**6**	**9**	--	--	--	--	--	--	--	--	--
	6/25/1994	7.42	4.58	NP	2.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/27/1994	7.42	4.58	NP	2.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	7.42	4.65	NP	2.77	**110**	**130**	**1**	**1**	ND	**1**	--	--	--	--	--	--	--	--	--
	11/14/1994	7.42	3.18	NP	4.24	**150**	**1,600**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/21/1995	7.42	1.81	NP	5.61	**850**	**3,800**	**350**	ND	130	**22**	--	--	--	--	--	--	--	--	--
	5/18/1995	7.42	4.56	NP	2.86	**150**	**1,300**	**42**	ND	**ND**	ND	--	--	--	--	--	--	--	--	--
	8/17/1995	7.42	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	7/26/1996	7.42	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	10/28/1996	7.42	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO	WO
	1/29/1997	7.42	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	4/15/1997	7.42	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	5/27/1997	7.42	3.45	NP	3.97	--	**670**	**7**	ND	ND	ND	**250**	--	--	--	--	--	--	--	--
	6/1/1997	7.42	3.50	NP	3.92	**610**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/1997	8.04	3.71	NP	4.33	**240**	**240**	ND	ND	ND	ND	**490**	--	--	--	--	--	--	--	--
	10/9/1997	8.04	3.70	NP	4.34	**500**	**270**	**1**	ND	**2**	**1**	**910**	--	--	--	--	--	--	--	--
	1/14/1998	8.04	2.16	NP	5.88	**340**	**310**	ND	ND	**1**	**1**	**140**	--	--	--	--	--	--	--	--
	4/1/1998	8.04	2.20	NP	5.84	**320**	**370**	**6**	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**	**5**	ND	ND	ND	**60**	--	--	--	--	--	--	--	--
	1/25/1999	8.04	2.42	NP	5.62	**120**	**420**	**2**	ND	ND	ND	**180**	--	--	--	--	--	--	--	--
	4/15/1999	8.04	2.16	NP	5.88	**170**	**290**	**1**	ND	ND	ND	**160**	--	--	--	--	--	--	--	--
	7/14/1999	8.04	2.35	NP	5.69	**420**	**290**	**3**	ND	ND	ND	**160**	--	--	--	--	--	--	--	--
	10/21/1999	8.04	2.49	NP	5.55	**350**	**360**	**1**	ND	ND	ND	**82**	--	--	--	--	--	--	--	--
	1/20/2000	8.04	2.38	NP	5.66	**2,060**	ND	**1**	ND	ND	ND	**54**	--	--	--	--	--	--	--	--
	4/13/2000	8.04	2.76	NP	5.28	**200**	**250**	**1**	ND	ND	ND	**91**	**150**	ND	ND	ND	ND	ND	ND	ND
	7/14/2000	8.04	3.26	NP	4.78	**423**	**345**	ND	ND	ND	ND	**95**	--	--	--	--	--	--	--	--
	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**	**2**	ND	ND	ND	**118**	--	--	--	--	--	--	--	--
	4/4/2001	8.04	3.98	NP	4.06	**360**	**417**	**1**	ND	ND	**1**	**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**	**4**	<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	**1**	**1**	**2**	--	**66**	--	--	--	--	<500	--	--
	4/26/2004	8.04	3.11	NP	4.93	**160**	**440**	**3**	**6**	**3**	**9**	--	**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**	**6**	**15**	**10**	**46**	--	**48**	--	--	--	--	<50	--	--
	1/10/2005	8.04	1.52	NP	6.52	**250**	**280**	<0.50	**1**	<0.50	**2**	--	**64**	--	--	--	--	<50	--	--
	6/15/2005	8.04	2.00	NP	6.04	**360**	**460**	<0.50	**0.70**	0.56	**2**	--	**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**	--	**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	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	9/17/2009	8.04	2.63	NP	5.41	NS	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	**1**	<1.5	--	**43**	--	--	--	--	<250	--	--
	3/29/2010	8.04	2.22	NP	5.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/30/2010	10.81	2.91	NP	7.90	**90**	**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	--	--
	3/14/2011	10.81	2.26	NP	8.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/2/2011	10.81	2.43	NP	8.38	**155**	**283**	**0.58**	**1.3**	<0.50	**2.2**	--	**42.1**	--	--	--	**55.7**	<250	--	--
	9/7/2011	10.81	2.36	NP	8.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	10.81	2.55	NP	8.26	**81.7**	**381**	<0.50	<0.50	<0.50	<1.5	--	**41.8**	--	--	--	--	<250	--	--
	3/6/2012	10.81	2.63	NP	8.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	10.81	2.99	NP	7.82	**87.9**	**371**	<0.50	<0.50	<0.50	<1.5	--	**55.7**	--	--	--	**77.2**	<250	--	--
	9/6/2012	10.81	2.50	NP	8.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	10.81	2.50	NP	8.31	<50	**130**	<0.50	<0.50	<0.50	<0.50	--	**28**	--	--	--	**77**	<5.0	--	--
	3/14/2013	10.81	2.63	NP	8.18	--	**--**	**--**	**--**	**--**	--	**--**	**--**	**--**	**--**	**--**	--	**--**	**--**	--
	6/11/2013	10.81	3.31	NP	7.50	<50	**190**	<0.50	<0.50	<0.50	<0.50	**--**	**44**	**--**	**--**	**--**	**97**	<5.0	**--**	--
	9/10/2013	10.81	3.25	NP	7.56	--	**--**	--	--	--	--	**--**	**--**	**--**	**--**	**--**	--	**--**	**--**	--
	12/12/2013	10.81	2.60	NP	8.21	<50	**400**	<0.50	<0.50	<0.50	<0.50	**--**	**22**	**--**	**--**	**--**	**46**	<5.0	**--**	--
	3/4/2014	10.81	2.38	NP	8.43	--	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	--
MW-4	8/31/1992	NSVD	NG	NG	NG	**90**	**240**	ND	ND	ND	**0.54**	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**61**	**420**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	5/4/1993	9.00	4.09	NP	4.91	ND	**110**	**0.95**	ND	ND	ND	--	--	--	--	--	--	--	--	--
	8/4/1993	9.00	5.01	NP	3.99	**81**	**250**	ND	**3.5**	ND	**4.1**	--	--	--	--	--	--	--	--	--
	11/3/1993	8.41	4.23	NP	4.18	**68**	**130**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/7/1994	8.41	3.35	NP	5.06	ND	**56**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	5/19/1994	8.41	3.92	NP	4.49	**90**	**140**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	6/25/1994	8.41	4.35	NP	4.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/27/1994	8.41	4.28	NP	4.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	8.41	4.27	NP	4.14	**72**	**59**	ND	**0.6**	ND	ND	--	--	--	--	--	--	--	--	--
	11/14/1994	8.41	4.05	NP	4.36	ND	**130**	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	2/21/1995	NSVD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-5	8/31/1992	NSVD	NG	NG	NG	**690**	**78**	**1**	ND	ND	**13**	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**470**	**930**	**70**	**290**	**1**	**14**	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	**5,500**	**5,700**	**38**	ND	**620**	**170**	--	--	--	--	--	--	--	--	--
	5/4/1993	8.95	4.37	NP	4.58	**4,600**	**7,400**	**41**	ND	**1,000**	**35**	--	--	--	--	--	--	--	--	--
	8/4/1993	8.95	5.81	NP	3.14	**970**	**1,500**	**130**	**1**	**460**	**11**	--	--	--	--	--	--	--	--	--
	11/3/1993	8.95	5.68	NP	3.27	**2,100**	**13,000**	**350**	ND	**3,500**	**530**	--	--	--	--	--	--	--	--	--
	2/7/1994	8.95	5.11	NP	3.84	**830**	**2,000**	**87**	ND	**370**	**110**	--	--	--	--	--	--	--	--	--
	5/19/1994	8.95	5.09	NP	3.86	**600**	**260**	**44**	ND	**32**	**4**	--	--	--	--	--	--	--	--	--
	6/25/1994	8.95	4.55	NP	4.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/27/1994	8.95	5.72	NP	3.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	8.95	5.68	NP	3.27	**860**	**1,600**	**110**	ND	**340**	**72**	--	--	--	--	--	--	--	--	--
	11/14/1994	8.95	5.63	NP	3.32	**290**	**250**	**40**	ND	ND	**5**	--	--	--	--	--	--	--	--	--
	2/21/1995	NSVD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-6	8/31/1992	NSVD	NG	NG	NG	**750**	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**1,400**	**9,200**	**550**	ND	**740**	**1,600**	--	--	--	--	--	--	--	--	--
	2/4/1993	NSVD	NG	NG	NG	**890**	**3,600**	**340**	ND	**290**	**550**	--	--	--	--	--	--	--	--	--
	5/4/1993	9.12	3.72	NP	5.40	**1,800**	**4,900**	**360**	**18**	**450**	**430**	--	--	--	--	--	--	--	--	--
	8/4/1993	9.12	5.15	NP	3.97	**1,100**	**3,400**	**390**	ND	**440**	**190**	--	--	--	--	--	--	--	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	11/3/1993	8.87	5.25	NP	3.62	**390**	**1,400**	**320**	ND	**200**	**8**	--	--	--	--	--	--	--	--	--
	2/7/1994	8.87	4.55	NP	4.32	**970**	**4,900**	**650**	ND	**250**	**35**	--	--	--	--	--	--	--	--	--
	5/19/1994	8.87	4.62	NP	4.25	**1,400**	**3,600**	**300**	**2**	**210**	**41**	--	--	--	--	--	--	--	--	--
	8/15/1994	8.87	5.08	NP	3.79	**790**	**1,300**	**130**	**7**	**54**	**57**	--	--	--	--	--	--	--	--	--
	11/14/1994	8.87	5.30	NP	3.57	**800**	**730**	**50**	ND	ND	**39**	--	--	--	--	--	--	--	--	--
	2/21/1995	8.87	5.37	NP	3.50	**730**	**2,000**	**250**	**5**	**25**	**30**	--	--	--	--	--	--	--	--	--
	5/18/1995	8.87	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	8/17/1995	8.87	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	7/26/1996	8.87	6.40	3.33	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/28/1996	8.87	4.10	0.21	4.93	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/13/1996	8.87	4.02	0.25	5.04	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/25/1996	8.87	4.01	0.75	5.42	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/4/1996	8.87	3.65	0.50	5.60	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/19/1996	8.87	4.80	2.20	5.72	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/8/1997	8.87	4.84	1.75	5.34	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/14/1997	8.87	4.51	1.15	5.22	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/27/1997	8.87	4.00	1.75	6.18	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/29/1997	8.87	3.24	0.31	5.86	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/11/1997	8.87	4.65	1.20	5.12	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/24/1997	8.87	4.81	1.10	4.89	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/10/1997	8.87	4.60	0.95	4.98	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	LPH

