July 29, 2014

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

Subject: **Quarterly Summary Report, Second 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, Second 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

July 29, 2014

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

Prepared by:
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1.0 INTRODUCTION

Antea™Group is pleased to submit this *Quarterly Summary Report, Second 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 June 12, 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 [Second Quarter 2014]

1. Antea Group mailed out the Public Notice Fact Sheet, dated April 8, 2014 detailing the proposed soil excavation work.
2. Antea Group submitted the *Quarterly Summary Report, First Quarter 2014*, dated May 1, 2014 to the Alameda County Health Care Services Agency (ACHCSA).
3. Ante Group submitted the *Work Plan – Monitoring Well Destruction*, dated May 8, 2014 to the ACHCSA.
4. Blaine Tech Services, Inc. (Blaine Tech) conducted the second quarter 2014 groundwater monitoring and sampling event on June 12, 2014.
5. Antea Group destroyed the on-site wells as described in *the Work Plan – Monitoring Well Destruction* on June 18, 2014 in preparation for on-site excavation activities.
6. Antea Group submitted the *Remedial Design and Implementation Plan*, dated June 19, 2014 to the ACHCSA.
7. Antea Group submitted the *Work Plan – CPT Investigation*, dated June 20, 2014 to the ACHCSA.

1.2 Work Proposed [Third Quarter 2014]

1. Antea Group will submit the *Quarterly Summary Report, Second Quarter 2014* (contained herein) to the ACHCSA.
2. Antea Group will conduct the site investigation activities as outlined by the *Work Plan - Monitoring Well Installation*, dated November 21, 2013.

3. Antea Group will conduct the site investigation activities as outlined by the *Work Plan – CPT Investigation*, dated June 20, 2014.

4. Blaine Tech will conduct the third 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 April 3, 2014. The email detailed ACHCSAs approval of the draft Public Notice Fact Sheet and detailed the distribution timeline for mailing out the fact sheet and the public comment period. The email also outlined a timeline for submitting documents requested in the email. Antea Group received a letter from ACHCSA dated June 12, 2014. The letter detailed ACHCSA's denial of a request made by Beretta Property Management to destroy monitoring wells MW-7 and MW-8 which are located on the property owned by Beretta Property Management adjacent to the site to the south.

2.2 Remedial Activities

No remedial activities took place during the second quarter 2014.

2.3 Groundwater Monitoring

During the second quarter 2014 groundwater monitoring and sampling event, fourteen monitoring wells were gauged, 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:	June 12, 2014
Wells gauged:	MW-3, MW-6 through MW-12, MW-12A, and MW-13 through MW-17
Wells sampled:	MW-3, MW-6 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: 2.39 (MW-9) Max: 5.76 (MW-7)
Current groundwater elevation range (ft):	Min: 5.88 (MW-7) Max: 8.55 (MW-9)
Change in water depths from previous event (average change for all gauged wells):	0.74 foot increase
Groundwater flow direction and gradient in foot per foot (ft/ft):	South at 0.02 ft/ft

2.3.1 Groundwater Flow Gradient and Directional Trends

The second quarter 2014 groundwater monitoring and sampling event was performed by Blaine Tech on June 12, 2014. The average groundwater elevation decreased 0.74 feet from the March 2014 event. Depth to groundwater in the site monitoring wells ranged from 2.39 feet (MW-9) to 5.76 feet (MW-7) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the south at 0.02 ft/ft during the current event (**Table 4**).

2.3.2 Groundwater Quality Data

Groundwater samples collected during the second 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.

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 June 12, 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	5 of 14	200 (MW-12)	36,000 (MW-14)
TPHd	3 of 14	64 (MW-14)	570 (MW-6)
Benzene	5 of 14	4.4 (MW-10)	3,600 (MW-17)
Toluene	4 of 14	3.3 (MW-12)	410 (MW-17)
Ethylbenzene	4 of 14	4.2 (MW-12)	3,000 (MW-14)
Total Xylenes	5 of 14	0.91 (MW-10)	6,500 (MW-14)
MTBE	8 of 14	3.3 (MW-9)	920 (MW-12)
TBA	7 of 14	8.6 (MW-12)	440 (MW-16)

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

2.3.3 Groundwater Contaminant Trends

During the second quarter 2014, analytical results from the groundwater sample collected from monitoring well MW-3 indicated that TPHg decreased in concentration and MTBE and TBA increased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-6 indicated that TPHd, benzene, toluene, total xylenes, and MTBE decreased in concentration and TPHg, ethylbenzene, and TBA increased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-9 indicated that MTBE increased in concentration. Analytical results from the groundwater sample collected from monitoring well MW-10 indicated that benzene and total xylenes increased 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 MTBE decreased in concentration and TPHg, BTEX, and TBA increased in concentration. MTBE concentrations decreased in monitoring well MW-13 and TBA concentrations increased. Analytical results from the groundwater sample collected from monitoring well MW-14 indicated a decrease in TPHd, TPHg, and total xylenes concentrations and an increase in toluene and ethylbenzene concentrations. Analytical results from the groundwater sample collected from monitoring well MW-15 indicated a decrease in TBA concentrations and an increase in MTBE concentrations. Analytical results from the groundwater sample collected from monitoring well MW-16 indicated a decrease in

MTBE concentration and an increase in TBA concentrations. Analytical results from the groundwater sample collected from monitoring well MW-17 indicated a decrease in TPHd, TBA, and ethanol concentrations and an increase 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 133 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 June 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 – two qualifiers*
Are the data valid for their intended purpose?	Yes, the data are valid

*The Method Reporting Limit (MRL) for Ethanol has been increased due to the presence of an interfering compound for sample MW-10_20140630.

*At the time of receipt by the laboratory, the temperature of the sample was -0.8 degrees C.

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, MW-11, MW-13, MW-14, MW-15, and MW-16 be purged and sampled on a semi-annual basis during the second and fourth quarters of each year. In addition, Antea Group recommends that monitoring wells MW-7 and MW-8 be purged and sampled annually during the second quarter of each year. As indicated above, monitoring wells MW-10, MW-12, MW-12A, and MW-17 were destroyed in preparation of the upcoming site excavation activities.