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76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	3/22/1999	8.87	4.32	0.15	4.66	LPH	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	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	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	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	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	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	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	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	LPH
	1/20/2000	8.87	4.31	NP	4.56	**67,600**	**130,000**	**2,900**	**8,600**	**2,000**	**16,000**	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	**8,700**	**140,000**	**5,000**	**14,000**	**3,600**	**27,000**	**7,700**	--	--	--	--	--	--	--	--
	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	**133,000**	**259,000**	**7,670**	**13,700**	**6,860**	**40,700**	ND	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	**61,000**	**110,000**	**7,000**	**6,200**	**3,700**	**12,000**	**670**	**43**	--	--	--	--	--	--	--
	1/3/2001	8.87	4.52	NP	4.35	**929**	**84,700**	**3,950**	**4,130**	**3,650**	**11,800**	ND	ND	--	--	--	--	--	--	--
	4/4/2001	8.87	4.29	NP	4.58	**18,000**	**69,800**	**2,060**	**2,840**	**3,650**	**10,900**	ND	**48**	ND	ND	ND	ND	ND	ND	ND
	7/17/2001	8.87	4.37	NP	4.50	**20,000**	**100,000**	**3,200**	**3,300**	**3,400**	**12,000**	ND	--	--	--	--	--	--	--	--
	10/1/2001	8.87	4.45	NP	4.42	**24,000**	**110,000**	**3,200**	**2,400**	**4,500**	**13,000**	<1000	--	--	--	--	--	--	--	--
	1/31/2002	8.87	4.03	NP	4.84	**11,000**	**230,000**	**2,400**	**1,800**	**5,400**	**16,000**	<2500	--	--	--	--	--	--	--	--
	4/18/2002	8.87	3.45	NP	5.42	**3,500**	**94,000**	**6,800**	**13,000**	**3,000**	**19,000**	<500	--	--	--	--	--	--	--	--
	7/28/2002	8.87	2.24	NP	6.63	**27,000**	**110,000**	**530**	**170**	**3,200**	**7,300**	--	<100	--	--	--	--	--	--	--
	10/9/2002	8.87	3.53	NP	5.34	**170,000**	**970,000**	**10,000**	**39,000**	**13,000**	**94,000**	--	<2000	--	--	--	--	--	--	--
	1/2/2003	8.87	2.34	NP	6.53	**66,000**	**270,000**	**6,100**	**15,000**	**5,400**	**37,000**	--	<200	--	--	--	--	--	--	--
	4/1/2003	8.87	3.17	NP	5.70	**35,000**	**3,000,000**	**8,000**	**39,000**	**37,000**	**260,000**	--	<2000	--	--	--	--	--	--	--
	7/1/2003	8.87	3.55	NP	5.32	**11,000**	**38,000**	**2,100**	**990**	**2,700**	**6,500**	--	<100	--	--	--	--	<25000	--	--
	10/2/2003	8.87	3.82	NP	5.05	<50	**100,000**	**5,600**	**6,900**	**4,700**	**18,000**	--	<800	--	--	--	--	<200000	--	--
	1/9/2004	8.87	2.80	NP	6.07	**20,000**	**170,000**	**2,800**	**3,300**	**4,700**	**16,000**	--	<200	--	--	--	--	<50000	--	--
	4/26/2004	8.87	3.40	NP	5.47	**13,000**	**97,000**	**5,900**	**9,000**	**5,100**	**23,000**	--	<50	--	--	--	--	<5000	--	--
	7/22/2004	8.87	3.54	NP	5.33	**33,000**	**110,000**	**4,100**	**5,100**	**4,000**	**16,000**	--	<200	--	--	--	--	<300000	--	--
	10/29/2004	8.87	3.03	NP	5.84	**78,000**	**100,000**	**5,200**	**6,100**	**4,200**	**15,000**	--	<50	--	--	--	--	<5000	--	--
	1/10/2005	8.87	2.35	NP	6.52	**12,000**	**71,000**	**1,600**	**3,700**	**2,100**	**9,900**	--	<50	--	--	--	--	<5000	--	--
	6/15/2005	8.87	2.47	NP	6.40	**16,000**	**130,000**	**800**	**1,800**	**2,200**	**9,300**	--	<50	--	--	--	--	<5000	--	--
	9/27/2005	8.87	2.55	NP	6.32	**2,500**	**13,000**	**82**	**120**	**430**	**990**	--	**1**	**2**	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.87	3.28	NP	5.59	**18,000**	**68,000**	**1,500**	**1,100**	**2,200**	**7,700**	--	<50	--	--	--	--	<25000	--	--
	3/23/2006	8.87	2.87	NP	6.00	**73,000**	**41,000**	**290**	**140**	**1,500**	**2,700**	--	<50	--	--	--	--	<25000	--	--
	6/23/2006	8.87	3.15	NP	5.72	**35,000**	**50,000**	**2,200**	**1,400**	**1,900**	**5,700**	--	<12	--	--	--	--	<6200	--	--
	9/26/2006	8.87	3.08	NP	5.79	**22,000**	**130,000**	**2,200**	**1,000**	**2,900**	**8,800**	--	<50	--	--	--	--	<25000	--	--
	12/22/2006	8.87	2.90	NP	5.97	**62,000**	**90,000**	**940**	**610**	**1,900**	**4,700**	--	<50	--	--	--	--	<25000	--	--
	3/30/2007	8.87	3.26	NP	5.61	**62,000**	**210,000**	**1,100**	**560**	**3,400**	**12,000**	--	<10	--	--	--	--	<5000	--	--
	6/28/2007	8.87	3.46	NP	5.41	**71,000**	**67,000**	**2,200**	**1,300**	**2,700**	**10,000**	--	<25	--	--	--	--	<12000	--	--
	9/25/2007	8.87	3.52	NP	5.35	**58,000**	**56,000**	**2,900**	**720**	**2,400**	**9,000**	--	<25	--	--	--	--	<12000	--	--
	12/28/2007	8.87	3.27	NP	5.60	**18,000**	**78,000**	**28,000**	**2,700**	**4,000**	**8,100**	--	**16,000**	--	--	--	--	<12000	--	--
	3/22/2008	8.87	2.48	NP	6.39	**68,000**	**66,000**	**380**	**150**	**1,500**	**2,400**	--	<25	--	--	--	--	<12000	--	--
	6/23/2008	8.87	3.54	NP	5.33	**68,000**	**59,000**	**1,600**	**130**	**1,800**	**4,100**	--	**25**	--	--	--	--	<12000	--	--
	9/19/2008	8.87	4.06	NP	4.81	**180,000**	**65,000**	**2,000**	**230**	**2,000**	**4,500**	--	<12	--	--	--	--	<6200	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	12/31/2008	8.87	3.45	NP	5.42	**68,000**	**91,000**	**2,000**	**320**	**5,300**	**13,000**	--	<50	--	--	--	--	<25000	--	--
	3/27/2009	8.87	3.09	NP	5.78	**170,000**	**150,000**	**1,300**	**240**	**2,800**	**7,200**	--	<50	--	--	--	--	<25000	--	--
	5/28/2009	8.87	3.49	NP	5.38	**78,000**	**53,000**	**1,700**	**200**	**2,300**	**5,400**	--	<50	--	--	--	--	<25000	--	--
	9/17/2009	8.87	3.64	NP	5.23	**250,000 T4**	**77,000**	**2,100**	**1,400**	**2,600**	**8,500**	--	<12	--	--	--	--	<6200	--	--
	12/17/2009	8.87	3.14	NP	5.73	**30,300**	**59,100**	**1,730**	**199**	**2,260**	**5,460**	--	**20**	--	--	--	--	<250	--	--
	3/29/2010	8.87	3.16	NP	5.71	**106,000**	**48,400**	**1,980**	**208**	**3,070**	**8,070**	--	**12**	--	--	--	--	<250	--	--
	6/30/2010	11.55	3.50	NP	8.05	**170,000**	**78,700**	**2,130**	**281**	**2,860**	**8,400**	--	**6**	--	--	--	--	<250	--	--
	7/6/2010	11.55	3.49	NP	8.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	11.55	3.75	NP	7.80	**18,800**	**64,500**	**2,300**	**170**	**2,770**	**6,260**	--	**19**	--	--	--	--	<250	--	--
	12/8/2010	11.55	8.42	NP	3.13	**28,700**	**78,400**	**1,300**	**1,680**	**3,490**	**20,600**	--	**11**	--	--	--	--	<250	--	--
	3/14/2011	11.55	3.40	NP	8.15	**93,000**	**44,600**	**912**	**338**	**728**	**3,670**	--	**16**	--	--	--	**134**	<250	--	--
	6/2/2011	11.55	2.76	NP	8.79	**33,700 T4**	**56,200**	**780**	**262**	**651**	**3,890**	--	**7**	--	--	--	**81.0**	<250	--	--
	9/7/2011	11.55	2.83	NP	8.72	**6,780 T4**	**16,600**	**16**	**11**	**90**	**339**	--	**<0.50**	--	--	--	--	<250	--	--
	12/5/2011	11.55	3.56	NP	7.99	**20,200 T4**	**64,600**	**646**	**95**	**924**	**4,050**	--	**15**	--	--	--	--	<250	--	--
	3/6/2012	11.55	3.43	NP	8.12	**14,800 T4**	**55,000**	**1,020**	**131**	**1,320**	**4,730**	--	**19**	--	--	--	**316**	<1250	--	--
	6/11/2012	11.55	3.33	NP	8.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	**47,100 T4**	**33,400**	**773**	**61**	**840**	**3,110**	--	**11**	--	--	--	**123**	<250	--	--
	9/6/2012	11.55	2.85	NP	8.70	<1000	**24,000**	**450**	**51**	**610**	**1,800**	--	**6**	<4.0	<4.0	<4.0	**82**	<40	<4.0	<4.0
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	11.55	2.90	NP	8.65	**470**	**20,000**	**200**	**16**	**350**	**1,100**	--	<4.0	--	--	--	**22**	<40	--	--
	3/14/2013	11.55	3.69	NP	7.86	**680**	**24,000**	**500**	**25**	**540**	**1,700**	--	**8**	--	--	--	**110**	<40	--	--
	6/11/2013	11.55	3.86	NP	7.69	**2,400**	**87,000**	**1,800**	**250**	**2,000**	**9,400**	--	**13**	--	--	--	**230**	<40	--	--
	9/10/2013	11.55	4.11	NP	7.44	**470**	**28,000**	**440**	**19**	**530**	**1,500**	--	**10**	--	--	--	**170**	<40	--	--
	12/12/2013	11.55	3.55	NP	8.00	**100**	**15,000**	**220**	**13**	**270**	**660**	--	**9.5**	--	--	--	**120**	<25	--	--
	3/4/2014	11.55	3.07	NP	8.48	**580**	**33,000**	**490**	**19**	**620**	**1,800**	--	**13**	--	--	--	**160**	<50	--	--
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	--	--	--	--	--	--	--	--
	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	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	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	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**	--	<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	--	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	--	<250	--	--
	3/6/2012	11.64	4.54	NP	7.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	11.64	4.93	NP	6.71	<37.9	--	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	<5.0	<250	--	--
	9/6/2012	11.64	4.03	NP	7.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	11.64	3.43	NP	8.21	<50	--	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/14/2013	11.64	4.9	NP	6.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2013	11.64	6.92	NP	4.72	**96**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	**7**	<5.0	--	--
	9/10/2013	11.64	6.54	NP	5.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/2013	11.64	4.60	NP	7.04	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/4/2014	11.64	3.42	NP	8.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--
	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	--	--	--	--	--	--	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	10/21/1999	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	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	--	<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	11.32	3.08	NP	8.24	<37.9	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	**8.3**	<250	--	--
	9/6/2012	11.32	2.91	NP	8.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	11.32	2.31	NP	9.01	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/14/2013	11.32	3.19	NP	8.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	6/11/2013	11.32	3.4	NP	7.92	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	9/10/2013	11.32	3.54	NP	7.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/2013	11.32	2.80	NP	8.52	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/4/2014	11.32	2.88	NP	8.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--
	7/26/1996	8.29	0.28	NP	8.01	**98**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/28/1996	8.29	1.15	NP	7.14	**99**	ND	ND	ND	ND	ND	**7.6**	--	--	--	--	--	--	--	--
	1/29/1997	8.29	1.05	NP	7.24	**54**	ND	ND	ND	ND	ND	**5.4**	--	--	--	--	--	--	--	--
	4/15/1997	8.29	1.88	NP	6.41	**94**	ND	ND	ND	ND	ND	**5.4**	--	--	--	--	--	--	--	--
	5/27/1997	8.29	1.05	NP	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/1997	8.29	1.90	NP	6.39	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/9/1997	8.29	1.76	NP	6.53	**160**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	1/14/1998	8.29	1.26	NP	7.03	**110**	ND	ND	ND	ND	ND	**3.0**	--	--	--	--	--	--	--	--
	4/1/1998	8.29	0.85	NP	7.44	**110**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/15/1998	8.29	1.52	NP	6.77	**200**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/16/1998	8.29	0.81	NP	7.48	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	1/25/1999	8.29	0.92	NP	7.37	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/15/1999	8.29	0.90	NP	7.39	ND	**75**	**21**	ND	ND	**1.1**	**680**	--	--	--	--	--	--	--	--
	7/14/1999	8.29	1.04	NP	7.25	**140**	ND	**1.9**	ND	ND	ND	**260**	--	--	--	--	--	--	--	--
	10/21/1999	8.29	1.23	NP	7.06	**210**	ND	ND	ND	ND	ND	**170**	--	--	--	--	--	--	--	--
	1/20/2000	8.29	1.18	NP	7.11	**519**	ND	**1.1**	ND	ND	ND	**35**	--	--	--	--	--	--	--	--
	4/13/2000	8.29	1.08	NP	7.21	**81**	**160**	**0.64**	ND	ND	ND	**53**	--	--	--	--	--	--	--	--	--
	7/14/2000	8.29	1.43	NP	6.86	**107**	ND	ND	ND	ND	ND	**20.2**	--	--	--	--	--	--	--	--
	10/26/2000	8.29	1.38	NP	6.91	**240**	240	**2.9**	ND	ND	ND	**56**	--	--	--	--	--	--	--	--
	1/3/2001	8.29	1.66	NP	6.63	**164**	**166**	**0.763**	**0.776**	ND	**1.28**	**50.2**	--	--	--	--	--	--	--	--
	4/4/2001	8.29	1.27	NP	7.02	**240**	**296**	**0.738**	ND	ND	0.907	**135**	--	--	--	--	--	--	--	--
	7/17/2001	8.29	1.38	NP	6.91	ND	ND	ND	ND	ND	ND	**13**	--	--	--	--	--	--	--	--
	10/1/2001	8.29	1.93	NP	6.36	<52	**51**	<0.50	<0.50	<0.50	<0.50	**5.0**	--	--	--	--	--	--	--	--
	1/31/2002	8.29	2.08	NP	6.21	**200**	<50	<0.50	<0.50	<0.50	<0.50	**5.8**	--	--	--	--	--	--	--	--
	4/18/2002	8.29	1.76	NP	6.53	<50	<50	<0.50	<0.50	<0.50	<0.50	**5.1**	--	--	--	--	--	--	--	--
	7/28/2002	8.29	1.57	NP	6.72	<50	<50	<0.50	<0.50	<0.50	<1.0	--	**3.5**	--	--	--	--	--	--	--
	10/9/2002	8.29	1.45	NP	6.84	**100**	<50	<0.50	<0.50	<0.50	<1.0	--	**17**	--	--	--	--	--	--	--
	1/2/2003	8.29	1.18	NP	7.11	<50	<50	<0.50	<0.50	<0.50	<1.0	--	**8.6**	--	--	--	--	--	--	--
	4/1/2003	8.29	2.04	NP	6.25	56	<50	<0.50	<0.50	<0.50	<1.0	--	**9.4**	--	--	--	--	--	--	--
	7/1/2003	8.29	2.80	NP	5.49	<50	<50	<0.50	<0.50	<0.50	<1.0	--	**3.2**	--	--	--	--	<500	--	--
	10/2/2003	8.29	2.70	NP	5.59	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	<500	--	--
	1/9/2004	8.29	1.90	NP	6.39	**91**	**74**	<0.50	**0.98**	**2.3**	**6.2**	--	<2.0	--	--	--	--	<500	--	--
	4/26/2004	8.29	1.62	NP	6.67	<50	**51**	<0.50	<0.50	<0.50	<1.0	--	**0.51**	--	--	--	--	<50	--	--
	7/22/2004	8.29	1.88	NP	6.41	<200	<50	<0.5	<0.5	<0.5	<1	--	**0.78**	--	--	--	--	<1000	--	--
	10/29/2004	8.29	1.28	NP	7.01	**76**	<50	<0.50	<0.50	<0.50	**1.0**	--	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.29	0.07	NP	8.22	**77**	**93**	**0.60**	**2.3**	**2.4**	**9.0**	--	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.29	1.70	NP	6.59	**67**	<50	<0.50	<0.50	<0.50	<1.0	--	**6.6**	--	--	--	--	<50	--	--
	9/27/2005	8.29	1.98	NP	6.31	<200	<50	<0.50	**0.73**	<0.50	<1.0	--	**2.3**	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.29	2.26	NP	6.03	<200	<50	<0.50	<0.50	<0.50	<1.0	--	**2.9**	--	--	--	--	<250	--	--
	3/23/2006	8.29	1.32	NP	6.97	<200	<50	<0.50	<0.50	<0.50	<1.0	--	**2.7**	--	--	--	--	<250	--	--
	6/23/2006	8.29	1.98	NP	6.31	<200	<50	<0.50	<0.50	<0.50	<1.0	--	**1.9**	--	--	--	--	<250	--	--
	9/26/2006	8.29	2.52	NP	5.77	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	12/22/2006	8.29	1.98	NP	6.31	**150**	<50	<0.50	**0.57**	**1.8**	**4.6**	--	**1.6**	--	--	--	--	<250	--	--
	3/30/2007	8.29	2.01	NP	6.28	**72**	<50	<0.50	<0.50	<0.50	<0.50	--	**3.4**	--	--	--	--	<250	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	6/28/2007	8.29	1.90	NP	6.39	**1000**	<50	<0.50	<0.50	<0.50	<0.50	--	**4.9**	--	--	--	--	<250	--	--
	9/25/2007	8.29	1.57	NP	6.72	**100**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	12/28/2007	8.29	1.98	NP	6.31	**56**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/22/2008	8.29	0.80	NP	7.49	<50	<50	<0.50	<0.50	<0.50	<1.0	--	**0.61**	--	--	--	--	<250	--	--
	6/23/2008	8.29	1.80	NP	6.49	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/19/2008	8.29	2.43	NP	5.86	56	<50	<0.50	<0.50	<0.50	<1.0	--	**3.9**	--	--	--	--	<250	--	--
	12/31/2008	8.29	2.66	NP	5.63	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/27/2009	8.29	2.01	NP	6.28	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	5/28/2009	8.29	2.20	NP	6.09	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/17/2009	8.29	1.83	NP	6.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	10.94	1.75	NP	9.19	<37.9	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	<5.0	<250	--	--
	9/6/2012	10.94	1.24	NP	9.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	10.94	1.80	NP	9.14	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/14/2013	10.94	2.38	NP	8.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2013	10.94	2.81	NP	8.13	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**4.2**	--	--	--	<5.0	<5.0	--	--
	9/10/2013	10.94	2.63	NP	8.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/2013	10.94	1.78	NP	9.16	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**0.56**	--	--	--	<5.0	<5.0	--	--
	3/4/2014	10.94	1.93	NP	9.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	ND	--	--	--	--	--	--	--	--
	10/28/1996	8.62	4.09	NP	4.53	ND	ND	**1.1**	ND	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	--	--	--	--	--	--	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	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	--	--
	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	--	--
	6/11/2012	10.97	3.99	NP	6.98	<37.9	<50.0	**0.79**	<0.50	<0.50	<1.5	--	**0.72**	--	--	--	**17.2**	<250	--	--
	9/6/2012	10.97	4.00	NP	6.97	**110**	**64**	**6.9**	**0.89**	**1.8**	**3.9**	--	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	10.97	3.40	NP	7.57	<50	**120**	**15**	**1.1**	**1.7**	**5.2**	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/14/2013	10.97	4.00	NP	6.97	<50	**86**	**25**	<0.50	**0.6**	**0.8**	--	<0.50	--	--	--	<5.0	<5.0	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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	6/11/2013	10.97	4.20	NP	6.77	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<8.0	--	--
	9/10/2013	10.97	3.92	NP	7.05	<50	<50	<0.50	<0.50	<0.50	**1.2**	--	<0.50	--	--	--	<5.0	<5.0	--	--
	12/12/2013	10.97	3.85	NP	7.12	<50	<50	**2.4**	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/4/2014	10.97	3.38	NP	7.59	<50	<50	**1.5**	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
MW-11	7/6/2010	10.53	2.44	NP	8.09	**226**	**99.2**	<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	--	--
	6/11/2012	10.53	2.24	NP	8.29	<37.9	<50.0	<0.50	<0.50	<0.50	<1.5	--	**20.9**	--	--	--	**10.4**	<250	--	--
	9/6/2012	10.53	1.70	NP	8.83	**64**	<50	<0.50	<0.50	<0.50	<0.50	--	**7.7**	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50
	12/13/2012	10.53	1.56	NP	8.97	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**27**	--	--	--	<5.0	<5.0	--	--
	3/14/2013	10.53	2.20	NP	8.33	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**20**	--	--	--	<5.0	<5.0	--	--
	6/11/2013	10.53	2.92	NP	7.61	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**32**	--	--	--	<5.0	<5.0	--	--
	9/10/2013	10.53	2.98	NP	7.55	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**22**	--	--	--	<5.0	<5.0	--	--
	12/12/2013	10.53	2.20	NP	8.33	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**20**	--	--	--	<5.0	<5.0	--	--
	3/4/2014	10.53	1.75	NP	8.78	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**12**	--	--	--	<5.0	<5.0	--	--
MW-12	7/6/2010	11.01	4.00	NP	7.01	**990**	**20,300**	**1,030**	**955**	**311**	**2,450**	--	**1,650**	<0.50	<0.50	**1.0**	**1,430**	<250	<1.0	<1.0
	9/20/2010	11.01	4.18	NP	6.83	**5,220**	**73,700**	**6,020**	**6,390**	**2,970**	**18,300**	--	**894**	--	--	--	--	<250	--	--
	12/8/2010	11.01	3.92	NP	7.09	**428**	**3,350**	**249**	**117**	**90**	**558**	--	**1,470**	--	--	--	--	<2500	--	--
	3/14/2011	11.01	3.70	NP	7.31	**283**	**2,420**	**287**	**81**	**49**	**243**	--	**1,020**	--	--	--	**70**	<250	--	--
	6/2/2011	11.01	4.40	NP	6.61	**1,330 T4**	**12,200**	**688**	**71**	**225**	**619**	--	**824**	--	--	--	**110**	<250	--	--
	9/7/2011	11.01	4.37	NP	6.64	**1,270 T4**	**7,900**	**920**	**25**	**187**	**267**	--	**896**	--	--	--	--	<2500	--	--
	12/5/2011	11.01	4.32	NP	6.69	**286 T4**	**2,240**	**296**	**38**	**38.0**	**122**	--	**1,040**	--	--	--	--	<250	--	--
	3/6/2012	11.01	4.01	NP	7.00	**272 T4**	**1,260**	**193**	**23**	**29**	**81**	--	**835**	--	--	--	**78**	<250	--	--
	6/11/2012	11.01	4.20	NP	6.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	**957 T4**	**1,030**	**178**	**17.0**	**24**	**69**	--	**993**	--	--	--	**448**	<250	--	--
	9/6/2012	11.01	4.15	NP	6.86	<200	**580**	**120**	**10**	**15**	**37**	--	**840**	<1.5	<1.5	<1.5	**15**	<15	<1.5	**14**
	12/13/2012	11.01	3.35	NP	7.66	<50	**480**	**70**	**4.60**	**7.20**	**19**	--	**820**	--	--	--	**19**	<15	--	--
	3/14/2013	11.01	4.11	NP	6.90	<50	**370**	**76**	**3.40**	**12.00**	**18**	--	**810**	--	--	--	**21**	<15	--	--
	6/11/2013	11.01	4.30	NP	6.71	**62**	**290**	**51**	<1.5	**4.30**	**6**	--	**840**	--	--	--	**19**	<15	--	--
	9/10/2013	11.01	3.96	NP	7.05	<50	**340**	**52**	**1.90**	**6.40**	**5**	--	**820**	--	--	--	**17**	<15	--	--
	12/12/2013	11.01	4.00	NP	7.01	<50	**180**	**18**	<1.5	**1.60**	<1.5	--	**940**	--	--	--	**14**	<15	--	--
	3/4/2014	11.01	3.46	NP	7.55	<50	<200	**19**	<2.0	<2.0	<2.0	--	**990**	--	--	--	<9.0	<20	--	--
MW-12A	7/6/2010	11.29	4.22	NP	7.07	**89**	**664**	**18**	**0.78**	**2.30**	**50**	--	**14**	<0.50	<0.50	<0.50	**12**	<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	--	**8.50**	--	--	--	--	<250	--	--
	12/8/2010	11.29	4.00	NP	7.29	**76**	<50.0	<0.50	<0.50	<0.50	<1.5	--	**9.40**	--	--	--	--	<250	--	--
	3/14/2011	11.29	3.81	NP	7.48	**62**	<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	**52.0 T4**	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	<5.0	<250	--	--
	6/11/2012	11.29	4.36	NP	6.93	<37.9	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	--	--	<5.0	<250	--	--
	9/6/2012	11.29	4.45	NP	6.84	**300**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50
	12/13/2012	11.29	3.80	NP	7.49	**62**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/14/2013	11.29	4.36	NP	6.93	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	6/11/2013	11.29	4.53	NP	6.76	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**0.78**	--	--	--	<5.0	<5.0	--	--
	9/10/2013	11.29	4.40	NP	6.89	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**6.3**	--	--	--	<5.0	<5.0	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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-12A	12/12/2013	11.29	4.35	NP	6.94	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
	3/4/2014	11.29	3.73	NP	7.56	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
MW-13	7/6/2010	11.08	4.26	NP	6.82	**469**	**122**	<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**	<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**	--	--	--	**45**	<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**	--	--	--	**39**	<250	--	--
	6/11/2012	11.08	5.73	NP	5.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	<37.9	**118 1n**	<0.50	<0.50	<0.50	<1.5	--	**220**	--	--	--	**82**	<250	--	--
	9/6/2012	11.08	4.14	NP	6.94	**87**	<50	<0.50	<0.50	<0.50	<0.50	--	**140**	<0.50	<0.50	<0.50	**10**	<5.0	<0.50	<0.50
	12/13/2012	11.08	3.80	NP	7.28	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**130**	--	--	--	**14**	<5.0	--	--
	3/14/2013	11.08	4.20	NP	6.88	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**110**	--	--	--	**24**	<5.0	--	--
	6/11/2013	11.08	4.10	NP	6.98	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**97**	--	--	--	**31**	<5.0	--	--
	9/10/2013	11.08	4.20	NP	6.88	<50	<50	<0.50	<0.50	<0.50	**0.62**	--	**64**	--	--	--	**47**	<5.0	--	--
	12/12/2013	11.08	4.05	NP	7.03	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**63**	--	--	--	**43**	<5.0	--	--
	3/4/2014	11.08	3.51	NP	7.57	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**54**	--	--	--	**30**	<5.0	--	--
MW-14	6/2/2011	12.00	3.58	NP	8.42	**4,180 T4**	**51,600**	**2,750**	**67.9**	**1,790**	**13,400**	--	**1.9**	--	--	--	**27.2**	<250	--	--
	9/7/2011	12.00	3.02	NP	8.98	**2,970 T4**	**42,600**	**1,050**	**28.1**	**2,990**	**7,300**	--	<25.0	--	--	--	--	<12500	--	--
	12/5/2011	12.00	4.05	NP	7.95	**3,980 T4**	**14,000**	**709**	**9.1**	**1,420**	**2,530**	--	**0.97**	--	--	--	--	<250	--	--
	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	--	--
	6/11/2012	12.00	3.91	NP	8.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	**4,580**	**15,700**	**1,200**	**14.0**	**1,580**	**3,010**	--	**1.4**	--	--	--	**23.3**	<250	--	--
	9/6/2012	12.00	3.35	NP	8.65	<2000	**12,000**	**210**	**9.1**	**1,100**	**1,800**	--	<4.0	<4.0	<4.0	<4.0	<20	<40	<4.0	<4.0
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	12.00	3.26	NP	8.74	<50	**10,000**	**72**	**5.8**	**610**	**780**	--	<1.5	--	--	--	<7.0	<15	--	--
	3/14/2013	12.00	4.16	NP	7.84	<50	**5,700**	**290**	**11**	**750**	**960**	--	<1.5	--	--	--	**12**	<15	--	--
	6/11/2013	12.00	7.37	NP	7.37	<50	**6,900**	**630**	**5.3**	**480**	**680**	--	<1.5	--	--	--	**24**	<15	--	--
	9/10/2013	12.00	4.88	NP	7.12	**120**	**31,000**	**1,500**	**39**	**2,300**	**5,200**	--	<1.5	--	--	--	**32**	<15	--	--
	12/12/2013	12.00	4.35	NP	7.65	<50	**27,000**	**1,400**	**32**	**2,200**	**4,800**	--	<9.0	--	--	--	<50	<90	--	--
	3/4/2014	12.00	3.6	NP	8.4	**250**	**40,000**	**1,600**	**41**	**2,900**	**6,700**	--	<9.0	--	--	--	<50	<90	--	--
MW-15	6/2/2011	11.11	2.50	NP	8.61	**124 T4**	**357**	<0.50	<0.50	<0.50	<1.5	--	**15**	--	--	--	**6.4**	<250	--	--
	9/7/2011	11.11	2.54	NP	8.57	<50.0	**412**	**6.2**	<0.50	**43**	<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	--	--
	6/11/2012	11.11	2.84	NP	8.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	<37.9	**74.3 1n**	<0.50	<0.50	<0.50	<1.5	--	**114**	--	--	--	**91**	<250	--	--
	9/6/2012	11.11	2.24	NP	8.87	**64**	59	<0.50	<0.50	<0.50	<0.50	--	**76**	<0.50	<0.50	<0.50	**45**	<5.0	<0.50	<0.50
	12/13/2012	11.11	2.51	NP	8.60	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**33**	--	--	--	**7.4**	<5.0	--	--
	3/14/2013	11.11	2.91	NP	8.20	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**46**	--	--	--	**21**	<5.0	--	--
	6/11/2013	11.11	3.36	NP	7.75	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**73**	--	--	--	**31**	<5.0	--	--
	9/10/2013	11.11	3.28	NP	7.83	<50	**68**	<0.50	<0.50	<0.50	<0.50	--	**120**	--	--	--	**39**	<5.0	--	--
	12/12/2013	11.11	3.00	NP	8.11	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**130**	--	--	--	**59**	<10	--	--
	3/4/2014	11.11	2.34	NP	8.77	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**96**	--	--	--	**45**	<5.0	--	--
MW-16	6/2/2011	10.98	3.00	NP	7.98	**509 T4**	**1,420 1n**	**79**	<0.50	**4**	<1.5	--	**1,200**	--	--	--	**257**	<250	--	--
	9/7/2011	10.98	2.65	NP	8.33	**90.0 T4**	**934**	<0.50	<0.50	<0.50	<1.5	--	**1,240**	--	--	--	--	<250	--	--
	12/5/2011	10.98	3.18	NP	7.80	**196 T4**	**948 1n**	<0.50	<0.50	<0.50	<1.5	--	**1,320**	--	--	--	--	<250	--	--
	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	--	--
	6/11/2012	10.98	3.04	NP	7.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
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)	TPHd (ug/L)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (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-16	6/12/2012	--	--	--	--	**48.1 T4**	**430 1n**	<0.50	<0.50	<0.50	<1.5	--	**1,100**	--	--	--	**374**	<250	--	--
	9/6/2012	10.98	2.61	NP	8.37	**390**	<150	<1.5	<1.5	<1.5	<1.5	--	**960**	<1.5	<1.5	<1.5	**70**	<15	<1.5	<1.5
	12/13/2012	10.98	2.50	NP	8.48	**52**	<150	<1.5	<1.5	<1.5	<1.5	--	**980**	--	--	--	**55**	<20	--	--
	3/14/2013	10.98	3.15	NP	7.83	<50	<200	<2.0	<2.0	<2.0	<2.0	--	**950**	--	--	--	**67**	<20	--	--
	6/11/2013	10.98	3.19	NP	7.79	<50	<150	<1.5	<1.5	<1.5	<1.5	--	**820**	--	--	--	**70**	<15	--	--
	9/10/2013	10.98	3.44	NP	7.54	<50	<50	<0.50	<0.50	<0.50	**0.67**	--	**240**	--	--	--	**440**	<5.0	--	--
	12/12/2013	10.98	2.90	NP	8.08	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**62**	--	--	--	**530**	<5.0	--	--
	3/4/2014	10.98	3.25	NP	7.73	<50	**60**	<0.50	<0.50	<0.50	<0.50	--	**440**	--	--	--	**400**	<5.0	--	--
MW-17	6/2/2011	11.52	5.78	NP	5.74	**687 T4**	**9,130**	**2,530**	**960**	**35**	**907**	--	**0.74**	--	--	--	**366**	<250	--	--
	9/7/2011	11.52	4.56	NP	6.96	**1,900 T4**	**47,200**	**9,620**	**5,510**	**1,210**	**4,510**	--	<25.0	--	--	--	--	<12500	--	--
	12/5/2011	11.52	4.70	NP	6.82	**1,790 T4**	**17,300**	**4,720**	**511**	**238**	**747**	--	<2.5	--	--	--	--	<1250	--	--
	3/6/2012	11.52	4.64	NP	6.88	**1,530 T4**	**1,580**	**2,090**	**24**	**39**	**166**	--	**1.1**	--	--	--	**481**	<250	--	--
	6/11/2012	11.52	4.67	NP	6.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	**1,090 T4**	**4,950**	**2,340**	**123**	**153**	**610**	--	<2.5	--	--	--	**411**	<1250	--	--
	9/6/2012	11.52	4.39	NP	7.13	<1000	**18,000**	**4,300**	**170**	**370**	**1,100**	--	<10	<10	<10	<10	**300**	<100	<10	110
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	11.52	4.20	NP	7.32	<100	**55,000**	**7,300**	**2,700**	**1,700**	**4,600**	--	<10	--	--	--	**300**	<100	--	--
	3/14/2013	11.52	4.70	NP	6.82	<200	**63,000**	**13,000**	**5,400**	**3,100**	**8,800**	--	<15	--	--	--	**260**	<150	--	--
	6/11/2013	11.52	4.83	NP	6.69	**710**	**110,000**	**10,000**	**11,000**	**3,100**	**12,000**	--	<25	--	--	--	<150	<250	--	--
	9/10/2013	11.52	4.60	NP	6.92	**160**	**36,000**	**8,200**	**510**	**1,200**	**2,400**	--	<15	--	--	--	**320**	<150	--	--
	12/12/2013	11.52	5.00	NP	6.52	<50	**92,000**	**17,000**	**9,000**	**2,900**	**9,100**	--	<15	--	--	--	**250**	<150	--	--
	3/4/2014	11.52	3.99	NP	7.53	**400**	**13,000**	**1,600**	**270**	**260**	**540**	--	<3.0	--	--	--	**330**	**48**	--	--

Gauging Notes:
TOS - Top of Screen
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 laboratory's indicated reporting limit
ug/L - micrograms/liter
DRO- diesel range organics
TPHd- Total petroleum hydrocarbons as diesel
TPHg- Total petroleum hydrocarbons as gasoline
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
Bold - Above the laboratory's indicated reporting limit
1n - The TPHg result for this sample did not match 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 ROAD
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 A2320B (mg/L)	Antimony (ug/L)	Arsenic (ug/L)	Barium (ug/L)	Beryllium (ug/L)	Biochemical Oxygen Demand (ug/L)	Bromate (mg/L)	Bromide (mg/L)	Cadmium S(ug/L)	Chemical Oxygen Demand (ug/L)	Chloride (ug/L)	Chromium (ug/L)	Chromium, Hexavalent (ug/L)	Cobalt (ug/L)	Coliform, Total (MPN/100ML)	E. Coli (MPN/100ML)
MW-6	3/14/2011	**18**	--	--	--	--	<60.0	**23**	**216**	<5.0	**32,200**	--	--	<5.0	**173,000**	**204,000**	--	--	<50.0	--	--
	6/2/2011	<5.0	**828**	<1	**828**	<1	<60.0	**22.0**	**191**	<5.0	**45,100**	<0.005	**2**	<5.0	**121,000**	**149,000**	**4**	<2	<50.0	**42,000**	<100
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/6/2012	--	--	--	--	**650**	--	--	--	--	--	--	--	--	--	--	<5.0	<10	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/2014	--	--	--	--	--	--	**31**	--	--	--	--	--	<1.0	--	--	<5.0	--	--	--	--
MW-9	3/14/2011	<5.0	--	--	--	--	<60.0	<20.0	<100	<5.0	**7,160.0**	--	--	<5.0	**11,500.0**	**34,700.0**	--	--	<50.0	--	--
	6/2/2011	<5.0	**226.0**	<1	**226.0**	<1	<60.0	<20.0	<100	<5.0	**4,170.0**	<0.005	**2.0**	<5.0	**15,100.0**	**32,400.0**	**2.4**	<0.2	<50.0	**2.0**	<1
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	9/6/2012	--	--	--	--	**561**	--	--	--	--	--	--	--	--	--	--	**17**	<10	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	3/14/2011	<5.0	--	--	--	--	<60.0	<20.0	<100	<5.0	<2000	--	--	<5.0	**80,100**	**8,240,000**	--	--	<50.0	--	--
	6/2/2011	<5.0	**905**	<1	**905**	<1	<60.0	<20.0	<100	<5.0	**7,240**	<0.05	**33**	<5.0	**191,000**	**7,260,000**	**3**	<2	<50.0	**210**	<1
	9/7/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/6/2012	--	--	--	--	**806**	--	--	--	--	--	--	--	--	--	--	<5.0	<10	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/2014	--	--	--	--	--	--	<15	--	--	--	--	--	**1.8**	--	--	<5.0	--	--	--	--
MW-14	9/6/2012	--	--	--	--	**1,720**	--	--	--	--	--	--	--	--	--	--	**24**	<10	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	9/6/2012	--	--	--	--	**2,820**	--	--	--	--	--	--	--	--	--	--	**38**	<10	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analytical Notes:
< - Below laboratory's indicated reporting limit
mg/L - milligrams per liter
MPN/100ML - most probable number per 100 ml
ug/L - micrograms/liter
Bold - Above the laboratory's indicated reporting limit

TABLE 3b
ADDITIONAL HISORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/504
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUND WATER ANALYTICAL DATA																		
		Copper (ug/L)	Inorganic Carbon (mg/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Iron, Ferric (ug/L)	Iron, Ferrous (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Methane (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Nitrate as N E300.0 (mg/L)	Nitrate as N E353/E351 (ug/L)	Nitrite as N (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)
MW-3	12/17/2009		--	--	**12,300**	--	--	--	--	--	--	--	--	--	<50.0	<50.0	--	<50.0	--	--	--
	3/29/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/30/2010		--	**5,550**	**10,700**	--	--	--	--	--	--	--	--	--	<50.0	**95.0**	--	**76**	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/2/2011		--	--	**13,600**	--	--	--	--	--	--	--	--	--	<50.0	<10.0	--	**53**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**10,900**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/17/2009		--	--	**1,500**	--	--	--	--	--	--	--	--	<0.00044	<0.44	--	--	--	--	--	--
	12/17/2009		--	--	**2,460**	--	--	--	--	--	--	--	--	--	<50.0	<50.0	--	<50.0	--	--	--
	3/29/2010		--	**1,790**	**1,510**	--	--	--	--	--	--	--	--	--	<50.0	**41**	--	**55**	--	--	--
	6/30/2010		--	**946**	**2,310**	--	--	--	--	--	--	--	--	--	<50.0	**58**	--	**69**	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	**2,730**	**2,600**	--	--	--	--	--	--	--	--	--	<50.0	<10.0	--	**52**	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**4,900**	**3,900**	**1,000**	**27**	**1,270**	<0.20	**474**	<20.0	<40.0	--	**50**	<10.0	--	**54**	--	--	--
	6/2/2011		**870**	--	**4,320**	**2,520**	**1,800**	**23**	**1,510**	<0.20	**445**	<20.0	<40.0	--	<50.0	<10.0	**3**	**51**	**5**	--	**1,500**
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**1,240**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	**1,000**	--	--	--	--	**2,890**	--	--	--	--	--	--	--	--	--	--
	9/11/2012		--	--	--	--	--	--	--	--	--	--	--	<0.10	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/2014	<5.0	--	--	**2,000**	--	--	**14**	--	<0.5	--	--	**17**	--	--	--	--	--	--	--	--
MW-7	6/30/2010		--	**836**	**7,550**	--	--	--	--	--	--	--	--	--	<50.0	**74**	--	**74**	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/2/2011		--	--	**7,800**	--	--	--	--	--	--	--	--	--	**233**	<10.0	--	**239**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**264**	--	--	--	--	--	--	--	--	--	<50.0	**67**	--	**111**	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/30/2010		--	**4,710**	**8,000**	--	--	--	--	--	--	--	--	--	<50.0	**68**	--	**60**	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/2/2011		--	--	**24,900**	--	--	--	--	--	--	--	--	--	**61**	<10.0	--	**61**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**21,000**	--	--	--	--	--	--	--	--	--	<50.0	**48**	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	12/17/2009		--	--	**2,270**	--	--	--	--	--	--	--	--	--	<50.0	<50.0	--	<50.0	--	--	--
	3/29/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/30/2010		--	**3,210**	**8,820**	--	--	--	--	--	--	--	--	--	<50.0	**15**	--	<50.0	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3b
ADDITIONAL HISORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/504
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUND WATER ANALYTICAL DATA																		
		Copper (ug/L)	Inorganic Carbon (mg/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Iron, Ferric (ug/L)	Iron, Ferrous (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Methane (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Nitrate as N E300.0 (mg/L)	Nitrate as N E353/E351 (ug/L)	Nitrite as N (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)
MW-9	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**1,560**	**157**	**1,400**	<10.0	**148**	<0.20	**419**	<20.0	<40.0	--	<50.0	<10.0	--	<50.0	--	--	--
	6/2/2011		**240**	--	**1,260**	**1,060**	**200**	<10.0	**92**	<0.20	**673**	<20.0	<40.0	--	<50.0	<10.0	**1**	<50.0	**1**	--	**405**
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**731**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	9/17/2009		--	--	**9,800**	--	--	--	--	--	--	--	--	**0**	**12**	--	--	--	--	--	--
	12/17/2009		--	--	**3,410**	--	--	--	--	--	--	--	--	--	**1,970**	**60**	--	**2,030**	--	--	--
	3/29/2010		--	**365**	**2,410**	--	--	--	--	--	--	--	--	--	**1,960**	**19**	--	**1,970**	--	--	--
	6/30/2010		--	**216**	**1,860**	--	--	--	--	--	--	--	--	--	**2,120**	**68**	--	**2,190**	--	--	--
	7/6/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010		--	**280**	**3,080**	--	--	--	--	--	--	--	--	--	**2,690**	**68**	--	**2,750**	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**2,620**	--	--	--	--	--	--	--	--	--	--	--	--	**2,350**	--	--	--
	6/2/2011		--	--	**9,870**	--	--	--	--	--	--	--	--	--	**1,290**	**49**	--	**1,340**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**11,300**	--	--	--	--	--	--	--	--	--	**1,510**	**57**	--	**1,570**	--	--	--
	9/6/2012		--	--	--	**11,000**	--	--	--	--	**467**	--	--	--	--	--	--	--	--	--	--
	9/11/2012		--	--	--	--	--	--	--	--	--	--	--	**0**	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	7/6/2010		--	<100	**3,510**	--	--	--	--	--	--	--	--	--	<50.0	**31.0**	--	**67**	--	--	--
	9/20/2010		--	<100	**1,690**	--	--	--	--	--	--	--	--	--	**167**	<10.0	--	**172**	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**756**	--	--	--	--	--	--	--	--	--	--	--	--	<50.0	--	--	--
	6/2/2011		--	--	**1,040**	--	--	--	--	--	--	--	--	--	**110**	<10.0	--	**115**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**1,300**	--	--	--	--	--	--	--	--	--	**89**	<10	--	**94**	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	7/6/2010		--	<100	**30,200**	--	--	--	--	--	--	--	--	--	<50.0	**61**	--	<50.0	--	--	--
	9/20/2010		--	**552**	**3,890**	--	--	--	--	--	--	--	--	--	**72**	<10.0	--	**75**	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**793**	**593**	**200**	<10.0	**12,400**	<0.20	**114**	<20.0	**151**	--	<50.0	**61**	--	**54**	--	--	--
	6/2/2011		**1,100**	--	**9,340**	**8,740**	**600**	<10.0	**12,800**	<0.20	**287**	<20.0	**119**	--	<50.0	<10.0	**0**	**58.0**	**1**	--	**15,600**
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**497**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	**190**	--	--	--	--	**64**	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/2014	<5.0	--	--	**680**	--	--	<5.0	--	<0.5	--	--	**120**	--	--	--	--	--	--	--	--
MW-12A	7/6/2010		--	**716**	**57,300**	--	--	--	--	--	--	--	--	--	**3,680**	**164**	--	**3,840**	--	--	--
	9/20/2010		--	<100	**523**	--	--	--	--	--	--	--	--	--	**4,680**	**10**	--	**4,690**	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**523**	--	--	--	--	--	--	--	--	--	--	--	--	**4,790**	--	--	--
	6/2/2011		--	--	**754**	--	--	--	--	--	--	--	--	--	**4,710**	<10.0	--	**4,720**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	**859**	--	--	--	--	--	--	--	--	--	**4,250**	<10	--	**4,260**	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3b
ADDITIONAL HISORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/504
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUND WATER ANALYTICAL DATA																		
		Copper (ug/L)	Inorganic Carbon (mg/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Iron, Ferric (ug/L)	Iron, Ferrous (ug/L)	Lead (ug/L)	Manganese (ug/L)	Mercury (ug/L)	Methane (ug/L)	Molybdenum (ug/L)	Nickel (ug/L)	Nitrate as N E300.0 (mg/L)	Nitrate as N E353/E351 (ug/L)	Nitrite as N (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)
MW-13	7/6/2010		--	**116**	**92,600**	--	--	--	--	--	--	--	--	--	<50.0	**65**	--	**70**	--	--	--
	9/20/2010		--	**279**	**59,500**	--	--	--	--	--	--	--	--	--	<50.0	<10.0	--	<50.0	--	--	--
	12/8/2010		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/2011		--	--	**44,600**	--	--	--	--	--	--	--	--	--	--	--	--	<50.0	--	--	--
	6/2/2011		--	--	**36,700**	--	--	--	--	--	--	--	--	--	**72**	**15**	--	**86.0**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**3,760**	--	--	--	--	--	--	--	--	--	<50.0	**19**	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	6/2/2011		--	--	**47,500**	--	--	--	--	--	--	--	--	--	<50.0	**10**	--	**50**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**1,150**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	**8,900**	--	--	--	--	**718**	--	--	--	--	--	--	--	--	--	--
	9/11/2012		--	--	--	--	--	--	--	--	--	--	--	<0.10	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	6/2/2011		--	--	**11,700**	--	--	--	--	--	--	--	--	--	**890**	**38.0**	--	**928**	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**2,920**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	6/2/2011		--	--	**34,200**	--	--	--	--	--	--	--	--	--	<50.0	<10.0	--	<50.0	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**1,730**	--	--	--	--	--	--	--	--	--	<50.0	<10	--	<50.0	--	--	--
	9/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-17	6/2/2011		--	--	**109,000**	--	--	--	--	--	--	--	--	--	<50.0	**30**	--	<50.0	--	--	--
	9/7/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/5/2011		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2012		--	--	**44,300**	--	--	--	--	--	--	--	--	--	<50.0	**39**	--	<50.0	--	--	--
	9/6/2012		--	--	--	**21,000**	--	--	--	--	**182**	--	--	--	--	--	--	--	--	--	--
	9/11/2012		--	--	--	--	--	--	--	--	--	--	--	<0.50	--	--	--	--	--	--	--
	12/13/2012		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analytical Notes:
< - Below laboratory's indicated reporting limit
mg/L - milligrams per liter
ug/L - micrograms/liter
Bold - Above the laboratory's indicated reporting limit

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5041
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA							
		Selenium (ug/L)	Silver (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium (ug/L)	Total Organic Carbon (mg/L)	Vanadium (ug/L)	Zinc (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	--	--	--	--	--	--	--	--
	6/11/2012	--	--	<2000	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
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	<10.0	**35,400**	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	<10.0	**38,900**	--	<20.0	**41**	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**1,110**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
	3/4/2014	--	<5.0	--	--	--	--	--	**36**
MW-7	6/30/2010	--	--	**191,000**	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	--	--	--	--	--	--	--	--
	6/2/2011	--	--	**48,900**	--	--	--	--	--

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5041
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA							
		Selenium (ug/L)	Silver (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium (ug/L)	Total Organic Carbon (mg/L)	Vanadium (ug/L)	Zinc (ug/L)
MW-7	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**56,900**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-8	6/30/2010	--	--	**2,360,000**	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	--	--	--	--	--	--	--	--
	6/2/2011	--	--	**2,830,000**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**2,570,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-9	12/17/2009	--	--	--	**11**	--	--	--	--
	3/29/2010	--	--	--	--	--	--	--	--
	6/30/2010	--	--	**19,000**	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	<10.0	<10.0	**8,980**	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	<10.0	**18,600**	--	<20.0	**5**	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**42,500**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-10	9/17/2009	--	--	**84**	**0**	--	--	--	--
	12/17/2009	--	--	--	**86**	--	--	--	--
	3/29/2010	--	--	**73,600**	--	--	--	--	--
	6/30/2010	--	--	**70,800**	--	--	--	--	--
	7/6/2010	--	--	--	--	--	--	--	--

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5041
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA							
		Selenium (ug/L)	Silver (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium (ug/L)	Total Organic Carbon (mg/L)	Vanadium (ug/L)	Zinc (ug/L)
MW-10	9/20/2010	--	--	**82,000**	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	--	--	**68,600**	--	--	--	--	--
	6/2/2011	--	--	**71,700**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**70,100**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-11	7/6/2010	--	--	**82,100**	--	--	--	--	--
	9/20/2010	--	--	**58,300**	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	--	--	**59,900**	--	--	--	--	--
	6/2/2011	--	--	**62,900**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**79,400**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-12	7/6/2010	--	--	**3,030,000**	--	--	--	--	--
	9/20/2010	--	--	**1,970,000**	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	<10.0	<10.0	**2,500,000**	--	<20.0	--	<50.0	<40.0
	6/2/2011	<10.0	<10.0	**2,330,000**	--	<20.0	**9**	<50.0	<40.0
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**2,130,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
	3/4/2014	--	<5.0	--	--	--	--	--	**46**
MW-12A	7/6/2010	--	--	**100,000**	--	--	--	--	--
	9/20/2010	--	--	**82,500**	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5041
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA							
		Selenium (ug/L)	Silver (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium (ug/L)	Total Organic Carbon (mg/L)	Vanadium (ug/L)	Zinc (ug/L)
MW-12A	3/14/2011	--	--	**81,000**	--	--	--	--	--
	6/2/2011	--	--	**101,000**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	**118,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-13	7/6/2010	--	--	**450,000**	--	--	--	--	--
	9/20/2010	--	--	**241,000**	--	--	--	--	--
	12/8/2010	--	--	--	--	--	--	--	--
	3/14/2011	--	--	**375,000**	--	--	--	--	--
	6/2/2011	--	--	**188,000**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**131,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-14	6/2/2011	--	--	**56,300**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**439,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-15	6/2/2011	--	--	**62,700**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**42,100**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--

TABLE 3c
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5041
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA							
		Selenium (ug/L)	Silver (ug/L)	Sulfate E300 (ug/L)	Sulfate E300.1 (mg/L)	Thallium (ug/L)	Total Organic Carbon (mg/L)	Vanadium (ug/L)	Zinc (ug/L)
MW-16	6/2/2011	--	--	**8,740**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**19,900**	--	--	--	--	--
	9/6/2012	--	--	**--**	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--
MW-17	6/2/2011	--	--	**3,920,000**	--	--	--	--	--
	9/7/2011	--	--	--	--	--	--	--	--
	12/5/2011	--	--	--	--	--	--	--	--
	3/6/2012	--	--	--	--	--	--	--	--
	6/11/2012	--	--	--	--	--	--	--	--
	6/12/2012	--	--	**2,520,000**	--	--	--	--	--
	9/6/2012	--	--	--	--	--	--	--	--
	9/11/2012	--	--	--	--	--	--	--	--
	12/13/2012	--	--	--	--	--	--	--	--

Analytical Notes:
< - Below laboratory's indicated reporting limit
mg/L - milligrams per liter
ug/L - micrograms/liter
Bold - Above the laboratory's indicated reporting limit

TABLE 3d
ADDITIONAL HISTORICAL GROUNDWATER ANALYTICAL DATA
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA												
		1,2,4-Trimethylbenzene (ug/L	1,3,5-Trimethylbenzene (ug/L)	Isopropyl Benzene (ug/L)	Naphthalene (ug/L)	O-Xylene (ug/L)	P,M-Xylene (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	p-Isopropyltoluene (ug/L)	sec-Butylbenzene (ug/L)	HEM:Oil and Grease (mg/L)	Phenolics, Total (mg/L)	Cyanide, Total (mg/L)
MW-6	3/4/2014	**3,000**	**860**	**200**	**990**	**300**	**1,400**	**100**	**530**	**22**	**53**	**1.6**	<0.1	<0.02
MW-12	3/4/2014	**3.7**	**11**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**1.9**	**0.1**	<0.02

Analytical Notes:
< - Below laboratory's indicated reporting limit
mg/L - milligrams per liter
MPN/100ML - most probable number per 100 ml
ug/L - micrograms/liter
Bold - Above the laboratory's indicated reporting limit

TABLE 4
Historical Groundwater Gradient and Flow Direction Data
76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California

Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction															
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
	04/22/92		0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0
	08/31/92	0.05	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0
	11/30/92	0.04	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0
	02/07/94		0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0
	11/14/94	0.03	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0
	02/21/95	0.08	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	05/18/95	0.07	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	07/26/96	0.02	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	10/28/96	0.02	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	01/29/97	0.01	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	04/15/97	0.01	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	07/15/97	0.10	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	10/09/97	0.10	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	01/14/98	0.02	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	04/01/98	0.05	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	07/15/98	0.04	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	09/30/98	0.05	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	01/25/99	0.05	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	04/15/99	0.04	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	10/21/99	0.03	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	07/14/99	0.04	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	04/13/00	0.050	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	07/14/00	0.033	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	10/26/00	0.060	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	01/03/01	0.070	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	07/17/01	0.040	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	10/01/01	0.030	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	01/31/02	0.010	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	07/28/02	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	10/09/02	0.016	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	01/02/03	0.010	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	04/01/03	0.008	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	07/29/09	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	10/02/03	0.010	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	01/09/04	0.010	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	04/26/04	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	07/22/04	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	10/29/04	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	01/10/05	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	06/15/05	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/27/05	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	12/13/05	0.005	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	03/23/06	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	06/23/06	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	09/26/06	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	12/22/06	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	03/30/07	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/25/07	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	12/28/07	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	06/28/07	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	03/22/08	0.020	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	06/23/08	0.010	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	09/19/08	0.006	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	12/31/08	0.005	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	03/27/09	0.006	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	05/28/09	0.008	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/17/09	0.010	0	0	0	0	0	0	**1**	0	0	0	**1**	0	0	0	0	0
	12/17/09	0.008	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0
	03/29/10	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	06/30/10	0.009	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/20/10	0.007	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0	0
	12/08/10	0.018	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	03/14/11	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	06/02/11	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/07/11	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	12/05/11	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0

TABLE 4

Historical Groundwater Gradient and Flow Direction Data

76 Station No. 5191/5043

449 Hegenberger Road

Oakland, California

Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction															
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
	03/06/12	0.010	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0
	06/11/12	0.050	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/06/12	Variable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12/13/12	0.020	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	03/14/13	0.050	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	06/11/13	0.001	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	09/10/13	0.014	0	0	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0
	12/12/13	0.018	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
	03/04/14	0.010	0	0	0	0	0	0	**1**	0	0	0	0	0	0	0	0	0
		0.024 Average	**0**	**0**	**0**	**0**	**0**	**1**	**34**	**1**	**14**	**0**	**20**	**2**	**3**	**0**	**0**	**0**

Explanation

NA = Not available

Number of Events = 67

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.

July 2013 – Antea Group advanced ten soil borings (SB-1 through SB-10) at the site. The borings were advanced using direct push technology. The borings were used to delineate petroleum hydrocarbon impacted soil around

monitoring well MW-6. Results of the investigation can be found in the *Site Investigation Report*, dated January 9, 2014.

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**

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 dewaters 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.