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.

PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

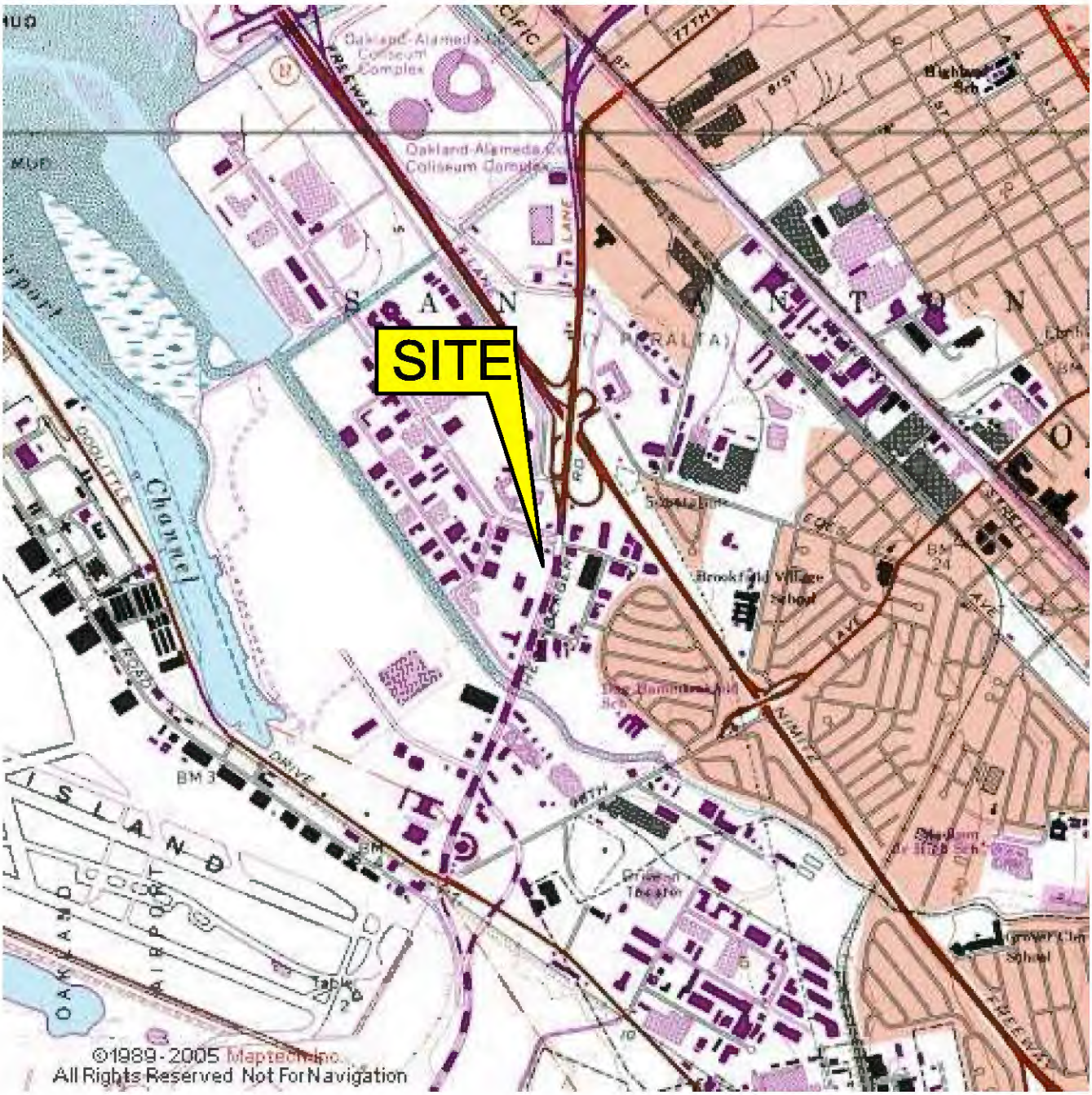
Licensed Approver:

Date: 7/29/14

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

antea group

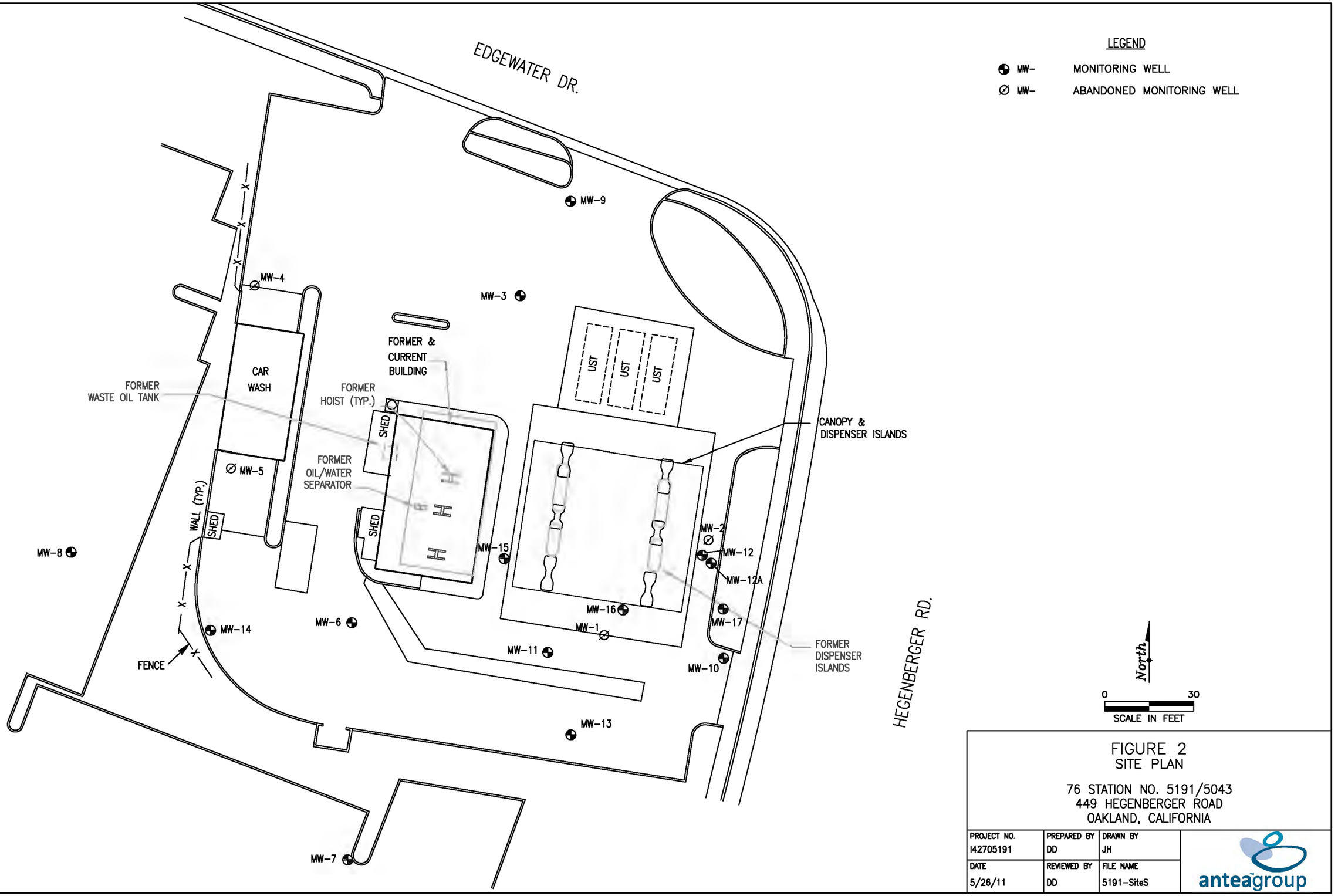


FIGURE 2
SITE PLAN

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

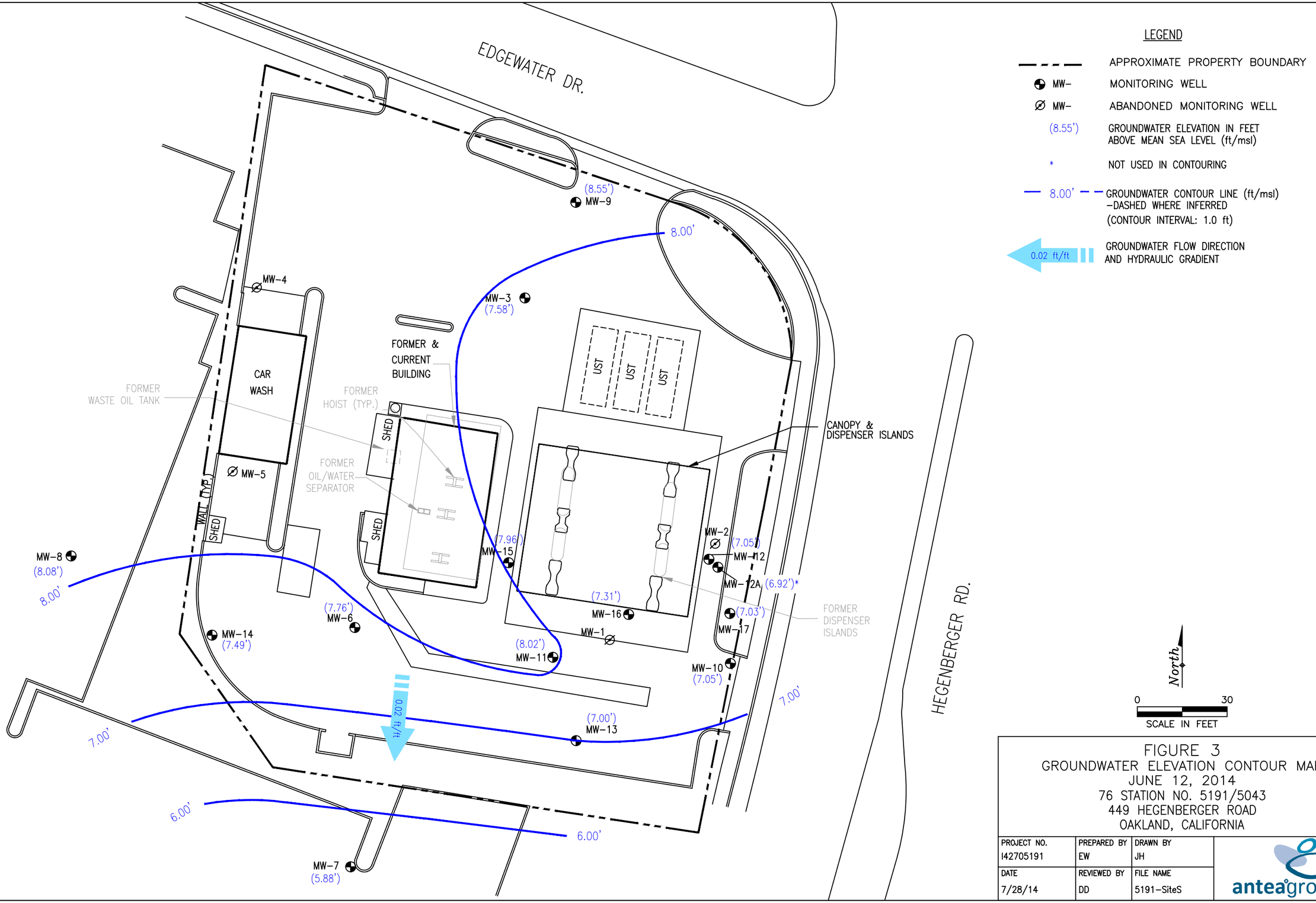


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
JUNE 12, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	JH
DATE	REVIEWED BY	FILE NAME
7/28/14	DD	5191–SiteS

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EDGEWATER DR.