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: DOUG WHICHARD, BLAINE TECH SERVICES (Print Full Name & Company*) Date: 3/4/2014 Weather: OVERCAST

Sample Order	Field Point	Well Condition: 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
5	MW-3	P	G	P	G	G	Y	2	0804	2.98	~~13.93~~ 5 ft dc			-1/2 BOLTS, 2/2 TABS STRIPPED
12	MW-6	G	G	G	G	G	N	2	0828	3.07	12.63			
2	MW-7	G	G	G	G	G	N	2	0747	3.42	12.94			
1	MW-8	G	G	G	G	G	N	2	0742	2.88	14.67			
4	MW-9	P	G	P	G	G	Y	2	0759	1.93	12.57			-1/3 BOLTS, 1/3 TABS STRIPPED
7	MW-10	G	G	G	G	G	Y	2	0811	3.38	12.61			
6	MW-11	G	G	G	G	G	N	4	0808	1.75	19.51			
11	MW-12	G	G	G	G	G	Y	4	0825	3.46	19.43			
3	MW-12A	G	G	G	G	G	Y	2	0753	3.73	32.65			
8	MW-13	G	G	G	G	G	N	2	0815	3.51	14.54			
13	MW-14	G	G	G	G	G	N	2	0830	3.60	12.77			
9	MW-15	G	G	G	G	G	N	2	0818	2.34	12.64			
10	MW-16	G	G	G	G	G	N	2	0822	3.25	12.65			
14	MW-17	G	G	G	G	G	N	2	0834	3.99	12.64			

Notes:

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

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*Form provided by Antea Group

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

Groundwater Sampling Form

Site Address:	449 HEGENBERGER, OAKLAND, CA		
Project No:	~~140304-DC1~~ 270519	Field Technician:	DC
Field Point:	MW-6	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.07	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):	9.56

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) W/BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 9.56 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.6

Casing Volume (gal): 1.6 X Specified Volumes: 3 = Calculated Purge (gal): 4.8

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								
1336	18.4	6.78	3101	214.2	27	0.43	0.8	
1337	17.8	6.75	2832	208.4	33	0.25	1.6	
1338	17.5	6.71	2843	203.9	36		2.4	
	WELL	DEWATERED		@ 2.5	GAL			
1540	17.1	6.69	2901	166.6	38	0.73	GRAB	
Post-Purge								

Did Well dewater? (Yes) No Total Purge volume (gal): 2.5

Other Comments:
80% : 4.98
DTW: 6.93 (>2 HRS)
* PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-6-20140331	Sample Date and Time:	3/4/14 @ 1540
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-10	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.38	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):	9.23

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~~ w/BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 9.23 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.6760

Casing Volume (gal): 1.6760 X Specified Volumes: 3 = Calculated Purge (gal): 4.8

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								
1055	17.9	6.73	3472	375.6	47	0.54	0.8	
1056	17.9	6.69	3300	368.3	25	0.33	1.6	
1057	18.1	6.71	2865	360.5	22	0.37	2.4	
1058	18.2	6.72	2540	352.2	21	0.43	3.2	
1059	18.4	6.74	2255	342.3	14	0.43	4.0	
1100	18.5	6.75	2193	337.5	9	0.45	4.6	
1101	18.6	6.75	2147	334.9	8	0.46	5.4	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 5.4

Other Comments: 80% = 5.23 DTW: 3.81 *PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-10_20140331	Sample Date and Time:	3/4/14 @ 1110
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-11	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	1.75	Well Diameter (in):	2 (4) 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.51	Water Column Height (ft):	17.76

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) W/BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 17.76 X Conversion Factor (gal/ft): 0.66 = Casing Volume (gal): 11.7

Casing Volume (gal): 11.7 X Specified Volumes: 3 = Calculated Purge (gal): 35.1

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								
1017	18.8	7.25	1364	286.1	21	0.16	6.0	
1021	19.0	7.18	1371	269.8	16	0.15	12.0	
1024	18.9	7.16	1361	261.0	9	0.19	18.0	
1026	19.0	7.15	1352	255.2	5	0.28	24.0	
1028	19.0	7.14	1347	252.1	5	0.32	30.0	
1030	19.0	7.13	1344	249.9	4	0.31	36.0	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 36.0

Other Comments: 80% : 5.30 * PURGED THROUGH FLOW CELL
DTW: 2.80

Sample Info:

Sample ID:	MW-11_20140331	Sample Date and Time:	3/4/14 @ 1040
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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 HERENBERGER, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-12	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.46	Well Diameter (in):	2 (4) 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.43	Water Column Height (ft):	15.97

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) W/BED; Extraction Port; Dedicated Tubing; Disposable Tubing; Other:_____

Water Column Height (ft): 15.97 X Conversion Factor (gal/ft): 0.66 = Casing Volume (gal): 10.5

Casing Volume (gal): 10.5 X Specified Volumes: 3 = Calculated Purge (gal): 31.5

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

Purge: **Start Time:**_____ **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								
1306	19.0	6.15	26695	367.4	6	0.54	5.5	
1309	19.1	6.17	26453	346.1	5	0.39	11.0	
1312	18.6	6.46	22828	309.4	5	0.72	16.5	
1315	18.8	6.35	24624	284.1	5	0.48	22.0	
1318	19.1	6.28	25805	271.4	4	0.23	27.5	
1321	19.2	6.26	26132	264.3	4	0.16	33.0	
1324	19.3	6.19	26290	262.7	4	0.14	38.5	12.86
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 38.5

Other Comments: 80%: 6.65 DTW: 3.97 *PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-12-20140331	Sample Date and Time:	3/4/14 @ 1505
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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 HEGENBERGER, OAKLAND, CA		
Project No:	270 5191	Field Technician:	DC
Field Point:	MW-12A	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.73	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	32.65	Water Column Height (ft):	28.92

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) w/BED; Extraction Port; Dedicated Tubing; Disposable Tubing — Other:_____

Water Column Height (ft): 28.92 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 4.9

Casing Volume (gal): 4.9 X Specified Volumes: 3 = Calculated Purge (gal): 14.7

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								
0939	18.7	6.41	2763	225.3	523	0.73	2.5	
0941	19.1	6.46	3108	218.1	401	0.71	5.0	
0943	19.3	6.56	3184	214.6	156	0.68	7.5	
0945	19.3	6.60	3159	213.5	95	0.63	10.0	
0947	19.4	6.62	3175	213.1	55	0.55	12.5	
0949	19.4	6.62	3185	214.7	47	0.53	15.0	
0951	19.4	6.63	3194	214.6	43	0.51	17.5	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 17.5

Other Comments: 80% : 9.51 DTW : 3.84 * PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-12A-20140331	Sample Date and Time:	3/4/14 @ 0957
Selected Analysis:	SEE COC		

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Signature: _____ Date: 3/4/14

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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, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-13	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.51	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	14.54	Water Column Height (ft):	11.03

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 w/BED); Extraction Port; Dedicated Tubing; Disposable Tubing; Other:_____

Water Column Height (ft): 11.03 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.9

Casing Volume (gal): 1.9 X Specified Volumes: 3 = Calculated Purge (gal): 5.7

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								
1128	18.7	6.94	2907	389.4	55	0.19	1.0	
1129	18.4	7.28	3334	398.1	197	0.43	2.0	
1130	17.6	7.34	3359	391.1	85	0.19	3.0	
1131	17.3	7.34	2990	377.8	36	0.23	4.0	
1132	17.1	7.29	3183	369.4	32	0.14	5.0	
1133	17.1	7.21	3864	362.5	31	0.14	6.0	
1134	17.2	7.13	3868	356.8	31	0.15	7.0	
1135	17.4	7.12	3983	354.7	30	0.17	8.0	8.24
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 8.0

Other Comments: 80%: 5.72 DTW: 5.36 *PURGED THROUGH FLOW CELL

Sample Info:

Sample ID: MW-13_20140331 Sample Date and Time: 3/4/14 @ 1147

Selected Analysis: SEE COC

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

Signature: _____ Date: 3/4/14

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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 HELEN BERGER, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-14	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.60	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.77	Water Column Height (ft):	9.17

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) w/BEO / Extraction Port / Dedicated Tubing / Disposable Tubing / Other:_____

Water Column Height (ft): 9.17 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.6

Casing Volume (gal): 1.6 X Specified Volumes: 3 = Calculated Purge (gal): 4.8

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								
1352	17.7	6.80	13273	-15.7	52	1.76	0.8	
1355	17.0	6.89	10379	-18.7	34	0.72	1.6	
1358	16.1	6.81	8390	-14.3	29	0.44	2.4	
	WELL	DEWATERED	@	3.0	GAL			
1600	15.7	7.08	14247	-28.9	47	2.96	GRAB	
Post-Purge								

Did Well dewater? (Yes) No — Total Purge volume (gal): 3.0

Other Comments: 80%: 5.43 — *PURGED THROUGH FLOW CELL

DTW: 6.22 (>2 HRS) — FD1_20140331 @ 1605

Sample Info:

Sample ID:	MW-14_20140331	Sample Date and Time:	3/4/14 @ 1600
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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 HERENBERGER, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-15	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	2.34	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.64	Water Column Height (ft):	10.30

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) w/BEO
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 10.30 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.8

Casing Volume (gal): 1.8 X Specified Volumes: 3 = Calculated Purge (gal): 5.4

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								
1201	18.5	6.82	7198	376.6	23	1.21	1.0	
1202	18.6	6.44	2260	338.6	20	0.90	2.0	
1203	18.4	6.40	1980	328.5	18	0.91	3.0	
1204	18.4	6.35	1884	313.3	22	1.02	4.0	
1205	18.4	6.34	2143	306.8	21	0.94	5.0	
1206	18.5	6.38	2193	297.1	21	0.86	6.0	
1207	18.6	6.40	2219	298.3	20	0.89	7.0	9.45
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 7.0

Other Comments:
80% : 4.40
DTW: 9.23 (> 2 HRS)
*PURGED THROUGH FLOW CELL

Sample Info:

Sample ID:	MW-15_20140331	Sample Date and Time:	3/4/14 @ 1435
Selected Analysis:	SEE COC		

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Signature: _____ Date: 3/4/14

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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 HERENBERGER, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-16	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.25	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):	9.40

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) w/BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 9.40 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.6

Casing Volume (gal): 1.6 X Specified Volumes: 3 = Calculated Purge (gal): 4.8

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								
1223	19.3	6.79	4724	231.4	45	1.36	0.8	
1224	19.2	6.80	3509	210.5	22	0.35	1.6	
1225	19.0	6.76	3326	197.2	16	0.29	2.4	
1226	19.1	6.77	3381	191.4	14	0.30	3.2	
1227	19.2	6.78	3571	185.9	13	0.34	4.0	
1228	19.2	6.80	3614	182.2	13	0.38	4.8	
1229	19.3	6.81	3663	179.9	12	0.41	5.6	8.85
Post-Purge								

Did Well dewater? Yes (No)* Total Purge volume (gal): 5.6

Other Comments:
80%: 5.13
*PURGED THROUGH FLOW CELL
DTW: 6.21 (>2 HRS)

Sample Info:

Sample ID:	MW-16_20140331	Sample Date and Time:	3/4/14 @ 1455
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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 HERBERGER, OAKLAND, CA		
Project No:	2705191	Field Technician:	DC
Field Point:	MW-17	Date:	3/4/14
Depth to Water (DTW) (ft bgs):	3.99	Well Diameter (in):	② 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.64	Water Column Height (ft):	8.65

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) W/BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 8.65 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:**_____ **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								
1416	17.4	6.53	24563	-0.2	30	0.62	0.8	
1419	17.2	6.56	21934	-1.1	20	0.32	1.6	
1421	17.2	6.57	23907	-1.6	18	0.23	2.4	
1423	17.3	6.56	27775	-1.5	18	0.24	3.2	
	WELL	DEWATERED		@ 3.5 GAL				
1627	18.4	6.27	42005	14.2	>1000	0.77	GRAB	
Post-Purge								

Did Well dewater? (Yes) No Total Purge volume (gal): 3.5

Other Comments: 80%: 5.72 *PURGED THROUGH FLOW CELL
DTW: 9.76 (>2 HRS)

Sample Info:

Sample ID:	MW-17-20140331	Sample Date and Time:	3/4/14 @ 1630
Selected Analysis:	SEE COC		

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

Signature: _____ Date: 3/4/14

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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

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COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of 1 of 1
Cooler # ____ of ____

1Q14 GW Event

Required Lab Information:

Lab Name:	Kiff Analytical
Address:	2795 Second Street #300
	Davis, CA 95618
Lab PM:	Scott Forbes
Phone/Fax:	P: 530-297-4800 F: 530-297-4808
Lab PM email	SForbes@kiffanalytical.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	2705191
Task:	WG_Q_201403
AnteaGrp proj#	
Site Address	449 Hegenberger
City	Oakland
State	CA 94621
AG PM Name:	Dennis Dettloff
Phone/Fax:	P: 916-503-1261 F: 916-638-8385
AG PM Email:	dennis.dettloff@anteagroup.com

Required Invoice Information:

Send Invoice to:	Sandy Hayes
Address:	11050 White Rock Road, Suite 110
City/State	Rancho Cordova CA 95670
Phone #:	916-638-2085
Reimbursement project?	
Non-reimbursement project?	Y
Send EDD to	agdataview.us@anteagroup.com
CC Hardcopy report to	
CC Hardcopy report to	

Turn around time (days)	10
QC level Required: Standard	Special — Mark one
NJ Reduced Deliverable Package?	
MA MCP Cert?	CT RCP Cert? — Mark One
Lab Project ID (lab use)	

Valid Matrix Codes

MATRIX		MATRIX	
DRINKING WATER	WP	WATER	W
GROUND WATER	WG	SURFACE WATER	WS
WASTE WATER	WW	WATER OC	WQ
FREE PRODUCT	LF	SLUDGE	SL
SOIL	SO	RINSEATE	WH
OIL	OL	OTHER	OT
WIPE	SW	ANIMAL TISSUE	TA
AMBIENT AIR	AA		
SVE AIR	AR		
SOIL GAS	GS		

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	8015TPHDiesel w/silica	8260 GC/MS GRO	8260BtexMtbeTBA	8260Ethanol	624 TICH	6010 Arsenic, Cadmium,	6010 Chromium, Copper	SM4500 Cyanide	6010 Nickel, Silver, Zinc	1664 Hexane Extractab.	150.2 pH	420.1 Phenolic Compou.	6010 Iron, Lead	7470A Mercury	Comments/Lab Sample I.D.
1	MW-10_20140331	WG	C	03/04/14	1110	5	N				X					x	x	x	x											
2	MW-11_20140331	WG	C	3/4/14	1040	5	N				X					x	x	x	x											
3	MW-12_20140331	WG	C	3/4/14	1505	11	N	X	X	X	X	X				x	x	x	x	x	x	x	x	x	x	x	x	x	x	
4	MW-12A_20140331	WG	C	3/4/14	0957	5	N				X					x	x	x	x											
5	MW-13_20140331	WG	C	3/4/14	1147	5	N				X					x	x	x	x											
6	MW-14_20140331	WG	C	3/4/14	1600	5	N				X					x	x	x	x											
7	MW-15_20140331	WG	C	3/4/14	1435	5	N				X					x	x	x	x											
8	MW-16_20140331	WG	C	3/4/14	1455	5	N				X					x	x	x	x											
9	MW-17_20140331	WG	C	3/4/14	1630	5	N				X					x	x	x	x											
10	MW-6_20140331	WG	C	3/4/14	1540	11	N	X	X	X	X	X				x	x	x	x	x	x	x	x	x	x	x	x	x	x	
11	TB1_20140331	W	—	3/4/14	0720	2	N				X						x	x	x											
12	FD1_20140331	W	C	3/4/14	1605	5	N				X					x	x	x	x											

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
BTS	3/4/14	1745	BTS	3/4/14	1745
(Sample Custody)	3/5/14	1700			

Sample Receipt Conditions

	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?

SHIPPING METHOD: (mark as appropriate) — SAMPLER NAME AND SIGNATURE

UPS COURIER FEDEX — PRINT Name of SAMPLER: DOUG WHICHARD

US MAIL — SIGNATURE of SAMPLER: [signature] — DATE Signed: 3/4/14 — Time: 1635

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 449 HEGENBERGER, OAKLAND, CA				PROJECT NUMBER 140304-DC1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI 556 FLOW CELL	09B100592	3/4/14 0725	pH 7, 10, 4	7.00, 10.01, 4.00	Y	17.5°C	DC
			COND 3900 us/cm³	3902 ms/cm³	Y	17.5°C	DC
			ORP 240	242	Y	17.5°C	DC
			D.O. 100%	98%	Y	17.5°C	DC

Appendix D

Certified Laboratory Analytical Report and Data Validation Form

Is the Data Set Valid?
(circle)
Yes / No

Preservation Temperature
(if Known): 0.8 °C

Antea™Group Laboratory Data Validation Sheet

Project/Client: 76 Station No. 5191/5043 / COP-ELT
Project #: I42705191
Date of Validation: 3/24/14 **Date of Analysis:** 3/11/14 - 3/14/14
Sample Date: 3/4/14 **Completed By:** ETW
Signature:

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

Analytical Lab Used and Report # (if any): Kiff #87632

1.	Were the analyses the ones requested?	**Yes** / No
2.	Do the sample number(s) on the chain-of-custody (COC) match the one(s) that appear on the laboratory data sheet?	**Yes** / No
3.	Were samples prepared (extracted, filtered, etc.) within EPA holding times?	Yes / **No**
4.	Once prepared/extracted, were the samples analyzed within the EPA holding times?	Yes / **No**
5.	Were Laboratory blanks performed, if so, were they non-detect?	**Yes** / No
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/m^3,etc.)	**Yes** / No
7.	Were appropriate Matrix Spike (MS) and Matrix Spike Duplicate (MSD) samples included in the laboratory batch sample?	**Yes** / No
8.	In lieu of MS/ MSD, were surrogate spike (SS) or surrogate spike duplicate (SSD) samples included in the laboratory batch samples?	**Yes** / No
9.	Were MS/ MSD (or SS/SSD) within the acceptable range of % recovery (i.e., approximately 80-120%, depending on the analyte)?	Yes / **No**
10.	Were MS/MSD (or SS/SSD) values used to calculate Relative Percent Difference (RPD)?	**Yes** / No
11.	Were Relative Percent Difference values within the acceptable range (i.e. ±25%)?	**Yes** / No

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

3 & 4: MW-12, MW-14, MW-17, MW-6, & FD-1 were analyzed outside of Hold times for EPA Method 8260. HCl preservation was insufficient to maintain a pH of 2.0 or less required to extend sample hold time from 7 to 14 days.
9. MS/MSD results associated with samples for some analytes were affected by the analyte concentrations already present in un-spiked sample.
* MRL for Styrene & Ethanol in MW-6 increased due to interfering compound.

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Laboratory Results

Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Subject : 12 Water Samples
Project Name : 2705191
Project Number :

Dear Mr. Dettloff,

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

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Subject : 12 Water Samples
Project Name : 2705191
Project Number :

Case Narrative

The Method Reporting Limit for Styrene has been increased due to the presence of an interfering compound for sample MW-6_20140331.

The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-6_20140331.

Matrix Spike/Matrix Spike Duplicate results associated with samples for some analytes were affected by the analyte concentrations already present in the un-spiked sample.

Samples MW-12_20140331, MW-14_20140331, MW-17_20140331, MW-6_20140331, and FD1_20140331 were analyzed outside of hold time for Method EPA 8260B. The hydrochloric acid (HCl) preservation was insufficient to maintain a pH of 2.0 or less required to extend sample hold time from 7 to 14 days.

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140331		MW-11_20140331		MW-12_20140331		MW-12A_2014033		MW-13_20140331		MW-14_20140331		MW-15_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
pH	EPA 150.1	pH Units							**6.67**								
Arsenic	EPA 6010B	mg/L						0.015	ND								
Cadmium	EPA 6010B	mg/L						0.0010	**0.0018**								
Chromium	EPA 6010B	mg/L						0.0050	ND								
Copper	EPA 6010B	mg/L						0.0050	ND								
Iron	EPA 6010B	mg/L						0.10	**0.68**								
Lead	EPA 6010B	mg/L						0.0050	ND								
Mercury	EPA 7470A	mg/L						0.00050	ND								
Nickel	EPA 6010B	mg/L						0.0050	**0.12**								
Silver	EPA 6010B	mg/L						0.0050	ND								
Zinc	EPA 6010B	mg/L						0.010	**0.046**								
Benzene	EPA 8260B	ug/L		0.50	**1.5**	0.50	ND	2.0	**19**	0.50	ND	0.50	ND	9.0	**1600**	0.50	ND
Ethylbenzene	EPA 8260B	ug/L		0.50	ND	0.50	ND	2.0	ND	0.50	ND	0.50	ND	9.0	**2900**	0.50	ND
Toluene	EPA 8260B	ug/L		0.50	ND	0.50	ND	2.0	ND	0.50	ND	0.50	ND	9.0	**41**	0.50	ND
Total Xylenes	EPA 8260B	ug/L		0.50	ND	0.50	ND	2.0	ND	0.50	ND	0.50	ND	9.0	**6700**	0.50	ND
Ethanol	EPA 8260B	ug/L		5.0	ND	5.0	ND	20	ND	5.0	ND	5.0	ND	90	ND	5.0	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L		0.50	ND	0.50	**12**	2.0	**990**	0.50	ND	0.50	**54**	9.0	ND	0.50	**96**
Tert-Butanol	EPA 8260B	ug/L		5.0	ND	5.0	ND	9.0	ND	5.0	ND	5.0	**30**	50	ND	5.0	**45**
TPH as Gasoline	EPA 8260B	ug/L		50	ND	50	ND	200	ND	50	ND	50	ND	900	**40000**	50	ND
1,1,1,2-Tetrachloroethane	EPA 624	ug/L						2.0	ND								

MRL = Method Reporting Limit
ND = Not Detected

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632

Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140331		MW-11_20140331		MW-12_20140331		MW-12A_2014033		MW-13_20140331		MW-14_20140331		MW-15_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
1,1,1-Trichloroethane	EPA 624	ug/L						2.0	ND								
1,1,2,2-Tetrachloroethane	EPA 624	ug/L						2.0	ND								
1,1,2-Trichloroethane	EPA 624	ug/L						2.0	ND								
1,1-Dichloroethane	EPA 624	ug/L						2.0	ND								
1,1-Dichloroethene	EPA 624	ug/L						2.0	ND								
1,1-Dichloropropene	EPA 624	ug/L						2.0	ND								
1,2,3-Trichlorobenzene	EPA 624	ug/L						2.0	ND								
1,2,3-Trichloropropane	EPA 624	ug/L						2.0	ND								
1,2,4-Trichlorobenzene	EPA 624	ug/L						2.0	ND								
1,2,4-Trimethylbenzene	EPA 624	ug/L						2.0	**3.7**								
1,2-Dibromo-3-chloropropane	EPA 624	ug/L						2.0	ND								
1,2-Dibromoethane	EPA 624	ug/L						2.0	ND								
1,2-Dichlorobenzene	EPA 624	ug/L						2.0	ND								
1,2-Dichloroethane	EPA 624	ug/L						2.0	**11**								
1,2-Dichloropropane	EPA 624	ug/L						2.0	ND								
1,3,5-Trimethylbenzene	EPA 624	ug/L						2.0	ND								
1,3-Dichlorobenzene	EPA 624	ug/L						2.0	ND								
1,3-Dichloropropane	EPA 624	ug/L						2.0	ND								
1,4-Dichlorobenzene	EPA 624	ug/L						2.0	ND								
2+4-Chlorotoluene	EPA 624	ug/L						4.0	ND								

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2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632

Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140331		MW-11_20140331		MW-12_20140331		MW-12A_2014033		MW-13_20140331		MW-14_20140331		MW-15_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
2,2-Dichloropropane	EPA 624	ug/L						2.0	ND								
Benzene	EPA 624	ug/L															
Bromobenzene	EPA 624	ug/L						2.0	ND								
Bromochloromethane	EPA 624	ug/L						2.0	ND								
Bromodichloromethane	EPA 624	ug/L						2.0	ND								
Bromoform	EPA 624	ug/L						2.0	ND								
Bromomethane	EPA 624	ug/L						40	ND								
Carbon Tetrachloride	EPA 624	ug/L						2.0	ND								
Chlorobenzene	EPA 624	ug/L						2.0	ND								
Chloroethane	EPA 624	ug/L						2.0	ND								
Chloroform	EPA 624	ug/L						2.0	ND								
Chloromethane	EPA 624	ug/L						2.0	ND								
Dibromochloromethane	EPA 624	ug/L						2.0	ND								
Dibromomethane	EPA 624	ug/L						2.0	ND								
Dichlorodifluoromethane	EPA 624	ug/L						2.0	ND								
Ethylbenzene	EPA 624	ug/L															
Hexachlorobutadiene	EPA 624	ug/L						2.0	ND								
Isopropyl benzene	EPA 624	ug/L						2.0	ND								
Methylene Chloride	EPA 624	ug/L						5.0	ND								
Naphthalene	EPA 624	ug/L						2.0	ND								

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ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632

Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140331		MW-11_20140331		MW-12_20140331		MW-12A_2014033		MW-13_20140331		MW-14_20140331		MW-15_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
O-Xylene	EPA 624	ug/L						2.0	ND								
P,M-Xylene	EPA 624	ug/L						2.0	ND								
Styrene	EPA 624	ug/L						2.0	ND								
Tetrachloroethene	EPA 624	ug/L						2.0	ND								
Toluene	EPA 624	ug/L															
Trichloroethene	EPA 624	ug/L						2.0	ND								
Trichlorofluoromethane	EPA 624	ug/L						2.0	ND								
Vinyl Chloride	EPA 624	ug/L						2.0	ND								
cis-1,2-Dichloroethene	EPA 624	ug/L						2.0	ND								
cis-1,3-Dichloropropene	EPA 624	ug/L						2.0	ND								
n-Butylbenzene	EPA 624	ug/L						2.0	ND								
n-Propylbenzene	EPA 624	ug/L						2.0	ND								
p-Isopropyltoluene	EPA 624	ug/L						2.0	ND								
sec-Butylbenzene	EPA 624	ug/L						2.0	ND								
tert-Butylbenzene	EPA 624	ug/L						2.0	ND								
trans-1,2-Dichloroethene	EPA 624	ug/L						2.0	ND								
trans-1,3-Dichloropropene	EPA 624	ug/L						2.0	ND								
1,2-Dichloroethane-d4 (Surr)	EPA 624	%			101		101		99.7		99.2		99.7		99.0		99.4
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%															
4-Bromofluorobenzene (Surr)	EPA 624	%							112								

MRL = Method Reporting Limit
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ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140331		MW-11_20140331		MW-12_20140331		MW-12A_2014033		MW-13_20140331		MW-14_20140331		MW-15_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Toluene - d8 (Surr)	EPA 624	%			102		102		99.3		102		103		98.2		102
Toluene - d8 (Surr)	EPA 8260B	%															
TPH as Diesel (Silica Gel)	M EPA 8015	ug/L		50	ND	50	ND	50	ND	50	ND	50	ND	50	**250**	50	ND
Octacosane (Silica Gel Surr)	M EPA 8015	%			110		110		105		106		104		91.5		102

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2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-16_20140331		MW-17_20140331		MW-6_20140331		TB1_20140331		FD1_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
pH	EPA 150.1	pH Units							**7.21**				
Arsenic	EPA 6010B	mg/L						0.015	**0.031**				
Cadmium	EPA 6010B	mg/L						0.0010	ND				
Chromium	EPA 6010B	mg/L						0.0050	ND				
Copper	EPA 6010B	mg/L						0.0050	ND				
Iron	EPA 6010B	mg/L						0.10	**2.0**				
Lead	EPA 6010B	mg/L						0.0050	**0.014**				
Mercury	EPA 7470A	mg/L						0.00050	ND				
Nickel	EPA 6010B	mg/L						0.0050	**0.017**				
Silver	EPA 6010B	mg/L						0.0050	ND				
Zinc	EPA 6010B	mg/L						0.010	**0.036**				
Benzene	EPA 8260B	ug/L		0.50	ND	3.0	**1600**	2.5	**490**	0.50	ND	15	**1600**
Ethylbenzene	EPA 8260B	ug/L		0.50	ND	3.0	**260**	2.5	**620**	0.50	ND	15	**3000**
Toluene	EPA 8260B	ug/L		0.50	ND	3.0	**270**	2.5	**19**	0.50	ND	15	**40**
Total Xylenes	EPA 8260B	ug/L		0.50	ND	3.0	**540**	2.5	**1800**	0.50	ND	15	**7500**
Ethanol	EPA 8260B	ug/L		5.0	ND	30	**48**	50	ND	5.0	ND	150	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L		1.5	**440**	3.0	ND	2.5	**13**	0.50	ND	15	ND
Tert-Butanol	EPA 8260B	ug/L		5.0	**400**	15	**330**	15	**160**	5.0	ND	70	ND
TPH as Gasoline	EPA 8260B	ug/L		50	**60**	300	**13000**	900	**33000**	50	ND	1500	**57000**
1,1,1,2-Tetrachloroethane	EPA 624	ug/L						2.5	ND				

MRL = Method Reporting Limit
ND = Not Detected

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-16_20140331		MW-17_20140331		MW-6_20140331		TB1_20140331		FD1_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
1,1,1-Trichloroethane	EPA 624	ug/L						2.5	ND				
1,1,2,2-Tetrachloroethane	EPA 624	ug/L						2.5	ND				
1,1,2-Trichloroethane	EPA 624	ug/L						2.5	ND				
1,1-Dichloroethane	EPA 624	ug/L						2.5	ND				
1,1-Dichloroethene	EPA 624	ug/L						2.5	ND				
1,1-Dichloropropene	EPA 624	ug/L						2.5	ND				
1,2,3-Trichlorobenzene	EPA 624	ug/L						2.5	ND				
1,2,3-Trichloropropane	EPA 624	ug/L						2.5	ND				
1,2,4-Trichlorobenzene	EPA 624	ug/L						2.5	ND				
1,2,4-Trimethylbenzene	EPA 624	ug/L						9.0	**3000**				
1,2-Dibromo-3-chloropropane	EPA 624	ug/L						2.5	ND				
1,2-Dibromoethane	EPA 624	ug/L						2.5	ND				
1,2-Dichlorobenzene	EPA 624	ug/L						2.5	ND				
1,2-Dichloroethane	EPA 624	ug/L						2.5	ND				
1,2-Dichloropropane	EPA 624	ug/L						2.5	ND				
1,3,5-Trimethylbenzene	EPA 624	ug/L						2.5	**860**				
1,3-Dichlorobenzene	EPA 624	ug/L						2.5	ND				
1,3-Dichloropropane	EPA 624	ug/L						2.5	ND				
1,4-Dichlorobenzene	EPA 624	ug/L						2.5	ND				
2+4-Chlorotoluene	EPA 624	ug/L						5.0	ND				

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2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-16_20140331		MW-17_20140331		MW-6_20140331		TB1_20140331		FD1_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
2,2-Dichloropropane	EPA 624	ug/L						2.5	ND				
Benzene	EPA 624	ug/L											
Bromobenzene	EPA 624	ug/L						2.5	ND				
Bromochloromethane	EPA 624	ug/L						2.5	ND				
Bromodichloromethane	EPA 624	ug/L						2.5	ND				
Bromoform	EPA 624	ug/L						2.5	ND				
Bromomethane	EPA 624	ug/L						50	ND				
Carbon Tetrachloride	EPA 624	ug/L						2.5	ND				
Chlorobenzene	EPA 624	ug/L						2.5	ND				
Chloroethane	EPA 624	ug/L						2.5	ND				
Chloroform	EPA 624	ug/L						2.5	ND				
Chloromethane	EPA 624	ug/L						2.5	ND				
Dibromochloromethane	EPA 624	ug/L						2.5	ND				
Dibromomethane	EPA 624	ug/L						2.5	ND				
Dichlorodifluoromethane	EPA 624	ug/L						2.5	ND				
Ethylbenzene	EPA 624	ug/L											
Hexachlorobutadiene	EPA 624	ug/L						2.5	ND				
Isopropyl benzene	EPA 624	ug/L						2.5	**200**				
Methylene Chloride	EPA 624	ug/L						5.0	ND				
Naphthalene	EPA 624	ug/L						2.5	**990**				

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2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
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Project Name :2705191
Project Number :

			Sample Name	MW-16_20140331		MW-17_20140331		MW-6_20140331		TB1_20140331		FD1_20140331	
			Sample Date	03/04/14		03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
O-Xylene	EPA 624	ug/L						2.5	**300**				
P,M-Xylene	EPA 624	ug/L						2.5	**1400**				
Styrene	EPA 624	ug/L						10	ND				
Tetrachloroethene	EPA 624	ug/L						2.5	ND				
Toluene	EPA 624	ug/L											
Trichloroethene	EPA 624	ug/L						2.5	ND				
Trichlorofluoromethane	EPA 624	ug/L						2.5	ND				
Vinyl Chloride	EPA 624	ug/L						2.5	ND				
cis-1,2-Dichloroethene	EPA 624	ug/L						2.5	ND				
cis-1,3-Dichloropropene	EPA 624	ug/L						2.5	ND				
n-Butylbenzene	EPA 624	ug/L						2.5	**100**				
n-Propylbenzene	EPA 624	ug/L						2.5	**530**				
p-Isopropyltoluene	EPA 624	ug/L						2.5	**22**				
sec-Butylbenzene	EPA 624	ug/L						2.5	**53**				
tert-Butylbenzene	EPA 624	ug/L						2.5	ND				
trans-1,2-Dichloroethene	EPA 624	ug/L						2.5	ND				
trans-1,3-Dichloropropene	EPA 624	ug/L						2.5	ND				
1,2-Dichloroethane-d4 (Surr)	EPA 624	%			99.0		98.0		99.6		99.9		97.9
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%											
4-Bromofluorobenzene (Surr)	EPA 624	%							115				

MRL = Method Reporting Limit
ND = Not Detected

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Analysis Summary

Report Number : 87632
Date : 03/13/14

Attention : Dennis Dettloff
Antea Group
11050 White Rock Rd. Suite 110
Rancho Cordova, CA 95670

Project Name :2705191
Project Number :

			Sample Name	MW-16_20140331	MW-17_20140331		MW-6_20140331		TB1_20140331		FD1_20140331	
			Sample Date	03/04/14	03/04/14		03/04/14		03/04/14		03/04/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Toluene - d8 (Surr)	EPA 624	%			103		101		99.4		103		101
Toluene - d8 (Surr)	EPA 8260B	%											
TPH as Diesel (Silica Gel)	M EPA 8015	ug/L		50	ND	50	**400**	50	**580**			50	**100**
Octacosane (Silica Gel Surr)	M EPA 8015	%			110		114		104				79.1

MRL = Method Reporting Limit
ND = Not Detected

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/14

Project Name : **2705191**
Project Number :

Sample : **MW-10_20140331** Matrix : Water Lab Number : 87632-01
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 08:07
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	03/12/14 08:07

Sample : **MW-11_20140331** Matrix : Water Lab Number : 87632-02
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 08:41
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	03/12/14 08:41

Sample : **MW-12_20140331** Matrix : Water Lab Number : 87632-03
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 09:16
Octacosane (Silica Gel Surr)	105		% Recovery	M EPA 8015	03/12/14 09:16

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/14

Project Name : **2705191**
Project Number :

Sample : **MW-12A_20140331** Matrix : Water Lab Number : 87632-04
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 09:51
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	03/12/14 09:51

Sample : **MW-13_20140331** Matrix : Water Lab Number : 87632-05
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 10:26
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	03/12/14 10:26

Sample : **MW-14_20140331** Matrix : Water Lab Number : 87632-06
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	**250**	50	ug/L	M EPA 8015	03/12/14 11:01
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	91.5		% Recovery	M EPA 8015	03/12/14 11:01

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/14

Project Name : **2705191**
Project Number :

Sample : **MW-15_20140331** Matrix : Water Lab Number : 87632-07
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 11:35
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	03/12/14 11:35

Sample : **MW-16_20140331** Matrix : Water Lab Number : 87632-08
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/12/14 12:10
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	03/12/14 12:10

Sample : **MW-17_20140331** Matrix : Water Lab Number : 87632-09
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	**400**	50	ug/L	M EPA 8015	03/12/14 16:00
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	03/12/14 16:00

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/14

Project Name : **2705191**
Project Number :

Sample : **MW-6_20140331** Matrix : Water Lab Number : 87632-10
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	**580**	50	ug/L	M EPA 8015	03/12/14 16:29
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	03/12/14 16:29

Sample : **FD1_20140331** Matrix : Water Lab Number : 87632-12
Sample Date :03/04/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
TPH as Diesel (Silica Gel)	**100**	50	ug/L	M EPA 8015	03/12/14 16:58
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	79.1		% Recovery	M EPA 8015	03/12/14 16:58

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-10_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-01
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**1.5**	0.50	ug/L	03/11/14 22:41
Toluene	< 0.50	0.50	ug/L	03/11/14 22:41
Ethylbenzene	< 0.50	0.50	ug/L	03/11/14 22:41
Total Xylenes	< 0.50	0.50	ug/L	03/11/14 22:41
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	03/11/14 22:41
Tert-Butanol	< 5.0	5.0	ug/L	03/11/14 22:41
Ethanol	< 5.0	5.0	ug/L	03/11/14 22:41
TPH as Gasoline	< 50	50	ug/L	03/11/14 22:41
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	03/11/14 22:41
Toluene - d8 (Surr)	102		% Recovery	03/11/14 22:41

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-11_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-02
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/11/14 23:13
Toluene	< 0.50	0.50	ug/L	03/11/14 23:13
Ethylbenzene	< 0.50	0.50	ug/L	03/11/14 23:13
Total Xylenes	< 0.50	0.50	ug/L	03/11/14 23:13
Methyl-t-butyl ether (MTBE)	**12**	0.50	ug/L	03/11/14 23:13
Tert-Butanol	< 5.0	5.0	ug/L	03/11/14 23:13
Ethanol	< 5.0	5.0	ug/L	03/11/14 23:13
TPH as Gasoline	< 50	50	ug/L	03/11/14 23:13
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	03/11/14 23:13
Toluene - d8 (Surr)	102		% Recovery	03/11/14 23:13

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-12_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-03
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**19**	2.0	ug/L	03/13/14 12:15
Toluene	< 2.0	2.0	ug/L	03/13/14 12:15
Ethylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
Total Xylenes	< 2.0	2.0	ug/L	03/13/14 12:15
Methyl-t-butyl ether (MTBE)	**990**	2.0	ug/L	03/13/14 12:15
Tert-Butanol	< 9.0	9.0	ug/L	03/13/14 12:15
Ethanol	< 20	20	ug/L	03/12/14 22:36
TPH as Gasoline	< 200	200	ug/L	03/13/14 12:15
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	03/13/14 12:15
Toluene - d8 (Surr)	99.3		% Recovery	03/13/14 12:15

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-12A_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-04
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/11/14 23:44
Toluene	< 0.50	0.50	ug/L	03/11/14 23:44
Ethylbenzene	< 0.50	0.50	ug/L	03/11/14 23:44
Total Xylenes	< 0.50	0.50	ug/L	03/11/14 23:44
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	03/11/14 23:44
Tert-Butanol	< 5.0	5.0	ug/L	03/11/14 23:44
Ethanol	< 5.0	5.0	ug/L	03/11/14 23:44
TPH as Gasoline	< 50	50	ug/L	03/11/14 23:44
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	03/11/14 23:44
Toluene - d8 (Surr)	102		% Recovery	03/11/14 23:44

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-13_20140331**
Project Name : **2705191**
Project Number :
Lab Number : 87632-05
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/12/14 00:16
Toluene	< 0.50	0.50	ug/L	03/12/14 00:16
Ethylbenzene	< 0.50	0.50	ug/L	03/12/14 00:16
Total Xylenes	< 0.50	0.50	ug/L	03/12/14 00:16
Methyl-t-butyl ether (MTBE)	**54**	0.50	ug/L	03/12/14 00:16
Tert-Butanol	**30**	5.0	ug/L	03/12/14 00:16
Ethanol	< 5.0	5.0	ug/L	03/12/14 00:16
TPH as Gasoline	< 50	50	ug/L	03/12/14 00:16
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	03/12/14 00:16
Toluene - d8 (Surr)	103		% Recovery	03/12/14 00:16

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-14_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-06
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**1600**	9.0	ug/L	03/13/14 01:24
Toluene	**41**	9.0	ug/L	03/13/14 01:24
Ethylbenzene	**2900**	9.0	ug/L	03/13/14 01:24
Total Xylenes	**6700**	9.0	ug/L	03/13/14 01:24
Methyl-t-butyl ether (MTBE)	< 9.0	9.0	ug/L	03/13/14 01:24
Tert-Butanol	< 50	50	ug/L	03/13/14 01:24
Ethanol	< 90	90	ug/L	03/13/14 01:24
TPH as Gasoline	**40000**	900	ug/L	03/13/14 01:24
1,2-Dichloroethane-d4 (Surr)	99.0		% Recovery	03/13/14 01:24
Toluene - d8 (Surr)	98.2		% Recovery	03/13/14 01:24

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-15_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-07
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/12/14 00:47
Toluene	< 0.50	0.50	ug/L	03/12/14 00:47
Ethylbenzene	< 0.50	0.50	ug/L	03/12/14 00:47
Total Xylenes	< 0.50	0.50	ug/L	03/12/14 00:47
Methyl-t-butyl ether (MTBE)	**96**	0.50	ug/L	03/12/14 00:47
Tert-Butanol	**45**	5.0	ug/L	03/12/14 00:47
Ethanol	< 5.0	5.0	ug/L	03/12/14 00:47
TPH as Gasoline	< 50	50	ug/L	03/12/14 00:47
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	03/12/14 00:47
Toluene - d8 (Surr)	102		% Recovery	03/12/14 00:47

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-16_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-08
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/12/14 01:19
Toluene	< 0.50	0.50	ug/L	03/12/14 01:19
Ethylbenzene	< 0.50	0.50	ug/L	03/12/14 01:19
Total Xylenes	< 0.50	0.50	ug/L	03/12/14 01:19
Methyl-t-butyl ether (MTBE)	**440**	1.5	ug/L	03/12/14 14:37
Tert-Butanol	**400**	5.0	ug/L	03/12/14 01:19
Ethanol	< 5.0	5.0	ug/L	03/12/14 01:19
TPH as Gasoline	**60**	50	ug/L	03/12/14 01:19
1,2-Dichloroethane-d4 (Surr)	99.0		% Recovery	03/12/14 01:19
Toluene - d8 (Surr)	103		% Recovery	03/12/14 01:19

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-17_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-09
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**1600**	3.0	ug/L	03/13/14 12:58
Toluene	**270**	3.0	ug/L	03/13/14 12:58
Ethylbenzene	**260**	3.0	ug/L	03/13/14 12:58
Total Xylenes	**540**	3.0	ug/L	03/13/14 12:58
Methyl-t-butyl ether (MTBE)	< 3.0	3.0	ug/L	03/13/14 12:58
Tert-Butanol	**330**	15	ug/L	03/13/14 12:58
Ethanol	**48**	30	ug/L	03/13/14 12:58
TPH as Gasoline	**13000**	300	ug/L	03/13/14 12:58
1,2-Dichloroethane-d4 (Surr)	98.0		% Recovery	03/13/14 12:58
Toluene - d8 (Surr)	101		% Recovery	03/13/14 12:58

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-6_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-10
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**490**	2.5	ug/L	03/13/14 12:49
Toluene	**19**	2.5	ug/L	03/13/14 12:49
Ethylbenzene	**620**	2.5	ug/L	03/13/14 12:49
Total Xylenes	**1800**	2.5	ug/L	03/13/14 12:49
Methyl-t-butyl ether (MTBE)	**13**	2.5	ug/L	03/13/14 12:49
Tert-Butanol	**160**	15	ug/L	03/13/14 12:49
Ethanol	< 50	50	ug/L	03/13/14 10:57
TPH as Gasoline	**33000**	900	ug/L	03/13/14 13:57
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	03/13/14 12:49
Toluene - d8 (Surr)	99.4		% Recovery	03/13/14 12:49

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **TB1_20140331**
Project Name : **2705191**
Project Number :
Lab Number : 87632-11
Matrix : Water
Sample Date :03/04/2014
Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	03/11/14 21:06
Toluene	< 0.50	0.50	ug/L	03/11/14 21:06
Ethylbenzene	< 0.50	0.50	ug/L	03/11/14 21:06
Total Xylenes	< 0.50	0.50	ug/L	03/11/14 21:06
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	03/11/14 21:06
Tert-Butanol	< 5.0	5.0	ug/L	03/11/14 21:06
Ethanol	< 5.0	5.0	ug/L	03/11/14 21:06
TPH as Gasoline	< 50	50	ug/L	03/11/14 21:06
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	03/11/14 21:06
Toluene - d8 (Surr)	103		% Recovery	03/11/14 21:06

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **FD1_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-12
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 8260B

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Benzene	**1600**	15	ug/L	03/13/14 14:05
Toluene	**40**	15	ug/L	03/13/14 14:05
Ethylbenzene	**3000**	15	ug/L	03/13/14 14:05
Total Xylenes	**7500**	15	ug/L	03/13/14 14:05
Methyl-t-butyl ether (MTBE)	< 15	15	ug/L	03/13/14 14:05
Tert-Butanol	< 70	70	ug/L	03/13/14 14:05
Ethanol	< 150	150	ug/L	03/13/14 14:05
TPH as Gasoline	**57000**	1500	ug/L	03/13/14 14:05
1,2-Dichloroethane-d4 (Surr)	97.9		% Recovery	03/13/14 14:05
Toluene - d8 (Surr)	101		% Recovery	03/13/14 14:05

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-12_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-03
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 624

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Dichlorodifluoromethane	< 2.0	2.0	ug/L	03/13/14 12:15
Chloromethane	< 2.0	2.0	ug/L	03/13/14 12:15
Vinyl Chloride	< 2.0	2.0	ug/L	03/13/14 12:15
Bromomethane	< 40	40	ug/L	03/13/14 12:15
Chloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
Trichlorofluoromethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,1-Dichloroethene	< 2.0	2.0	ug/L	03/13/14 12:15
Methylene Chloride	< 5.0	5.0	ug/L	03/13/14 12:15
trans-1,2-Dichloroethene	< 2.0	2.0	ug/L	03/13/14 12:15
1,1-Dichloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
2,2-Dichloropropane	< 2.0	2.0	ug/L	03/13/14 12:15
cis-1,2-Dichloroethene	< 2.0	2.0	ug/L	03/13/14 12:15
Chloroform	< 2.0	2.0	ug/L	03/13/14 12:15
Bromochloromethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,1,1-Trichloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,1-Dichloropropene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dichloroethane	**11**	2.0	ug/L	03/13/14 12:15
Carbon Tetrachloride	< 2.0	2.0	ug/L	03/13/14 12:15
Benzene	**19**	2.0	ug/L	03/13/14 12:15
Trichloroethene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dichloropropane	< 2.0	2.0	ug/L	03/13/14 12:15
Bromodichloromethane	< 2.0	2.0	ug/L	03/13/14 12:15
Dibromomethane	< 2.0	2.0	ug/L	03/13/14 12:15
cis-1,3-Dichloropropene	< 2.0	2.0	ug/L	03/13/14 12:15
Toluene	< 2.0	2.0	ug/L	03/13/14 12:15
trans-1,3-Dichloropropene	< 2.0	2.0	ug/L	03/13/14 12:15
1,1,2-Trichloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,3-Dichloropropane	< 2.0	2.0	ug/L	03/13/14 12:15
Tetrachloroethene	< 2.0	2.0	ug/L	03/13/14 12:15
Dibromochloromethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dibromoethane	< 2.0	2.0	ug/L	03/13/14 12:15
Chlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,1,1,2-Tetrachloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
Ethylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-12_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-03
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 624

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
P,M-Xylene	< 2.0	2.0	ug/L	03/13/14 12:15
O-Xylene	< 2.0	2.0	ug/L	03/13/14 12:15
Styrene	< 2.0	2.0	ug/L	03/13/14 12:15
Isopropyl benzene	< 2.0	2.0	ug/L	03/13/14 12:15
Bromoform	< 2.0	2.0	ug/L	03/13/14 12:15
1,1,2,2-Tetrachloroethane	< 2.0	2.0	ug/L	03/13/14 12:15
1,2,3-Trichloropropane	< 2.0	2.0	ug/L	03/13/14 12:15
n-Propylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
Bromobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,3,5-Trimethylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
2+4-Chlorotoluene	< 4.0	4.0	ug/L	03/13/14 12:15
tert-Butylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2,4-Trimethylbenzene	**3.7**	2.0	ug/L	03/13/14 12:15
sec-Butylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
p-Isopropyltoluene	< 2.0	2.0	ug/L	03/13/14 12:15
1,3-Dichlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,4-Dichlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
n-Butylbenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dichlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dibromo-3-chloropropane	< 2.0	2.0	ug/L	03/13/14 12:15
1,2,4-Trichlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
Hexachlorobutadiene	< 2.0	2.0	ug/L	03/13/14 12:15
Naphthalene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2,3-Trichlorobenzene	< 2.0	2.0	ug/L	03/13/14 12:15
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	03/13/14 12:15
4-Bromofluorobenzene (Surr)	112		% Recovery	03/13/14 12:15
Toluene - d8 (Surr)	99.3		% Recovery	03/13/14 12:15