MW-9
(<50)

MW-4

50
MW-3
(310)

FORMER &
CURRENT
BUILDING

FORMER
WASTE OIL TANK

CAR
WASH

FORMER
HOIST (TYP.)

SHED

UST
UST
UST

CANOPY &
DISPENSER ISLANDS

MW-5

WALL (TYP.)

FORMER
OIL/WATER
SEPARATOR

SHED

SHED

(<50)
MW-15

MW-2
(200)

MW-12

(<50)*

MW-12A

5,000
(17,000)

FORMER
DISPENSER
ISLANDS

MW-17

MW-8
(<50)

50
500
5000

MW-14
(36,000)

MW-6
(35,000)

(<50)
MW-16

MW-1

(<50)
MW-11

MW-10
(<50)

MW-13
(<50)

MW-7
(<50)

HEGENBERGER RD.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW- MONITORING WELL
- MW- ABANDONED MONITORING WELL
- (35,000) 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
* = NOT USED IN CONTOURING

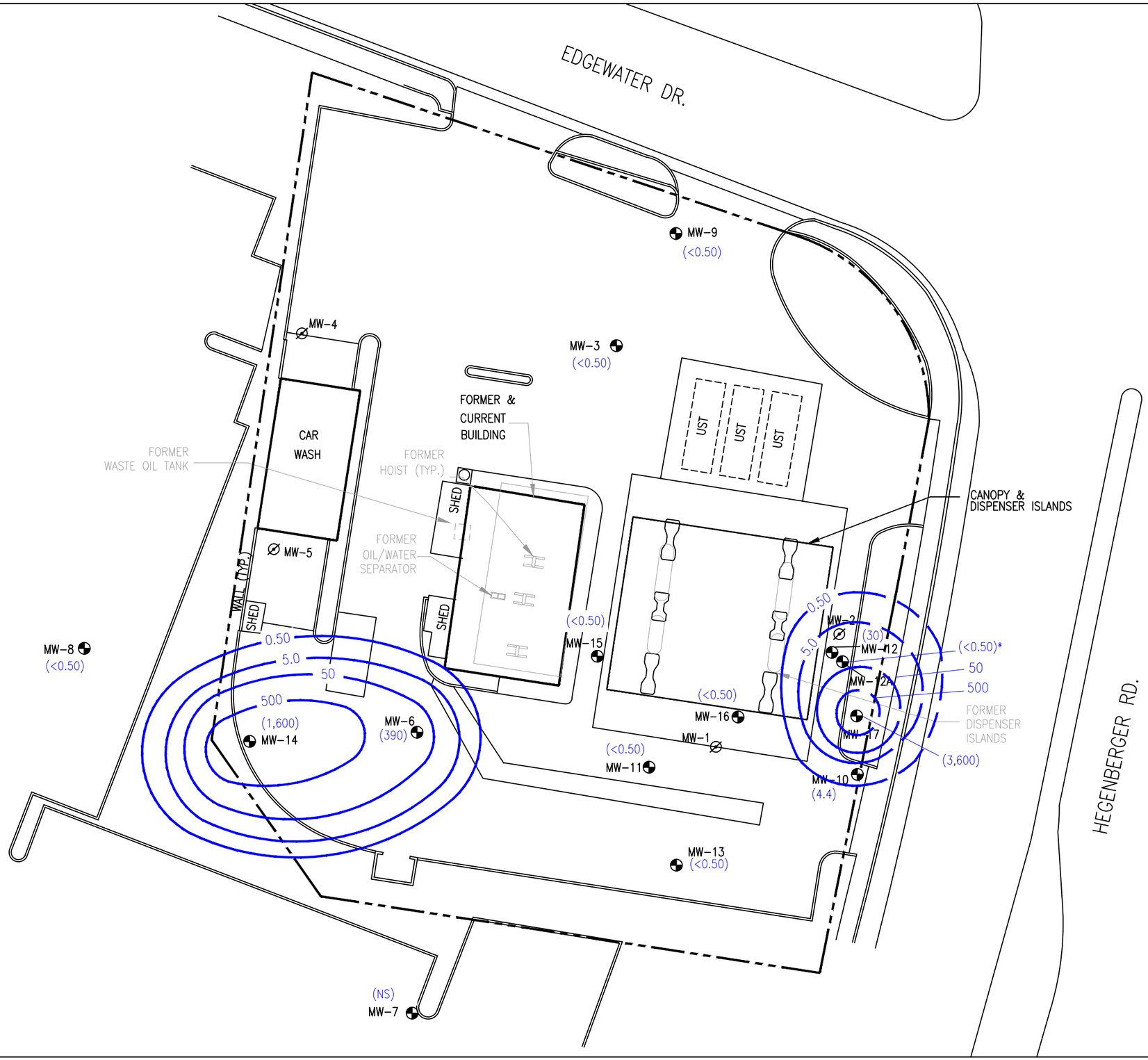
North

0 30
SCALE IN FEET

FIGURE 4
DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
JUNE 12, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	JH
DATE	REVIEWED BY	FILE NAME
7/28/14	DD	5191-SiteS

antea group



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW– MONITORING WELL
- MW– ABANDONED MONITORING WELL
- (390) 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
* = NOT USED IN CONTOURING

North

0 30

SCALE IN FEET

FIGURE 5
DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
JUNE 12, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	JH
DATE	REVIEWED BY	FILE NAME
7/28/14	DD	5191–SiteS

antea group

EDGEWATER DR.

HEGENBERGER RD.

MW-9 (3.3)

MW-4

MW-3 (28)

MW-5

MW-8 (<0.50)

MW-14 (<9.0)

MW-6 (12)

MW-7 (<0.50)

MW-15 (100)

MW-16 (92)

MW-1

MW-11 (3.7)

MW-13 (36)

MW-2

MW-12 (920)

MW-12A (<0.50)*

MW-17 (<3.0)

MW-10 (<0.50)

0.50

5.0

50

500

FORMER & CURRENT BUILDING

CAR WASH

FORMER WASTE OIL TANK

FORMER HOIST (TYP.)