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-6_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-10
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 624

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
Dichlorodifluoromethane	< 2.5	2.5	ug/L	03/13/14 12:49
Chloromethane	< 2.5	2.5	ug/L	03/13/14 12:49
Vinyl Chloride	< 2.5	2.5	ug/L	03/13/14 12:49
Bromomethane	< 50	50	ug/L	03/13/14 12:49
Chloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
Trichlorofluoromethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,1-Dichloroethene	< 2.5	2.5	ug/L	03/13/14 12:49
Methylene Chloride	< 5.0	5.0	ug/L	03/13/14 12:49
trans-1,2-Dichloroethene	< 2.5	2.5	ug/L	03/13/14 12:49
1,1-Dichloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
2,2-Dichloropropane	< 2.5	2.5	ug/L	03/13/14 12:49
cis-1,2-Dichloroethene	< 2.5	2.5	ug/L	03/13/14 12:49
Chloroform	< 2.5	2.5	ug/L	03/13/14 12:49
Bromochloromethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,1,1-Trichloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,1-Dichloropropene	< 2.5	2.5	ug/L	03/13/14 12:49
1,2-Dichloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
Carbon Tetrachloride	< 2.5	2.5	ug/L	03/13/14 12:49
Benzene	**490**	2.5	ug/L	03/13/14 12:49
Trichloroethene	< 2.5	2.5	ug/L	03/13/14 12:49
1,2-Dichloropropane	< 2.5	2.5	ug/L	03/13/14 12:49
Bromodichloromethane	< 2.5	2.5	ug/L	03/13/14 12:49
Dibromomethane	< 2.5	2.5	ug/L	03/13/14 12:49
cis-1,3-Dichloropropene	< 2.5	2.5	ug/L	03/13/14 12:49
Toluene	**19**	2.5	ug/L	03/13/14 12:49
trans-1,3-Dichloropropene	< 2.5	2.5	ug/L	03/13/14 12:49
1,1,2-Trichloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,3-Dichloropropane	< 2.5	2.5	ug/L	03/13/14 12:49
Tetrachloroethene	< 2.5	2.5	ug/L	03/13/14 12:49
Dibromochloromethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,2-Dibromoethane	< 2.5	2.5	ug/L	03/13/14 12:49
Chlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,1,1,2-Tetrachloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
Ethylbenzene	**620**	2.5	ug/L	03/13/14 12:49

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Sample : **MW-6_20140331**
Project Name : **2705191**
Project Number : Lab Number : 87632-10
Matrix : Water Sample Date :03/04/2014 Analysis Method: EPA 624

Parameter	Measured Value	Method Reporting Limit	Units	Date/Time Analyzed
P,M-Xylene	**1400**	2.5	ug/L	03/13/14 12:49
O-Xylene	**300**	2.5	ug/L	03/13/14 12:49
Styrene	< 10	10	ug/L	03/13/14 12:49
Isopropyl benzene	**200**	2.5	ug/L	03/13/14 12:49
Bromoform	< 2.5	2.5	ug/L	03/13/14 12:49
1,1,2,2-Tetrachloroethane	< 2.5	2.5	ug/L	03/13/14 12:49
1,2,3-Trichloropropane	< 2.5	2.5	ug/L	03/13/14 12:49
n-Propylbenzene	**530**	2.5	ug/L	03/13/14 12:49
Bromobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,3,5-Trimethylbenzene	**860**	2.5	ug/L	03/13/14 12:49
2+4-Chlorotoluene	< 5.0	5.0	ug/L	03/13/14 12:49
tert-Butylbenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,2,4-Trimethylbenzene	**3000**	9.0	ug/L	03/13/14 13:57
sec-Butylbenzene	**53**	2.5	ug/L	03/13/14 12:49
p-Isopropyltoluene	**22**	2.5	ug/L	03/13/14 12:49
1,3-Dichlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,4-Dichlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
n-Butylbenzene	**100**	2.5	ug/L	03/13/14 12:49
1,2-Dichlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,2-Dibromo-3-chloropropane	< 2.5	2.5	ug/L	03/13/14 12:49
1,2,4-Trichlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
Hexachlorobutadiene	< 2.5	2.5	ug/L	03/13/14 12:49
Naphthalene	**990**	2.5	ug/L	03/13/14 12:49
1,2,3-Trichlorobenzene	< 2.5	2.5	ug/L	03/13/14 12:49
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	03/13/14 12:49
4-Bromofluorobenzene (Surr)	115		% Recovery	03/13/14 12:49
Toluene - d8 (Surr)	99.4		% Recovery	03/13/14 12:49

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Project Name : **2705191**
Project Number :

Sample : **MW-12_20140331** Matrix : Water Lab Number : 87632-03
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
pH	**6.67**		pH Units	EPA 150.1	03/06/14 21:37
Arsenic	< 0.015	0.015	mg/L	EPA 6010B	03/12/14 13:42
Cadmium	**0.0018**	0.0010	mg/L	EPA 6010B	03/12/14 13:42
Chromium	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:42
Copper	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:42
Iron	**0.68**	0.10	mg/L	EPA 6010B	03/12/14 13:42
Lead	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:42
Nickel	**0.12**	0.0050	mg/L	EPA 6010B	03/12/14 13:42
Silver	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:42
Zinc	**0.046**	0.010	mg/L	EPA 6010B	03/12/14 13:42
Mercury	< 0.00050	0.00050	mg/L	EPA 7470A	03/12/14 15:21

KIFF Analytical LLC

Report Number : 87632
Date : 03/13/2014

Project Name : **2705191**
Project Number :

Sample : **MW-6_20140331** Matrix : Water Lab Number : 87632-10
Sample Date :03/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
pH	**7.21**		pH Units	EPA 150.1	03/06/14 21:39
Arsenic	**0.031**	0.015	mg/L	EPA 6010B	03/12/14 13:47
Cadmium	< 0.0010	0.0010	mg/L	EPA 6010B	03/12/14 13:47
Chromium	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:47
Copper	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:47
Iron	**2.0**	0.10	mg/L	EPA 6010B	03/12/14 13:47
Lead	**0.014**	0.0050	mg/L	EPA 6010B	03/12/14 13:47
Nickel	**0.017**	0.0050	mg/L	EPA 6010B	03/12/14 13:47
Silver	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/14 13:47
Zinc	**0.036**	0.010	mg/L	EPA 6010B	03/12/14 13:47
Mercury	< 0.00050	0.00050	mg/L	EPA 7470A	03/12/14 15:26

Report Number : 87632

Date : 03/13/2014

QC Report : Method Blank Data

Project Name : **2705191**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Arsenic	< 0.015	0.015	mg/L	EPA 6010B	03/12/2014
Cadmium	< 0.0010	0.0010	mg/L	EPA 6010B	03/12/2014
Chromium	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/2014
Copper	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/2014
Iron	< 0.10	0.10	mg/L	EPA 6010B	03/12/2014
Lead	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/2014
Nickel	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/2014
Silver	< 0.0050	0.0050	mg/L	EPA 6010B	03/12/2014
Zinc	< 0.010	0.010	mg/L	EPA 6010B	03/12/2014
Mercury	< 0.00050	0.00050	mg/L	EPA 7470A	03/12/2014
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/11/2014
Octacosane (Silica Gel Surr)	105		%	M EPA 8015	03/11/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/12/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/12/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/12/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/12/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/12/2014
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/12/2014
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/12/2014
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/12/2014
1,2-Dichloroethane-d4 (Surr)	97.9		%	EPA 8260B	03/12/2014
Toluene - d8 (Surr)	97.8		%	EPA 8260B	03/12/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/11/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/11/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/11/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/11/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/11/2014
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/11/2014
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/11/2014
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/11/2014
1,2-Dichloroethane-d4 (Surr)	98.2		%	EPA 8260B	03/11/2014
Toluene - d8 (Surr)	102		%	EPA 8260B	03/11/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/13/2014
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	03/13/2014
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/13/2014
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	03/13/2014
Toluene - d8 (Surr)	102		%	EPA 8260B	03/13/2014

KIFF ANALYTICAL, LLC

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Report Number : 87632

Date : 03/13/2014

QC Report : Method Blank Data

Project Name : **2705191**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/13/2014
1,2,4-Trimethylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/13/2014
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	03/13/2014
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/13/2014
Dichlorodifluoromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Chloromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Vinyl Chloride	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Bromomethane	< 20	20	ug/L	EPA 624	03/13/2014
Chloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Trichlorofluoromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1-Dichloroethene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Methylene Chloride	< 5.0	5.0	ug/L	EPA 624	03/13/2014
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1-Dichloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
2,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Chloroform	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Bromochloromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1,1-Trichloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1-Dichloropropene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Carbon Tetrachloride	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Trichloroethene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Bromodichloromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Dibromomethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 624	03/13/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
1,1,2-Trichloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,3-Dichloropropane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Tetrachloroethene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Dibromochloromethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Chlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1,1,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
O-Xylene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Styrene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Isopropyl benzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Bromoform	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2,3-Trichloropropane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
n-Propylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Bromobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,3,5-Trimethylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
2+4-Chlorotoluene	< 1.0	1.0	ug/L	EPA 624	03/13/2014
tert-Butylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2,4-Trimethylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
sec-Butylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
p-Isopropyltoluene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,3-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,4-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
n-Butylbenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dibromo-3-chloropropane	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2,4-Trichlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Hexachlorobutadiene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
Naphthalene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2,3-Trichlorobenzene	< 0.50	0.50	ug/L	EPA 624	03/13/2014
1,2-Dichloroethane-d4 (Surr)	99.7		%	EPA 8260B	03/13/2014
Toluene - d8 (Surr)	99.9		%	EPA 8260B	03/13/2014
4-Bromofluorobenzene (Surr)	112		%	EPA 624	03/13/2014

Report Number : 87632

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Arsenic														
	87630-01	0.12	0.400	0.400	0.513	0.502	mg/L	EPA 6010B	3/12/14	97.8	95.0	2.23	75-125	20
Cadmium														
	87630-01	0.011	0.400	0.400	0.426	0.423	mg/L	EPA 6010B	3/12/14	104	103	0.690	75-125	20
Chromium														
	87630-01	0.078	0.400	0.400	0.464	0.459	mg/L	EPA 6010B	3/12/14	96.6	95.2	1.13	75-125	20
Copper														
	87630-01	0.18	0.400	0.400	0.532	0.514	mg/L	EPA 6010B	3/12/14	87.6	83.3	3.27	75-125	20
Iron														
	87630-01	92	0.400	0.400	82.7	78.5	mg/L	EPA 6010B	3/12/14	**0.00**	**0.00**	5.20	75-125	20
Lead														
	87630-01	0.27	0.400	0.400	0.635	0.626	mg/L	EPA 6010B	3/12/14	90.1	88.0	1.36	75-125	20
Nickel														
	87630-01	0.18	0.400	0.400	0.545	0.535	mg/L	EPA 6010B	3/12/14	92.4	89.8	1.85	75-125	20
Silver														
	87630-01	< 0.0050	0.200	0.200	0.207	0.204	mg/L	EPA 6010B	3/12/14	103	102	1.36	75-125	20
Zinc														
	87630-01	0.22	0.400	0.400	0.612	0.596	mg/L	EPA 6010B	3/12/14	97.6	93.6	2.63	75-125	20

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Report Number : 87632

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Mercury														
	87632-03	< 0.00050	0.00100	0.00100	0.00081	0.00085	mg/L	EPA 7470A	3/12/14	76.0	80.0	4.82	75-125	20
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	939	926	ug/L	M EPA 8015	3/11/14	93.9	92.6	1.46	70-130	25
Benzene														
	87649-03	<0.50	39.9	39.4	38.5	37.5	ug/L	EPA 8260B	3/12/14	96.4	95.2	1.27	70.0-130	25
Ethanol														
	87649-03	<5.0	99.8	98.4	162	134	ug/L	EPA 8260B	3/12/14	**162**	136	17.5	55.0-150	25
Ethylbenzene														
	87649-03	<0.50	39.9	39.4	39.0	38.1	ug/L	EPA 8260B	3/12/14	97.7	96.9	0.882	70.0-130	25
Methyl-t-butyl ether														
	87649-03	41	39.8	39.2	75.0	76.8	ug/L	EPA 8260B	3/12/14	86.3	92.0	6.42	70.0-130	25
P + M Xylene														
	87649-03	<0.50	39.9	39.4	39.1	38.0	ug/L	EPA 8260B	3/12/14	98.0	96.5	1.53	70.0-130	25
Tert-Butanol														
	87649-03	90	200	197	269	272	ug/L	EPA 8260B	3/12/14	89.9	92.4	2.77	70.0-130	25
Toluene														
	87649-03	<0.50	39.9	39.4	37.8	37.4	ug/L	EPA 8260B	3/12/14	94.6	95.0	0.408	70.0-130	25

KIFF ANALYTICAL, LLC

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Report Number : 87632

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene														
	87628-01	<0.50	40.0	40.0	41.6	41.5	ug/L	EPA 8260B	3/11/14	104	104	0.149	70.0-130	25
Ethanol														
	87628-01	<5.0	100	100	100	99.5	ug/L	EPA 8260B	3/11/14	100	99.5	0.793	55.0-150	25
Ethylbenzene														
	87628-01	<0.50	40.0	40.0	42.5	42.2	ug/L	EPA 8260B	3/11/14	106	105	0.847	70.0-130	25
Methyl-t-butyl ether														
	87628-01	<0.50	39.9	39.9	43.0	43.1	ug/L	EPA 8260B	3/11/14	108	108	0.284	70.0-130	25
P + M Xylene														
	87628-01	<0.50	40.0	40.0	40.9	40.8	ug/L	EPA 8260B	3/11/14	102	102	0.149	70.0-130	25
Tert-Butanol														
	87628-01	<5.0	200	200	213	210	ug/L	EPA 8260B	3/11/14	106	105	1.18	70.0-130	25
Toluene														
	87628-01	<0.50	40.0	40.0	42.9	42.8	ug/L	EPA 8260B	3/11/14	107	107	0.0969	70.0-130	25
Benzene														
	87669-08	<0.50	40.0	40.0	38.0	41.8	ug/L	EPA 8260B	3/13/14	95.1	104	9.40	70.0-130	25
Ethanol														
	87669-08	<5.0	100	100	87.0	102	ug/L	EPA 8260B	3/13/14	87.0	102	16.0	55.0-150	25

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QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Ethylbenzene														
	87669-08	<0.50	40.0	40.0	39.1	43.0	ug/L	EPA 8260B	3/13/14	97.8	107	9.32	70.0-130	25
Methyl-t-butyl ether														
	87669-08	25	39.9	39.9	67.0	72.0	ug/L	EPA 8260B	3/13/14	104	117	11.5	70.0-130	25
P + M Xylene														
	87669-08	<0.50	40.0	40.0	37.9	41.8	ug/L	EPA 8260B	3/13/14	94.8	104	9.72	70.0-130	25
Tert-Butanol														
	87669-08	<5.0	200	200	198	215	ug/L	EPA 8260B	3/13/14	99.2	108	8.11	70.0-130	25
Toluene														
	87669-08	<0.50	40.0	40.0	39.6	43.5	ug/L	EPA 8260B	3/13/14	99.0	109	9.39	70.0-130	25
1,2,4-Trimethylbenzene														
	87669-07	<0.50	40.0	40.0	40.5	40.4	ug/L	EPA 624	3/13/14	101	101	0.262	70.0-130	25
1,1,1,2-Tetrachloroethane														
	87668-28	<0.50	40.0	40.0	44.6	42.9	ug/L	EPA 624	3/13/14	111	107	3.77	70.0-130	25
1,1,1-Trichloroethane														
	87668-28	<0.50	40.0	40.0	39.0	37.0	ug/L	EPA 624	3/13/14	97.4	92.4	5.28	70.0-130	25
1,1,2,2-Tetrachloroethane														
	87668-28	<0.50	40.0	40.0	43.0	42.4	ug/L	EPA 624	3/13/14	108	106	1.41	70.0-130	25

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1,1,2-Trichloroethane														
	87668-28	<0.50	40.0	40.0	40.1	39.4	ug/L	EPA 624	3/13/14	100	98.5	1.69	70.0-130	25
1,1-Dichloroethane														
	87668-28	<0.50	40.0	40.0	38.3	36.8	ug/L	EPA 624	3/13/14	95.7	92.0	4.02	70.0-130	25
1,1-Dichloroethene														
	87668-28	<0.50	40.0	40.0	43.2	41.2	ug/L	EPA 624	3/13/14	108	103	4.57	70.0-130	25
1,1-Dichloropropene														
	87668-28	<0.50	40.0	40.0	39.8	38.0	ug/L	EPA 624	3/13/14	99.4	95.0	4.50	70.0-130	25
1,2,3-Trichlorobenzene														
	87668-28	<0.50	40.0	40.0	39.4	38.1	ug/L	EPA 624	3/13/14	98.5	95.3	3.34	70.0-130	25
1,2,3-Trichloropropane														
	87668-28	<0.50	40.0	40.0	43.0	42.1	ug/L	EPA 624	3/13/14	108	105	2.18	70.0-130	25
1,2,4-Trichlorobenzene														
	87668-28	<0.50	40.0	40.0	39.4	37.7	ug/L	EPA 624	3/13/14	98.4	94.4	4.19	70.0-130	25
1,2,4-Trimethylbenzene														
	87668-28	<0.50	40.0	40.0	44.0	42.3	ug/L	EPA 624	3/13/14	110	106	3.91	70.0-130	25
1,2-Dibromoethane														
	87668-28	<0.50	40.3	40.3	41.3	40.3	ug/L	EPA 624	3/13/14	102	100	2.41	70.0-130	25
1,2-Dichlorobenzene														
	87668-28	<0.50	40.0	40.0	40.2	38.4	ug/L	EPA 624	3/13/14	100	96.0	4.61	70.0-130	25

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1,2-Dichloroethane														
	87668-28	<0.50	40.0	40.0	36.5	36.0	ug/L	EPA 624	3/13/14	91.4	90.0	1.56	70.0-130	25
1,2-Dichloropropane														
	87668-28	<0.50	40.0	40.0	38.5	37.4	ug/L	EPA 624	3/13/14	96.2	93.4	2.96	70.0-130	25
1,2-dibromo-3-chloropropane														
	87668-28	<0.50	40.0	40.0	40.6	40.2	ug/L	EPA 624	3/13/14	102	100	1.11	70.0-130	25
1,3,5-Trimethylbenzene														
	87668-28	<0.50	40.0	40.0	45.6	44.0	ug/L	EPA 624	3/13/14	114	110	3.71	70.0-130	25
1,3-Dichlorobenzene														
	87668-28	<0.50	40.0	40.0	44.4	43.0	ug/L	EPA 624	3/13/14	111	107	3.37	70.0-130	25
1,3-Dichloropropane														
	87668-28	<0.50	40.0	40.0	39.5	38.7	ug/L	EPA 624	3/13/14	98.6	96.7	1.98	70.0-130	25
1,4-Dichlorobenzene														
	87668-28	<0.50	40.0	40.0	40.6	38.9	ug/L	EPA 624	3/13/14	102	97.3	4.21	70.0-130	25
2+4-Chlorotoluene														
	87668-28	<1.0	80.0	80.0	91.4	87.5	ug/L	EPA 624	3/13/14	114	109	4.38	70.0-130	25
2,2-Dichloropropane														
	87668-28	<0.50	40.0	40.0	41.0	38.7	ug/L	EPA 624	3/13/14	102	96.7	5.82	70.0-130	25
Benzene														
	87668-28	<0.50	40.0	40.0	39.9	38.3	ug/L	EPA 624	3/13/14	99.7	95.9	3.96	70.0-130	25

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Project Number :

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Bromobenzene														
	87668-28	<0.50	40.0	40.0	46.6	45.2	ug/L	EPA 624	3/13/14	116	113	3.15	70.0-130	25
Bromochloromethane														
	87668-28	<0.50	40.0	40.0	44.0	43.2	ug/L	EPA 624	3/13/14	110	108	1.93	70.0-130	25
Bromodichloromethane														
	87668-28	<0.50	40.0	40.0	40.2	38.8	ug/L	EPA 624	3/13/14	101	96.9	3.73	70.0-130	25
Bromoform														
	87668-28	<0.50	40.0	40.0	47.5	46.9	ug/L	EPA 624	3/13/14	119	117	1.39	70.0-135	25
Bromomethane														
	87668-28	<20	200	200	172	191	ug/L	EPA 624	3/13/14	86.2	95.5	10.3	50.0-135	25
Carbon Tetrachloride														
	87668-28	<0.50	40.0	40.0	40.8	38.9	ug/L	EPA 624	3/13/14	102	97.2	4.71	70.0-130	25
Chlorobenzene														
	87668-28	<0.50	40.0	40.0	43.8	42.2	ug/L	EPA 624	3/13/14	110	106	3.74	70.0-130	25
Chloroethane														
	87668-28	<0.50	40.0	40.0	39.1	36.9	ug/L	EPA 624	3/13/14	97.7	92.2	5.74	70.0-130	25
Chloroform														
	87668-28	<0.50	40.0	40.0	39.0	37.6	ug/L	EPA 624	3/13/14	97.4	94.1	3.46	70.0-130	25
Chloromethane														
	87668-28	<0.50	40.0	40.0	38.2	35.9	ug/L	EPA 624	3/13/14	95.4	89.7	6.16	70.0-130	25

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Dibromochloromethane														
	87668-28	<0.50	40.0	40.0	44.7	43.3	ug/L	EPA 624	3/13/14	112	108	3.28	70.0-130	25
Dibromomethane														
	87668-28	<0.50	40.0	40.0	46.7	45.8	ug/L	EPA 624	3/13/14	117	114	1.99	70.0-130	25
Dichlorodifluoromethane														
	87668-28	<0.50	40.0	40.0	45.2	42.4	ug/L	EPA 624	3/13/14	113	106	6.48	65.0-140	25
Ethylbenzene														
	87668-28	<0.50	40.0	40.0	42.6	41.1	ug/L	EPA 624	3/13/14	106	103	3.64	70.0-130	25
Hexachlorobutadiene														
	87668-28	<0.50	40.0	40.0	38.3	36.5	ug/L	EPA 624	3/13/14	95.8	91.2	4.93	70.0-130	25
Isopropyl benzene														
	87668-28	<0.50	40.0	40.0	45.2	43.3	ug/L	EPA 624	3/13/14	113	108	4.34	70.0-130	25
Methyl-t-butyl ether														
	87668-28	<0.50	39.9	39.9	47.4	46.5	ug/L	EPA 8260B	3/13/14	119	116	1.92	70.0-130	25
Methylene Chloride														
	87668-28	<5.0	40.0	40.0	40.4	39.1	ug/L	EPA 624	3/13/14	101	97.8	3.13	70.0-130	25
Naphthalene														
	87668-28	<0.50	40.0	40.0	40.1	39.0	ug/L	EPA 624	3/13/14	100	97.5	2.72	70.0-130	25
O-Xylene														
	87668-28	<0.50	40.0	40.0	44.1	42.5	ug/L	EPA 624	3/13/14	110	106	3.67	70.0-130	25

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P + M Xylene														
	87668-28	<1.0	40.0	40.0	43.7	42.0	ug/L	EPA 624	3/13/14	109	105	3.94	70.0-130	25
Styrene														
	87668-28	<0.50	40.5	40.5	46.4	44.8	ug/L	EPA 624	3/13/14	115	110	3.66	70.0-130	25
Tert-Butanol														
	87668-28	<5.0	200	200	200	200	ug/L	EPA 8260B	3/13/14	99.8	100	0.209	70.0-130	25
Tetrachloroethene														
	87668-28	<0.50	40.0	40.0	46.2	44.3	ug/L	EPA 624	3/13/14	116	111	4.38	70.0-130	25
Toluene														
	87668-28	<0.50	40.0	40.0	41.0	39.7	ug/L	EPA 624	3/13/14	102	99.2	3.33	70.0-130	25
Trichloroethene														
	87668-28	<0.50	40.0	40.0	44.1	42.2	ug/L	EPA 624	3/13/14	110	106	4.37	70.0-130	25
Trichlorofluoromethane														
	87668-28	<0.50	40.0	40.0	40.6	38.4	ug/L	EPA 624	3/13/14	101	95.9	5.59	70.0-130	25
Vinyl Chloride														
	87668-28	<0.50	40.0	40.0	41.2	38.6	ug/L	EPA 624	3/13/14	103	96.4	6.73	70.0-130	25
c-1,3-Dichloropropene														
	87668-28	<0.50	40.0	40.0	40.1	38.9	ug/L	EPA 624	3/13/14	100	97.3	3.05	70.0-130	25
cis-1,2-Dichloroethene														
	87668-28	<0.50	40.0	40.0	41.9	40.4	ug/L	EPA 624	3/13/14	105	101	3.58	70.0-130	25

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QC Report : Matrix Spike/ Matrix Spike Duplicate

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Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
n-butylbenzene														
	87668-28	<0.50	40.0	40.0	39.1	37.4	ug/L	EPA 624	3/13/14	97.8	93.4	4.57	70.0-130	25
n-propylbenzene														
	87668-28	<0.50	40.0	40.0	45.6	44.0	ug/L	EPA 624	3/13/14	114	110	3.70	70.0-130	25
p-isopropyltoluene														
	87668-28	<0.50	40.0	40.0	44.4	42.5	ug/L	EPA 624	3/13/14	111	106	4.47	70.0-130	25
sec-butylbenzene														
	87668-28	<0.50	40.0	40.0	43.5	41.7	ug/L	EPA 624	3/13/14	109	104	4.18	70.0-130	25
t-1,2-Dichloroethene														
	87668-28	<0.50	40.0	40.0	42.7	41.0	ug/L	EPA 624	3/13/14	107	102	4.25	70.0-130	25
t-1,3-Dichloropropene														
	87668-28	<0.50	40.0	40.0	40.2	39.3	ug/L	EPA 624	3/13/14	101	98.2	2.43	70.0-130	25
tert-butylbenzene														
	87668-28	<0.50	40.0	40.0	45.7	43.8	ug/L	EPA 624	3/13/14	114	110	4.18	70.0-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Arsenic	0.400	mg/L	EPA 6010B	3/12/14	102	85-115
Cadmium	0.400	mg/L	EPA 6010B	3/12/14	106	85-115
Chromium	0.400	mg/L	EPA 6010B	3/12/14	104	85-115
Copper	0.400	mg/L	EPA 6010B	3/12/14	104	85-115
Iron	0.400	mg/L	EPA 6010B	3/12/14	101	85-115
Lead	0.400	mg/L	EPA 6010B	3/12/14	99.8	85-115
Nickel	0.400	mg/L	EPA 6010B	3/12/14	104	85-115
Silver	0.200	mg/L	EPA 6010B	3/12/14	104	85-115
Zinc	0.400	mg/L	EPA 6010B	3/12/14	107	85-115
Mercury	0.00100	mg/L	EPA 7470A	3/12/14	101	85-115
Benzene	40.0	ug/L	EPA 8260B	3/12/14	95.8	70.0-130
Ethanol	100	ug/L	EPA 8260B	3/12/14	122	55.0-150
Ethylbenzene	40.0	ug/L	EPA 8260B	3/12/14	96.8	70.0-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	3/12/14	81.9	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	3/12/14	95.8	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	3/12/14	93.3	70.0-130
Toluene	40.0	ug/L	EPA 8260B	3/12/14	94.8	70.0-130
Benzene	39.7	ug/L	EPA 8260B	3/11/14	102	70.0-130
Ethanol	99.3	ug/L	EPA 8260B	3/11/14	106	55.0-150

QC Report : Laboratory Control Sample (LCS)

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Ethylbenzene	39.7	ug/L	EPA 8260B	3/11/14	105	70.0-130
Methyl-t-butyl ether	39.6	ug/L	EPA 8260B	3/11/14	106	70.0-130
P + M Xylene	39.7	ug/L	EPA 8260B	3/11/14	101	70.0-130
TPH as Gasoline	488	ug/L	EPA 8260B	3/11/14	111	70.0-130
Tert-Butanol	198	ug/L	EPA 8260B	3/11/14	104	70.0-130
Toluene	39.7	ug/L	EPA 8260B	3/11/14	106	70.0-130
Benzene	40.2	ug/L	EPA 8260B	3/13/14	103	70.0-130
Ethanol	100	ug/L	EPA 8260B	3/13/14	93.8	55.0-150
Ethylbenzene	40.2	ug/L	EPA 8260B	3/13/14	107	70.0-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	3/13/14	105	70.0-130
P + M Xylene	40.2	ug/L	EPA 8260B	3/13/14	105	70.0-130
TPH as Gasoline	486	ug/L	EPA 8260B	3/13/14	105	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	3/13/14	105	70.0-130
Toluene	40.2	ug/L	EPA 8260B	3/13/14	107	70.0-130
1,2,4-Trimethylbenzene	40.1	ug/L	EPA 624	3/13/14	106	70.0-130
TPH as Gasoline	489	ug/L	EPA 8260B	3/13/14	90.3	70.0-130
1,1,1,2-Tetrachloroethane	40.1	ug/L	EPA 624	3/13/14	111	70.0-130
1,1,1-Trichloroethane	40.1	ug/L	EPA 624	3/13/14	96.2	70.0-130
1,1,2,2-Tetrachloroethane	40.1	ug/L	EPA 624	3/13/14	106	70.0-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,1,2-Trichloroethane	40.1	ug/L	EPA 624	3/13/14	99.3	70.0-130
1,1-Dichloroethane	40.1	ug/L	EPA 624	3/13/14	94.6	70.0-130
1,1-Dichloroethene	40.1	ug/L	EPA 624	3/13/14	107	70.0-130
1,1-Dichloropropene	40.1	ug/L	EPA 624	3/13/14	99.2	70.0-130
1,2,3-Trichlorobenzene	40.1	ug/L	EPA 624	3/13/14	99.4	70.0-130
1,2,3-Trichloropropane	40.1	ug/L	EPA 624	3/13/14	106	70.0-130
1,2,4-Trichlorobenzene	40.1	ug/L	EPA 624	3/13/14	98.4	70.0-130
1,2,4-Trimethylbenzene	40.1	ug/L	EPA 624	3/13/14	110	70.0-130
1,2-Dibromoethane	40.4	ug/L	EPA 624	3/13/14	101	70.0-130
1,2-Dichlorobenzene	40.1	ug/L	EPA 624	3/13/14	99.6	70.0-130
1,2-Dichloroethane	40.1	ug/L	EPA 624	3/13/14	91.7	70.0-130
1,2-Dichloropropane	40.1	ug/L	EPA 624	3/13/14	95.7	70.0-130
1,2-dibromo-3-chloropropane	40.1	ug/L	EPA 624	3/13/14	101	70.0-130
1,3,5-Trimethylbenzene	40.1	ug/L	EPA 624	3/13/14	115	70.0-130
1,3-Dichlorobenzene	40.1	ug/L	EPA 624	3/13/14	111	70.0-130
1,3-Dichloropropane	40.1	ug/L	EPA 624	3/13/14	97.9	70.0-130
1,4-Dichlorobenzene	40.1	ug/L	EPA 624	3/13/14	101	70.0-130
2+4-Chlorotoluene	80.2	ug/L	EPA 624	3/13/14	114	70.0-130
2,2-Dichloropropane	40.1	ug/L	EPA 624	3/13/14	100	70.0-130
Benzene	40.1	ug/L	EPA 624	3/13/14	99.8	70.0-130
Bromobenzene	40.1	ug/L	EPA 624	3/13/14	116	70.0-130
Bromochloromethane	40.1	ug/L	EPA 624	3/13/14	108	70.0-130
Bromodichloromethane	40.1	ug/L	EPA 624	3/13/14	99.6	70.0-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Bromoform	40.1	ug/L	EPA 624	3/13/14	118	70.0-135
Bromomethane	200	ug/L	EPA 624	3/13/14	74.1	50.0-135
Carbon Tetrachloride	40.1	ug/L	EPA 624	3/13/14	101	70.0-130
Chlorobenzene	40.1	ug/L	EPA 624	3/13/14	109	70.0-130
Chloroethane	40.1	ug/L	EPA 624	3/13/14	97.8	70.0-130
Chloroform	40.1	ug/L	EPA 624	3/13/14	96.7	70.0-130
Chloromethane	40.1	ug/L	EPA 624	3/13/14	93.2	70.0-130
Dibromochloromethane	40.1	ug/L	EPA 624	3/13/14	111	70.0-130
Dibromomethane	40.1	ug/L	EPA 624	3/13/14	117	70.0-130
Dichlorodifluoromethane	40.1	ug/L	EPA 624	3/13/14	113	65.0-140
Ethylbenzene	40.1	ug/L	EPA 624	3/13/14	106	70.0-130
Hexachlorobutadiene	40.1	ug/L	EPA 624	3/13/14	100	70.0-130
Isopropyl benzene	40.1	ug/L	EPA 624	3/13/14	113	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	3/13/14	118	70.0-130
Methylene Chloride	40.1	ug/L	EPA 624	3/13/14	101	70.0-130
Naphthalene	40.1	ug/L	EPA 624	3/13/14	100	70.0-130
O-Xylene	40.1	ug/L	EPA 624	3/13/14	110	70.0-130
P + M Xylene	40.1	ug/L	EPA 624	3/13/14	109	70.0-130
Styrene	40.6	ug/L	EPA 624	3/13/14	114	70.0-130
TPH as Gasoline	486	ug/L	EPA 8260B	3/13/14	93.2	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	3/13/14	99.8	70.0-130
Tetrachloroethene	40.1	ug/L	EPA 624	3/13/14	116	70.0-130
Toluene	40.1	ug/L	EPA 624	3/13/14	102	70.0-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Project Name : **2705191**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Trichloroethene	40.1	ug/L	EPA 624	3/13/14	110	70.0-130
Trichlorofluoromethane	40.1	ug/L	EPA 624	3/13/14	100	70.0-130
Vinyl Chloride	40.1	ug/L	EPA 624	3/13/14	101	70.0-130
c-1,3-Dichloropropene	40.1	ug/L	EPA 624	3/13/14	99.4	70.0-130
cis-1,2-Dichloroethene	40.1	ug/L	EPA 624	3/13/14	105	70.0-130
n-butylbenzene	40.1	ug/L	EPA 624	3/13/14	97.9	70.0-130
n-propylbenzene	40.1	ug/L	EPA 624	3/13/14	114	70.0-130
p-isopropyltoluene	40.1	ug/L	EPA 624	3/13/14	111	70.0-130
sec-butylbenzene	40.1	ug/L	EPA 624	3/13/14	109	70.0-130
t-1,2-Dichloroethene	40.1	ug/L	EPA 624	3/13/14	105	70.0-130
t-1,3-Dichloropropene	40.1	ug/L	EPA 624	3/13/14	100	70.0-130
tert-butylbenzene	40.1	ug/L	EPA 624	3/13/14	115	70.0-130

Report Number : 87632

QC Report : Sample Duplicate

Date : 03/13/2014

Project Name : **2705191**

Project Number :

Parameter	Sample ID	Units	Analysis Method	Date Analyzed	Sample Value	Duplicate Value	RPD	RPD Limit
pH	87632-03	pH	EPA 150.1	3/6/14	6.67	6.62	0.75	10

NC RPD not calculated. Both Sample and Duplicate < Lab PQL

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

87632

anteagroup

COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of 1 of 1
Cooler # ____ of ____

1Q14 GW Event

Required Lab Information:

Lab Name:	Kiff Analytical
Address:	2795 Second Street #300
Davis, CA 95618	
Lab PM:	Scott Forbes
Phone/Fax:	P: 530-297-4800 F: 530-297-4808
Lab PM email	SForbes@kiffanalytical.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	2705191
Task:	WG_Q_201403
AnteaGrp proj#	
Site Address	449 Hegenberger
City	Oakland
State	CA 94621
AG PM Name:	Dennis Dettloff
Phone/Fax:	P: 916-503-1261 F: 916-638-8385
AG PM Email:	dennis.dettloff@anteagroup.com

Required Invoice Information:

Send Invoice to:	Sandy Hayes
Address:	11050 White Rock Road, Suite 110
City/State	Rancho Cordova CA 95670
Phone #:	916-638-2085
Reimbursement project?	
Non-reimbursement project?	Y
Mark one	
Send EDD to	agdataview.us@anteagroup.com
CC Hardcopy report to	
CC Hardcopy report to	

Turn around time (days)	10
QC level Required: Standard	Special ____ Mark one
NJ Reduced Deliverable Package?	
MA MCP Cert?	CT RCP Cert? Mark One
Lab Project ID (lab use)	

Valid Matrix Codes: DRINKING WATER WP; GROUND WATER WG; WASTE WATER WW; FREE PRODUCT LF; SOIL SO; OIL OL; WIPE SW; AMBIENT AIR AA; SVE AIR AE; SOIL GAS GS; WATER W; SURFACE WATER WS; WATER QC WQ; SLUDGE SL; RINSEATE WH; OTHER OT; ANIMAL TISSUE TA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analyses: 8015TPH+Diesel w/silica	8260 GC/MS GRO	8260BTEX+MTBE+TBA	8260Ethanol	624 TICH	6010 Arsenic, Cadmium,	6010 Chromium, Coppe	SM4500 Cyanide	6010 Nickel, Silver, Zinc	1664 Hexane Extractab.	150.2 pH	420.1 Phenolic Compou.	6010 Iron, Lead	7470A Mercury	Comments/Lab Sample I.D.
1	MW-10_20140331	WG	C	03/04/14	1110	5	N				X					X	X	X	X											01
2	MW-11_20140331	WG	C	3/4/14	1040	5	N				X					X	X	X	X											02
3	MW-12_20140331	WG	C	3/4/14	1505	11	N	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	03
4	MW-12A_20140331	WG	C	3/4/14	0957	5	N				X					X	X	X	X											04
5	MW-13_20140331	WG	C	3/4/14	1147	5	N				X					X	X	X	X											05
6	MW-14_20140331	WG	C	3/4/14	1600	5	N				X					X	X	X	X											06
7	MW-15_20140331	WG	C	3/4/14	1435	5	N				X					X	X	X	X											07
8	MW-16_20140331	WG	C	3/4/14	1455	5	N				X					X	X	X	X											08
9	MW-17_20140331	WG	C	3/4/14	1630	5	N				X					X	X	X	X											09
10	MW-6_20140331	WG	C	3/4/14	1540	11	N	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	10
11	TB1_20140331	W	-	3/4/14	0720	2	N				X						X	X	X											11
12	FD1_20140331	W	C	3/4/14	1605	5	N				X					X	X	X	X											12

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
BTS	3/4/14	1745	BTS	3/4/14	1745
(Sample Custody)	3/5/14	1700			
			Kiff Analytical	030614	1147

SHIPPING METHOD (mark as appropriate): UPS COURIER FEDEX US MAIL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: DOUG WHICHARD
SIGNATURE of SAMPLER:
DATE Signed: 3/4/14 Time: 1635

Sample Receipt Conditions

	Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 87632

Sample Receipt	Initials/Date: Eyg 030614	Storage Time: 1147	Sample Login	Initials/Date: Eyg 030614

TAT: ☒ Standard ☐ Rush ☐ Split ☐ None

Method of Receipt: ☐ Courier ☐ Over-the-counter ☒ Shipped

Temp °C 0.8 ☐ N/A | Therm ID IR3 | Time 1000 | Coolant present ☒ Yes ☐ No ☐ Water | ☐ Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time: Eyg 030614 1000 | Custody Seals ☒ N/A ☐ Intact ☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	✓	
Is COC signed by relinquisher?	✓	
Is COC dated by relinquisher?	✓	
Is the sampler's name on the COC?	✓	
Are there analyses or hold for all samples?	✓	

Documented on	COC	Labels	Discrepancies:
Sample ID	✓	✓	
Project ID	✓	✓	
Sample Date	✓	✓	
Sample Time	✓		
Does COC match project history?	☐ N/A	☐ Yes	☒ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	✓		
Are sample containers intact?		✓	
Is preservation documented?		✓	
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?		✓	
Are samples within holding time?		✓	
Are sample container types correct?		✓	
Is there adequate sample volume?		✓	

Comments: SR logged The pH 150.2 as pH 150.1 until further clarification from The Lab and Client Services. pH 150.2 is not in the LIMS at this time. Eyg 030614 1257

Receipt Details:

Matrix	Container Type	# of Containers
WA	Voa	57
WA	Amber	06
WA	poly - 500ml	02
WA	poly - 250ml	04

CS Required: ☒

Proceed With Analysis: ☐ YES ☐ NO Init/Date:

Client Communication:

Leaders in Analytical Science and Service

KIFF Analytical LLC

Subcontract Laboratory Report Attachments

2795 Second Street, Suite 300 Davis, CA 95618
tel 530.297.4800 fax 530.297.4808
www.kiffanalytical.com

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 14-03-0523

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: 2705191

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

Amanda Porter

Approved for release on 03/17/2014 by:
Amanda Porter
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: 2705191
Work Order Number: 14-03-0523

Calscience Environmental Laboratories, Inc.

Work Order Narrative

Work Order: 14-03-0523 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/07/14. They were assigned to Work Order 14-03-0523.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Calscience Environmental Laboratories, Inc.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505
Project: 2705191

Date Received: 03/07/14
Work Order: 14-03-0523

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix
MW-12_20140331	**14-03-0523-1**	**03/04/14 15:05**	**Aqueous**

Parameter	Results	RL	DF	Qualifiers	Units	Date Prepared	Date Analyzed	Method
HEM: Oil and Grease	1.9	1.0	1.00		mg/L	03/14/14	03/14/14	EPA 1664A
Phenolics, Total	0.10	0.10	1.00		mg/L	03/12/14	03/12/14	EPA 420.1
Cyanide, Total	ND	0.020	1.00		mg/L	03/11/14	03/11/14	SM 4500-CN E

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix
MW-6_20140331	**14-03-0523-2**	**03/04/14 15:40**	**Aqueous**

Parameter	Results	RL	DF	Qualifiers	Units	Date Prepared	Date Analyzed	Method
HEM: Oil and Grease	1.6	1.0	1.00		mg/L	03/14/14	03/14/14	EPA 1664A
Phenolics, Total	ND	0.10	1.00		mg/L	03/12/14	03/12/14	EPA 420.1
Cyanide, Total	ND	0.020	1.00		mg/L	03/11/14	03/11/14	SM 4500-CN E

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Parameter	Results	RL	DF	Qualifiers	Units	Date Prepared	Date Analyzed	Method
HEM: Oil and Grease	ND	1.0	1.00		mg/L	03/14/14	03/14/14	EPA 1664A
Phenolics, Total	ND	0.10	1.00		mg/L	03/12/14	03/12/14	EPA 420.1
Cyanide, Total	ND	0.020	1.00		mg/L	03/11/14	03/11/14	SM 4500-CN E

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Project: 2705191

Date Received: 03/07/14
Work Order: 14-03-0523
Preparation: N/A
Method: EPA 1664A

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-12_20140331	**Sample**	**Aqueous**	**N/A**	**03/14/14**	**03/14/14 15:00**	**E0314HEMS1**
MW-12_20140331	**Matrix Spike**	**Aqueous**	**N/A**	**03/14/14**	**03/14/14 15:00**	**E0314HEMS1**
MW-12_20140331	**Matrix Spike Duplicate**	**Aqueous**	**N/A**	**03/14/14**	**03/14/14 15:00**	**E0314HEMS1**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
HEM: Oil and Grease	1.900	40.00	39.10	93	39.20	93	78-114	0	0-18	

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RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 2705191

Date Received: 03/07/14
Work Order: 14-03-0523
Preparation: N/A
Method: EPA 1664A

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-119-3582	**LCS**	**Aqueous**	**N/A**	**03/14/14**	**03/14/14 15:00**	**E0314HEML1**
099-05-119-3582	**LCSD**	**Aqueous**	**N/A**	**03/14/14**	**03/14/14 15:00**	**E0314HEML1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
HEM: Oil and Grease	40.00	38.70	97	38.40	96	78-114	1	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 2705191

Date Received: 03/07/14
Work Order: 14-03-0523
Preparation: N/A
Method: EPA 420.1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-085-2746	**LCS**	**Aqueous**	**UV 9**	**03/12/14**	**03/12/14 15:19**	**E0312PHEL1**
099-05-085-2746	**LCSD**	**Aqueous**	**UV 9**	**03/12/14**	**03/12/14 15:19**	**E0312PHEL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Phenolics, Total	0.5000	0.4400	88	0.4300	86	80-120	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCSD

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

Project: 2705191

Date Received: 03/07/14
Work Order: 14-03-0523
Preparation: N/A
Method: SM 4500-CN E
Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-061-3663	**LCS**	**Aqueous**	**UV 8**	**03/11/14**	**03/11/14 20:46**	**E0311CNL2**
099-05-061-3663	**LCSD**	**Aqueous**	**UV 8**	**03/11/14**	**03/11/14 20:46**	**E0311CNL2**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Cyanide, Total	0.2000	0.1610	80	0.1620	81	80-120	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Calscience Environmental Laboratories, Inc.