FORMER OIL/WATER SEPARATOR

FORMER DISPENSER ISLANDS

CANOPY & DISPENSER ISLANDS

UST

UST

UST

SHED

SHED

SHED

WALL (TYP.)

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW- MONITORING WELL
- MW- ABANDONED MONITORING WELL
- (920) 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

North

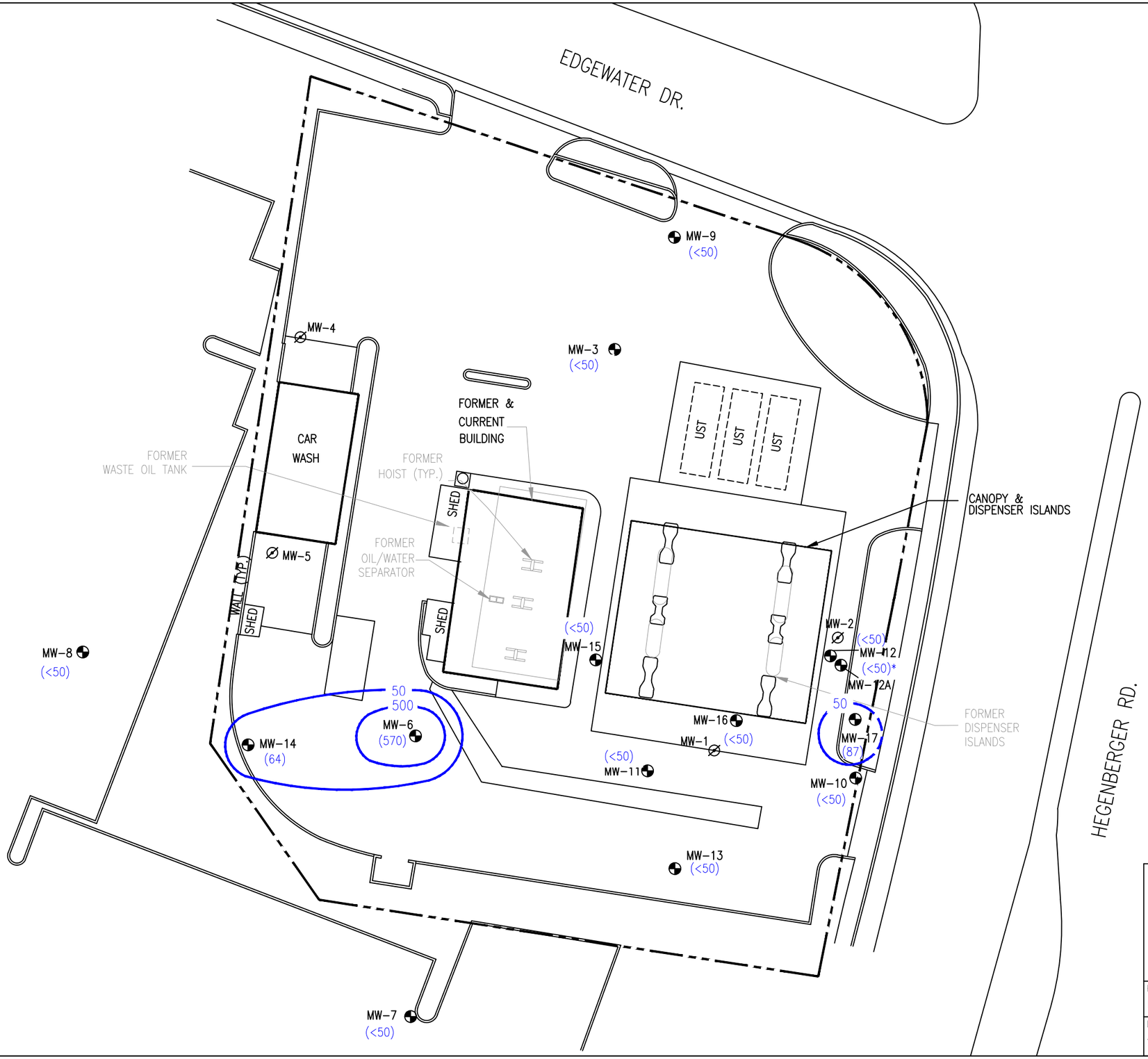
0 30

SCALE IN FEET

FIGURE 6
DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
JUNE 12, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	JH
DATE	REVIEWED BY	FILE NAME
7/28/14	DD	5191-SiteS

antea group



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- MW- MONITORING WELL
- MW- ABANDONED MONITORING WELL
- (570) DISSOLVED PHASE TPHd ISOOCONCENTRATION (µg/L)
- 50 DISSOLVED PHASE TPHd ISOCONTOUR (µg/L)

NOTES:

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

North

0 30

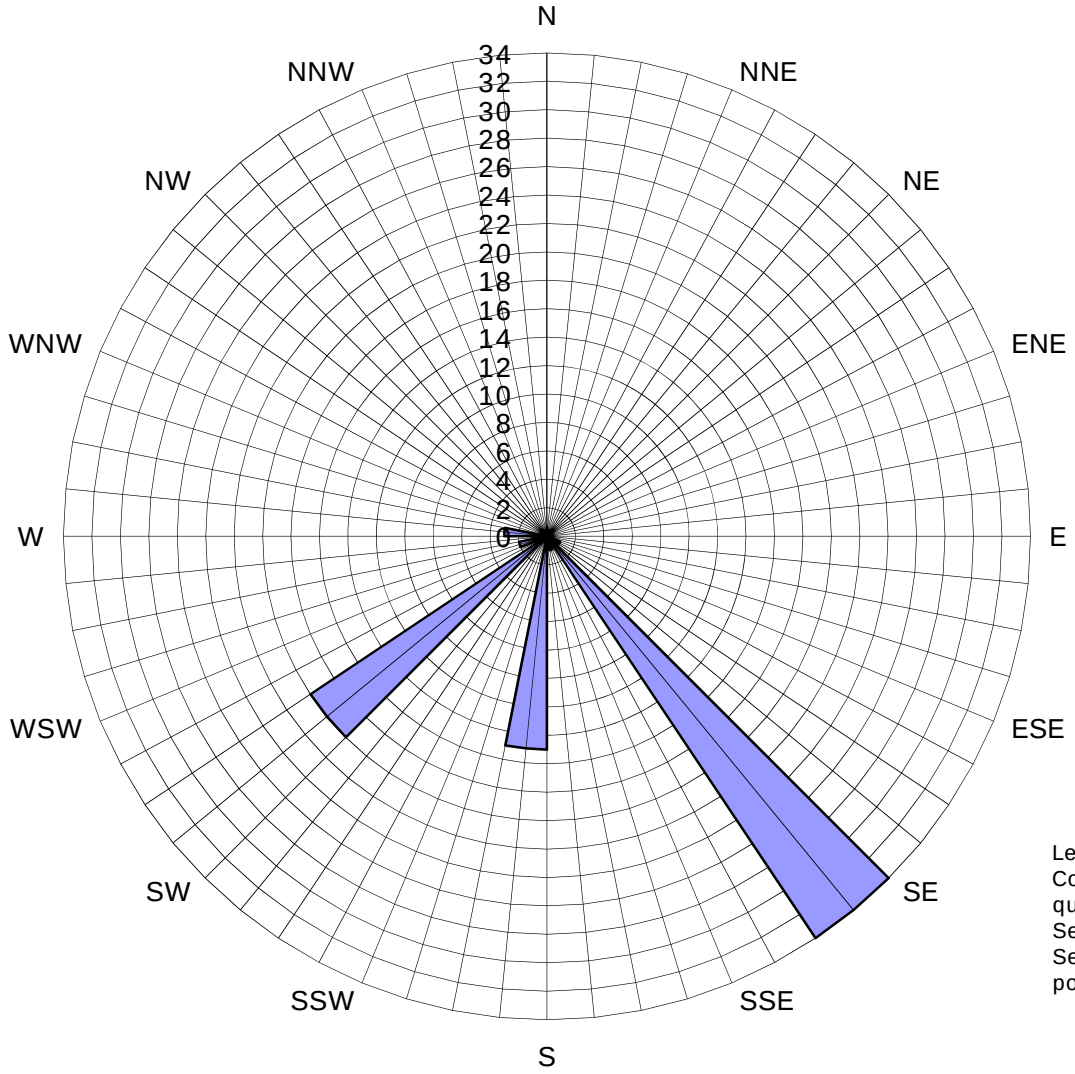
SCALE IN FEET

FIGURE 7
DISSOLVED PHASE TPHd ISOCONCENTRATION MAP
JUNE 12, 2014
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	EW	JH
DATE	REVIEWED BY	FILE NAME
7/28/14	DD	5191-SiteS

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 Second Quarter 2014. 76 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	Destoryed
MW-2	02/05/91	15.0	2	3.0	15.0	12.0	Destroyed
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	Destroyed
MW-5	08/21/92	13.5	2	2.5	13.5	11.0	Destroyed
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	6/12/2014	10.81	3.23	NP	7.58	<50	**310**	<0.50	<0.50	<0.50	<0.50	**28**	**74**	<5.0
MW-6	6/12/2014	11.55	3.79	NP	7.76	**570**	**35,000**	**390**	**17**	**690**	**1,600**	**12**	**180**	<50
MW-7	6/12/2014	11.64	5.76	NP	5.88	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-8	6/12/2014	11.32	3.24	NP	8.08	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-9	6/12/2014	10.94	2.39	NP	8.55	<50	<50	<0.50	<0.50	<0.50	<0.50	**3.3**	<5.0	<5.0
MW-10	6/12/2014	10.97	3.92	NP	7.05	<50	<50	**4.4**	<0.50	<0.50	**0.91**	<0.50	<5.0	<8.0
MW-11	6/12/2014	10.53	2.51	NP	8.02	<50	<50	<0.50	<0.50	<0.50	<0.50	**3.7**	<5.0	<5.0
MW-12	6/12/2014	11.01	3.96	NP	7.05	<50	**200**	**30**	**3.3**	**4.2**	**6.1**	**920**	**8.6**	<9.0
MW-12A	6/12/2014	11.29	4.37	NP	6.92	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0
MW-13	6/12/2014	11.08	4.08	NP	7.00	<50	<50	<0.50	<0.50	<0.50	<0.50	**36**	**43**	<5.0
MW-14	6/12/2014	12.00	4.51	NP	7.49	**64**	**36,000**	**1,600**	**43**	**3,000**	**6,500**	<9.0	<50	<90
MW-15	6/12/2014	11.11	3.15	NP	7.96	<50	<50	<0.50	<0.50	<0.50	<0.50	**100**	**31**	<5.0
MW-16	6/12/2014	10.98	3.67	NP	7.31	<50	<50	<0.50	<0.50	<0.50	<0.50	**92**	**440**	<5.0
MW-17	6/12/2014	11.52	4.49	NP	7.03	**87**	**17,000**	**3,600**	**410**	**650**	**1,100**	<3.0	**300**	<30

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 (silica gel treated)