Sample Analysis Summary Report

Work Order: 14-03-0523 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 1664A	N/A	691	N/A	1
EPA 420.1	N/A	686	UV 9	1
SM 4500-CN E	N/A	880	UV 8	1

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

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

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

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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

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

14-03-0523

COC No. **87632** Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Scott Forbes

Company/Address: Kiff Analytical

Phone No.: 530-297-4800 FAX No.: 530-297-4808

Project Number: P.O. No.: **87632**

Project Name: 2705191

Project Address:

EDF Report? YES

Recommended but not mandatory to complete this section:

Sampling Company Log Code: DECR

Global ID: T0600101476

Deliverables to (Email Address): inbox@kiffanalytical.com

Sample Designation	Sampling Date	Sampling Time	Container / Preservative: 1-L Amber H2SO4	Container / Preservative: 500 ml Poly NaOH	Matrix: Water	Analysis Request: Cyanide	Analysis Request: Hexane-Extractable Oil and Grease	Analysis Request: Phenolics, Total	TAT: 4-Days	For Lab Use Only
MW-12_20140331	03/04/14	15:05	3	1	X	X	X	X	X	1
MW-6_20140331	03/04/14	15:40	3	1	X	X	X	X	X	2

Relinquished by:	Date	Time	Received by:
Kiff Analytical	030614	1700	
Relinquished by:	Date	Time	Received by:
Relinquished by: (Ontrac)	Date 3/7/14	Time 0915	Received by Laboratory:

Remarks:

Bill to: Accounts Payable

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0523

OnTrac
On Time Delivery For Less

800.334.5000
ontrac.com

D10010663849540

Date Printed 3/6/2014

Tracking#D10010663849540

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

Sent By: SAMPLE RECEIVINGX125
Phone#: (530)297-4800
wgt(lbs): 40
Reference: SUBS
Reference 2: 600

Ship To Company:	*Service:* **S**
CALSCIENCE ENVIRONMENTAL LABS **7440 LINCOLN WAY** **GARDEN GROVE, CA 92841** **SAMPLE RECEIVING (714)895-5494**	*Sort Code:* **ORG** *Special Services:* **Signature Required**

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-03-0523

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Kiff DATE: 03/07/14

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.9 °C - 0.3 °C (CF) = 2.6 °C ☐ Blank ☑ Sample

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

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

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

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Checked by: 836

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Checked by: 603

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☐	☐	☑
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** (3) ☑1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☑500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: 603

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope Reviewed by: 778

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered Scanned by: 603

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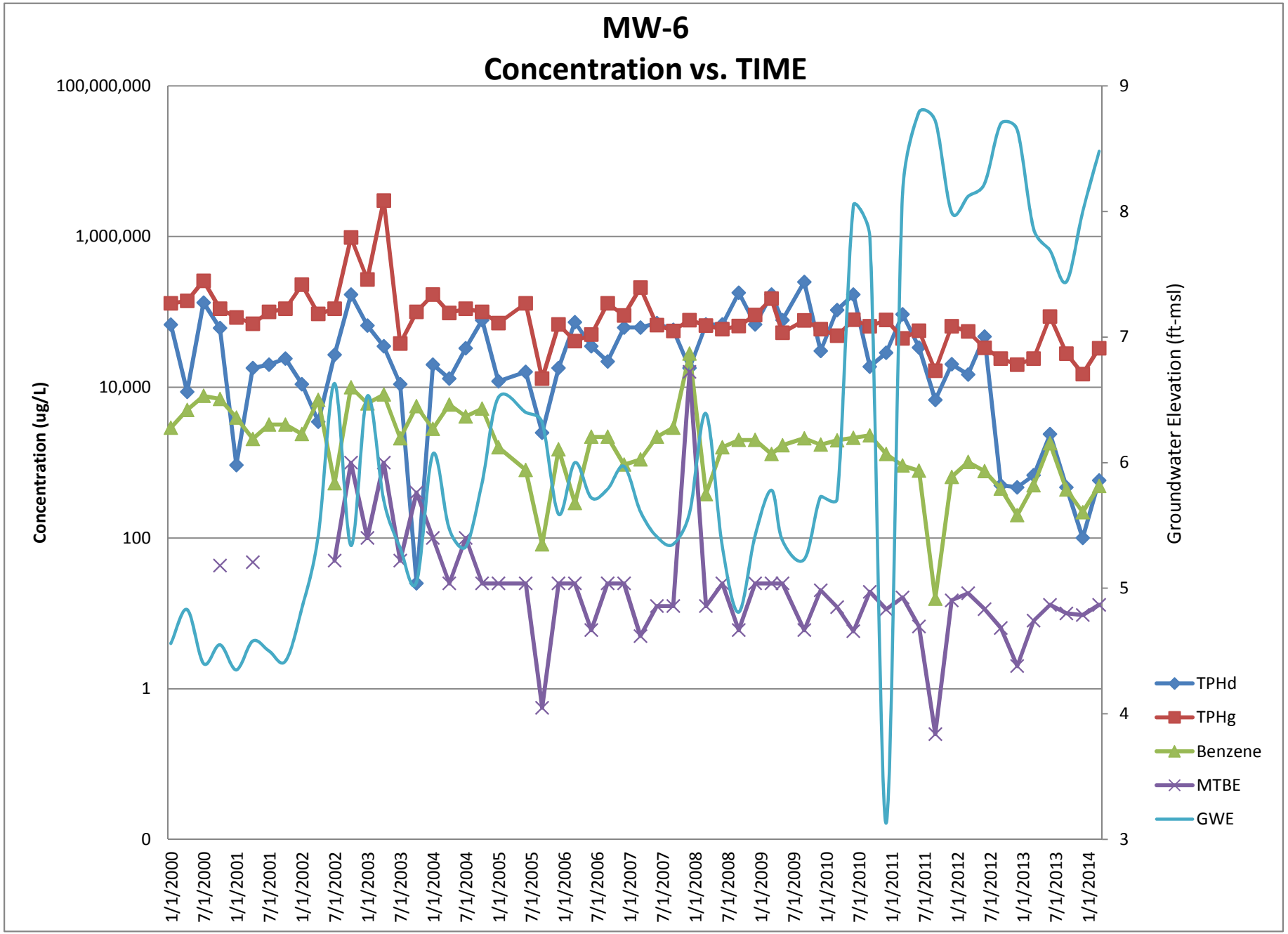
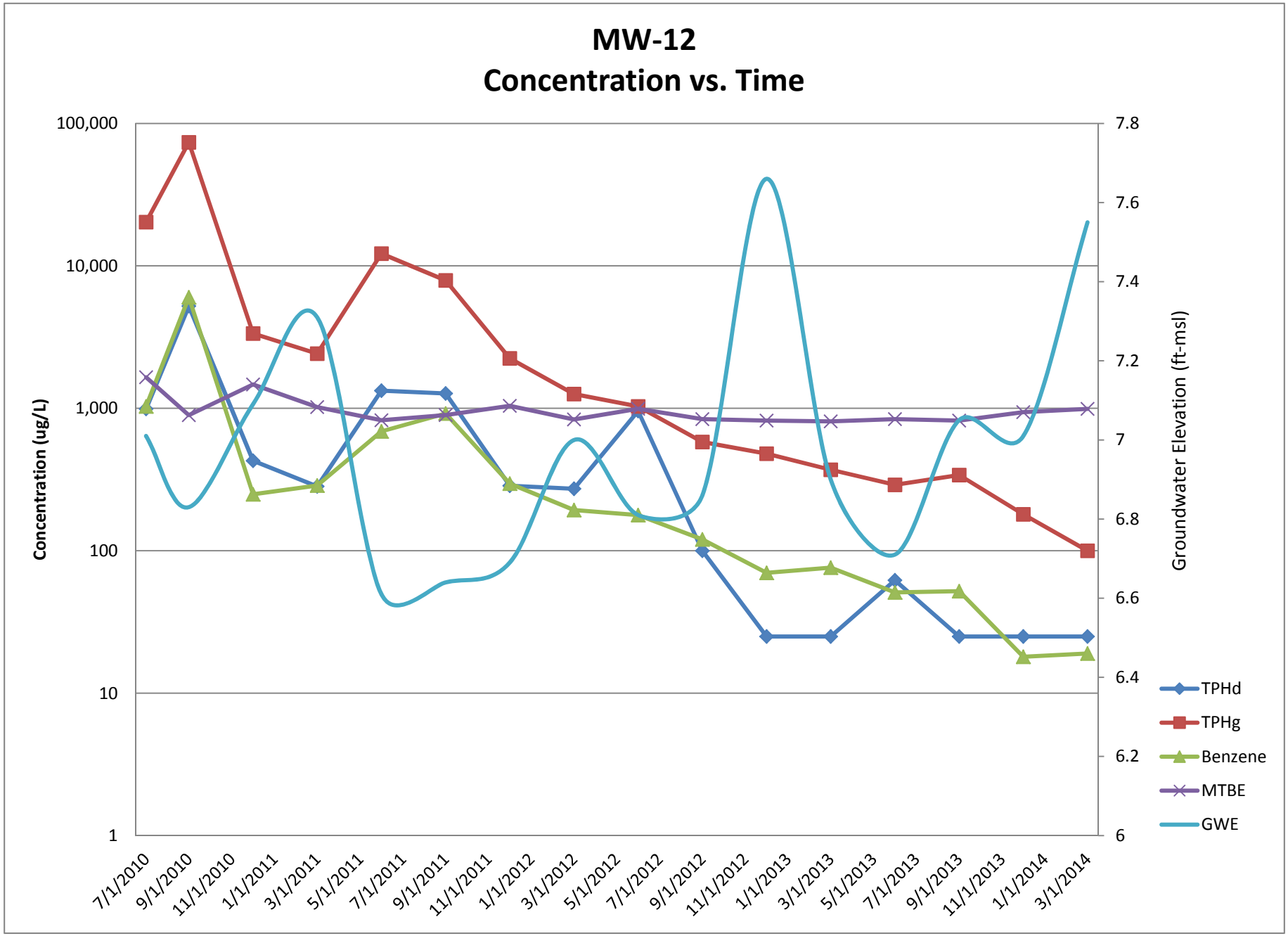
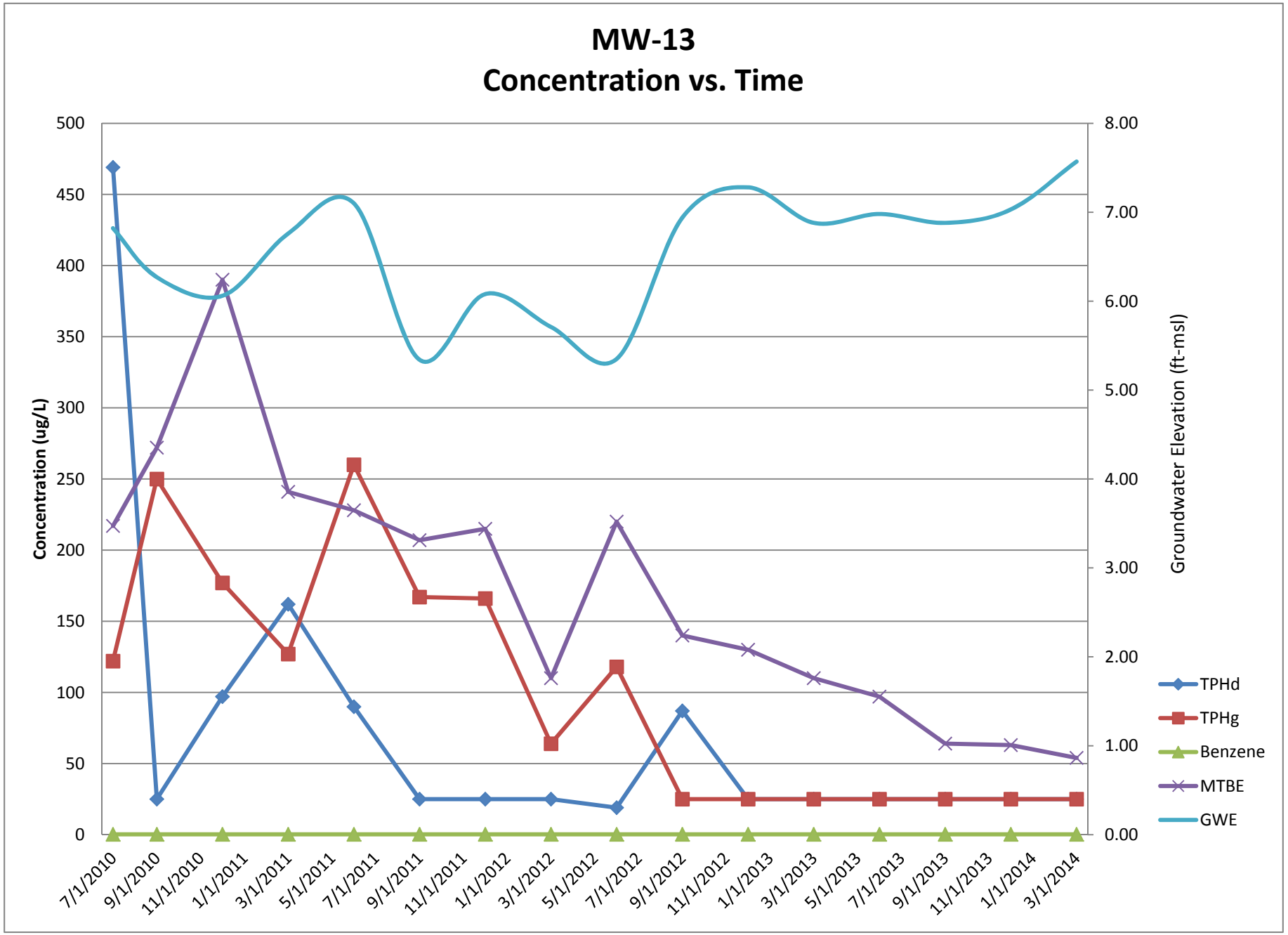
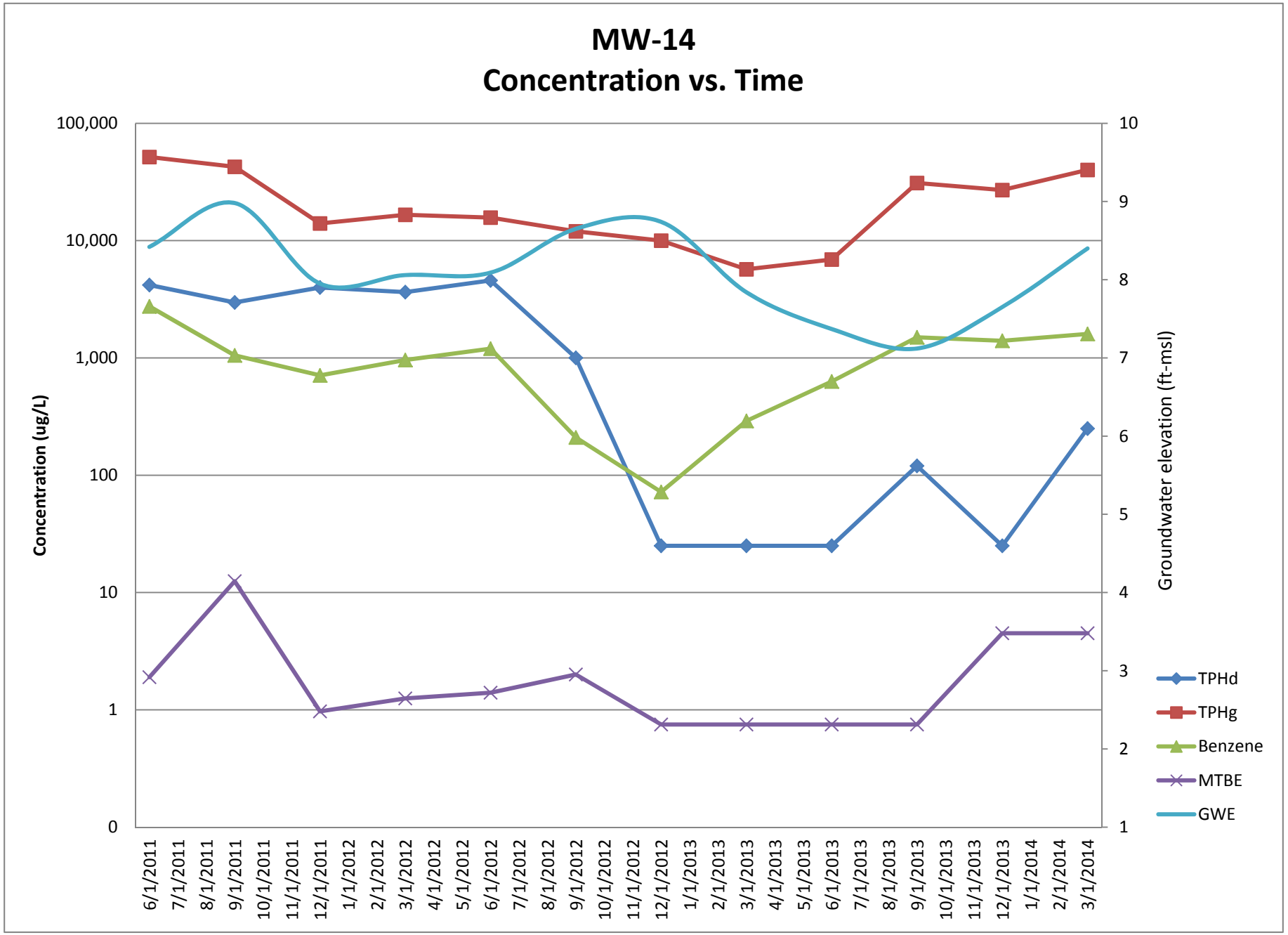
Appendix E

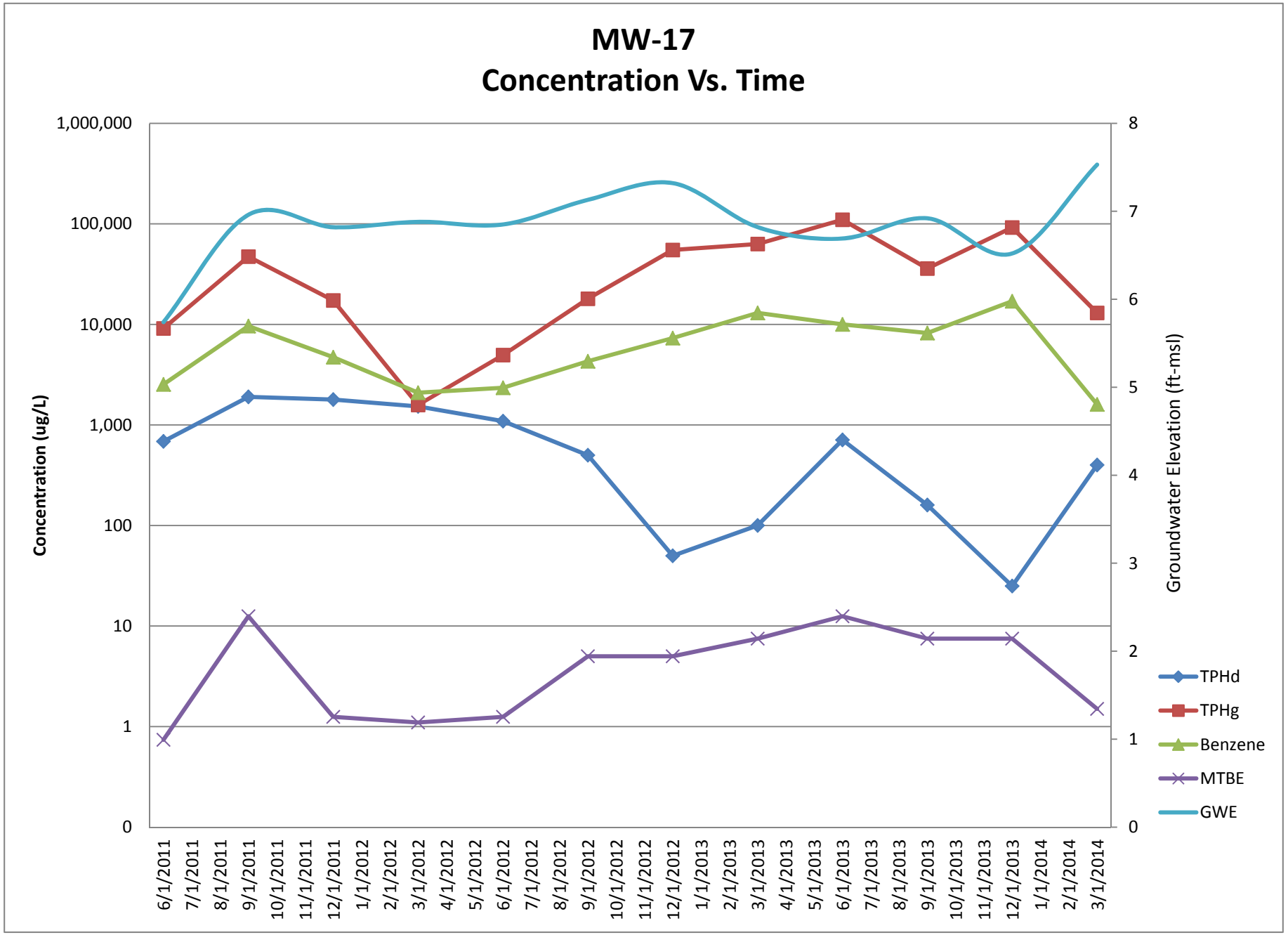
Concentration vs. Time Graphs


MW-6
Concentration vs. TIME
Concentration (ug/L)
100,000,000
1,000,000
10,000
100
1
0
Groundwater Elevation (ft-msl)
9
8
7
6
5
4
3
1/1/2000
7/1/2000
1/1/2001
7/1/2001
1/1/2002
7/1/2002
1/1/2003
7/1/2003
1/1/2004
7/1/2004
1/1/2005
7/1/2005
1/1/2006
7/1/2006
1/1/2007
7/1/2007
1/1/2008
7/1/2008
1/1/2009
7/1/2009
1/1/2010
7/1/2010
1/1/2011
7/1/2011
1/1/2012
7/1/2012
1/1/2013
7/1/2013
1/1/2014
TPHd
TPHg
Benzene
MTBE
GWE


MW-12
Concentration vs. Time
Concentration (ug/L)
100,000
10,000
1,000
100
10
1
Groundwater Elevation (ft-msl)
7.8
7.6
7.4
7.2
7
6.8
6.6
6.4
6.2
6
7/1/2010
9/1/2010
11/1/2010
1/1/2011
3/1/2011
5/1/2011
7/1/2011
9/1/2011
11/1/2011
1/1/2012
3/1/2012
5/1/2012
7/1/2012
9/1/2012
11/1/2012
1/1/2013
3/1/2013
5/1/2013
7/1/2013
9/1/2013
11/1/2013
1/1/2014
3/1/2014
TPHd
TPHg
Benzene
MTBE
GWE


MW-13
Concentration vs. Time
Concentration (ug/L)
Groundwater Elevation (ft-msl)
500
450
400
350
300
250
200
150
100
50
0
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
7/1/2010
9/1/2010
11/1/2010
1/1/2011
3/1/2011
5/1/2011
7/1/2011
9/1/2011
11/1/2011
1/1/2012
3/1/2012
5/1/2012
7/1/2012
9/1/2012
11/1/2012
1/1/2013
3/1/2013
5/1/2013
7/1/2013
9/1/2013
11/1/2013
1/1/2014
3/1/2014
TPHd
TPHg
Benzene
MTBE
GWE


MW-14
Concentration vs. Time
Concentration (ug/L)
Groundwater elevation (ft-msl)
100,000
10,000
1,000
100
10
1
0
10
9
8
7
6
5
4
3
2
1
6/1/2011
7/1/2011
8/1/2011
9/1/2011
10/1/2011
11/1/2011
12/1/2011
1/1/2012
2/1/2012
3/1/2012
4/1/2012
5/1/2012
6/1/2012
7/1/2012
8/1/2012
9/1/2012
10/1/2012
11/1/2012
12/1/2012
1/1/2013
2/1/2013
3/1/2013
4/1/2013
5/1/2013
6/1/2013
7/1/2013
8/1/2013
9/1/2013
10/1/2013
11/1/2013
12/1/2013
1/1/2014
2/1/2014
3/1/2014
TPHd
TPHg
Benzene
MTBE
GWE


MW-17
Concentration Vs. Time
Concentration (ug/L)
Groundwater Elevation (ft-msl)
1,000,000
100,000
10,000
1,000
100
10
1
0
8
7
6
5
4
3
2
1
0
6/1/2011
7/1/2011
8/1/2011
9/1/2011
10/1/2011
11/1/2011
12/1/2011
1/1/2012
2/1/2012
3/1/2012
4/1/2012
5/1/2012
6/1/2012
7/1/2012
8/1/2012
9/1/2012
10/1/2012
11/1/2012
12/1/2012
1/1/2013
2/1/2013
3/1/2013
4/1/2013
5/1/2013
6/1/2013
7/1/2013
8/1/2013
9/1/2013
10/1/2013
11/1/2013
12/1/2013
1/1/2014
2/1/2014
3/1/2014
TPHd
TPHg
Benzene
MTBE
GWE