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**	**4.8**	**22**	**1.8**	**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**	**6.1**	--	--	--	--	--	--	--	--	--
	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	**6.2**	**9.1**	--	--	--	--	--	--	--	--	--
	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**	**0.54**	ND	**0.97**	--	--	--	--	--	--	--	--	--
	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**	**6.5**	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**	**1.1**	ND	**2.4**	**1.4**	**910**	--	--	--	--	--	--	--	--
	1/14/1998	8.04	2.16	NP	5.88	**340**	**310**	ND	ND	**0.62**	**0.65**	**140**	--	--	--	--	--	--	--	--
	4/1/1998	8.04	2.20	NP	5.84	**320**	**370**	**5.7**	ND	ND	ND	**93**	--	--	--	--	--	--	--	--
	7/15/1998	8.04	3.38	NP	4.66	**510**	**460**	ND	ND	ND	ND	**230**	--	--	--	--	--	--	--	--
	10/16/1998	8.04	2.30	NP	5.74	**67**	**330**	**4.7**	ND	ND	ND	**60**	--	--	--	--	--	--	--	--
	1/25/1999	8.04	2.42	NP	5.62	**120**	**420**	**1.5**	ND	ND	ND	**180**	--	--	--	--	--	--	--	--
	4/15/1999	8.04	2.16	NP	5.88	**170**	**290**	**0.54**	ND	ND	ND	**160**	--	--	--	--	--	--	--	--
	7/14/1999	8.04	2.35	NP	5.69	**420**	**290**	**3.2**	ND	ND	ND	**160**	--	--	--	--	--	--	--	--
	10/21/1999	8.04	2.49	NP	5.55	**350**	**360**	**0.77**	ND	ND	ND	**82**	--	--	--	--	--	--	--	--
	1/20/2000	8.04	2.38	NP	5.66	**2,060**	ND	**0.81**	ND	ND	ND	**54**	--	--	--	--	--	--	--	--
	4/13/2000	8.04	2.76	NP	5.28	**200**	**250**	**0.69**	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**	**1.59**	ND	ND	ND	**118**	--	--	--	--	--	--	--	--
	4/4/2001	8.04	3.98	NP	4.06	**360**	**417**	**1.24**	ND	ND	**0.802**	**237**	--	--	--	--	--	--	--	--
	7/17/2001	8.04	3.12	NP	4.92	**270**	**480**	ND	ND	ND	ND	**150**	--	--	--	--	--	--	--	--
	10/1/2001	8.04	3.25	NP	4.79	**270**	**310**	**1.0**	<0.50	<0.50	<0.50	**53**	--	--	--	--	--	--	--	--
	1/31/2002	8.04	2.27	NP	5.77	**250**	**250**	**3.5**	<1.0	<1.0	<1.0	**110**	--	--	--	--	--	--	--	--
	4/18/2002	8.04	3.55	NP	4.49	**320**	**300**	<2.0	<2.0	<2.0	<2.0	--	**59**	--	--	--	--	--	--	--
	7/28/2002	8.04	2.55	NP	5.49	**310**	**500**	<0.50	<0.50	<0.50	<1.0	--	**130**	--	--	--	--	--	--	--
	10/9/2002	8.04	2.47	NP	5.57	**700**	**690**	**<5**	<5	<5	<10	--	**120**	--	--	--	--	--	--	--
	1/2/2003	8.04	1.70	NP	6.34	**210**	**310**	<0.50	<0.50	<0.50	<1.0	--	**110**	<2.0	<2.0	<2.0	<100	<500	<2.0	<2.0
	4/1/2003	8.04	3.48	NP	4.56	**200**	**250**	<1.0	<1.0	<1.0	<2.0	--	**210**	--	--	--	--	--	--	--
	7/1/2003	8.04	2.65	NP	5.39	**380**	**450**	<2.5	<2.5	<2.5	<5.0	--	**70**	--	--	--	--	<2500	--	--
	10/2/2003	8.04	3.12	NP	4.92	**300**	<250	<2.5	<2.5	<2.5	<5.0	--	**210**	--	--	--	--	<2500	--	--
	1/9/2004	8.04	2.39	NP	5.65	**200**	**300**	<0.50	**0.53**	**0.53**	**1.5**	--	**66**	--	--	--	--	<500	--	--
	4/26/2004	8.04	3.11	NP	4.93	**160**	**440**	**2.5**	**5.50**	**2.90**	**9.4**	--	**81**	--	--	--	--	<50	--	--
	7/22/2004	8.04	2.51	NP	5.53	**330**	**420**	<0.5	<0.5	<0.5	<1	--	**72**	--	--	--	--	<1000	--	--
	10/29/2004	8.04	2.00	NP	6.04	**200**	**460**	**5.6**	**15**	**10**	**46**	--	**48**	--	--	--	--	<50	--	--
	1/10/2005	8.04	1.52	NP	6.52	**250**	**280**	<0.50	**0.62**	<0.50	**2.4**	--	**64**	--	--	--	--	<50	--	--
	6/15/2005	8.04	2.00	NP	6.04	**360**	**460**	<0.50	**0.70**	0.56	**1.9**	--	**110**	--	--	--	--	<50	--	--
	9/27/2005	8.04	1.90	NP	6.14	<200	**210**	<0.50	**0.60**	<0.50	<1.0	--	**100**	<0.50	<0.50	<0.50	**79**	<250	--	--
	12/13/2005	8.04	2.35	NP	5.69	**230**	**230**	<0.50	<0.50	<0.50	<1.0	--	**92**	--	--	--	--	<250	--	--
	3/23/2006	8.04	1.84	NP	6.20	**260**	**290**	<0.50	<0.50	<0.50	<1.0	--	**88**	--	--	--	--	<250	--	--
	6/23/2006	8.04	2.26	NP	5.78	**330**	**500**	<0.50	<0.50	<0.50	<1.0	--	**75**	--	--	--	--	<250	--	--
	9/26/2006	8.04	2.08	NP	5.96	**260**	**270**	<0.50	<0.50	<0.50	<0.50	--	**73**	--	--	--	--	<250	--	--
	12/22/2006	8.04	1.88	NP	6.16	**250**	**260**	<0.50	<0.50	<0.50	**1.2**	--	**71**	--	--	--	--	<250	--	--
	3/30/2007	8.04	2.47	NP	5.57	**210**	**390**	<0.50	<0.50	<0.50	<0.50	--	**120**	--	--	--	--	<250	--	--
	6/28/2007	8.04	2.54	NP	5.50	**290**	**370**	<0.50	<0.50	<0.50	<0.50	--	**55**	--	--	--	--	<250	--	--
	9/25/2007	8.04	2.56	NP	5.48	**210**	**350**	<0.50	<0.50	<0.50	<0.50	--	**61**	--	--	--	--	<250	--	--
	12/28/2007	8.04	2.29	NP	5.75	**150**	**260**	<0.50	<0.50	<0.50	<1.0	--	**66**	--	--	--	--	<250	--	--
	3/22/2008	8.04	3.26	NP	4.78	**230**	**390**	<0.50	<0.50	<0.50	<1.0	--	**39**	--	--	--	--	<250	--	--
	6/23/2008	8.04	2.60	NP	5.44	**130**	**200**	<0.50	<0.50	<0.50	<1.0	--	**46**	--	--	--	--	<250	--	--
	9/19/2008	8.04	3.45	NP	4.59	**93**	**180**	<0.50	<0.50	<0.50	<1.0	--	**120**	--	--	--	--	<250	--	--
	12/31/2008	8.04	2.55	NP	5.49	**110**	**190**	<0.50	<0.50	<0.50	<1.0	--	**38**	--	--	--	--	<250	--	--
	3/27/2009	8.04	2.37	NP	5.67	**130**	**150**	<0.50	<0.50	<0.50	<1.0	--	**50**	--	--	--	--	<250	--	--
	5/28/2009	8.04	3.32	NP	4.72	**120**	**190**	<0.50	<0.50	<0.50	<1.0	--	**60**	--	--	--	--	<250	--	--

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	**0.78**	<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	--	**--**	**--**	**--**	**--**	--	**--**	**--**	**--**	**--**	**--**	--	**--**	**--**	--
	6/12/2014	10.81	3.23	NP	7.58	<50	**310**	<0.50	<0.50	<0.50	<0.50	**--**	**28**	**--**	**--**	**--**	**74**	<5.0	**--**	--
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**	**0.89**	ND	ND	**13**	--	--	--	--	--	--	--	--	--
	11/30/1992	NSVD	NG	NG	NG	**470**	**930**	**70**	**290**	**0.79**	**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**	**4.1**	--	--	--	--	--	--	--	--	--
	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**	--	--	--	--	--	--	--	--	--

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	8/4/1993	9.12	5.15	NP	3.97	**1,100**	**3,400**	**390**	ND	**440**	**190**	--	--	--	--	--	--	--	--	--
	11/3/1993	8.87	5.25	NP	3.62	**390**	**1,400**	**320**	ND	**200**	**7.7**	--	--	--	--	--	--	--	--	--
	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**	**1.7**	**210**	**41**	--	--	--	--	--	--	--	--	--
	8/15/1994	8.87	5.08	NP	3.79	**790**	**1,300**	**130**	**6.7**	**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**	**4.6**	**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

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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	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
	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	--	--

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	9/19/2008	8.87	4.06	NP	4.81	**180,000**	**65,000**	**2,000**	**230**	**2,000**	**4,500**	--	<12	--	--	--	--	<6200	--	--
	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	--	--
	6/12/2014	11.55	3.79	NP	7.76	**570**	**35,000**	**390**	**17**	**690**	**1,600**	--	**12**	--	--	--	**180**	<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	--	--

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	10/2/2003	8.83	5.46	NP	3.37	**82**	<50	<0.50	<0.50	<0.50	<1.0	--	**4.9**	--	--	--	--	<500	--	--
	1/9/2004	8.83	3.55	NP	5.28	**75**	**54**	<0.50	<0.50	<0.50	<1.0	--	**2.4**	--	--	--	--	<500	--	--
	4/26/2004	8.83	4.49	NP	4.34	<50	<50	<0.50	<0.50	<0.50	**1.5**	--	**2.3**	--	--	--	--	<50	--	--
	7/22/2004	8.83	4.93	NP	3.90	<200	**82**	**0.90**	**2.0**	**3.5**	**9.9**	--	**1.4**	--	--	--	--	<1000	--	--
	10/29/2004	8.83	3.71	NP	5.12	**54**	**210**	**0.67**	**1.6**	**1.7**	**5.8**	--	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.83	2.77	NP	6.06	<50	**74**	**0.51**	**2.2**	**1.7**	**7.0**	--	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.83	3.40	NP	5.43	<50	<50	<0.50	<0.50	<0.50	<1.0	--	**0.88**	--	--	--	--	<50	--	--
	9/27/2005	8.83	3.44	NP	5.39	<200	<50	**0.59**	**1.2**	<0.50	<1.0	--	**0.96**	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.83	3.98	NP	4.85	<200	<50	<0.50	<0.50	<0.50	<1.0	--	**0.65**	--	--	--	--	<250	--	--
	3/23/2006	8.83	3.37	NP	5.46	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	6/23/2006	8.83	5.25	NP	3.58	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/26/2006	8.83	4.13	NP	4.70	<50	<50	<0.50	<0.50	<0.50	<0.50	--	0.77	--	--	--	--	<250	--	--
	12/22/2006	8.83	3.63	NP	5.20	**630**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	3/30/2007	8.83	4.31	NP	4.52	**94**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	6/28/2007	8.83	4.62	NP	4.21	<50	<50	<0.50	<0.50	<0.50	<0.50	--	0.54	--	--	--	--	<250	--	--
	9/25/2007	8.83	4.65	NP	4.18	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	12/28/2007	8.83	3.99	NP	4.84	**75**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/22/2008	8.83	4.08	NP	4.75	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	6/23/2008	8.83	4.10	NP	4.73	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/19/2008	8.83	4.86	NP	3.97	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	12/31/2008	8.83	4.17	NP	4.66	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/27/2009	8.83	4.00	NP	4.83	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	5/28/2009	8.83	4.71	NP	4.12	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/17/2009	8.83	4.87	NP	3.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2014	11.64	5.76	NP	5.88	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
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	--	--	--	--	--	--	--	--

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	1/25/1999	8.52	2.92	NP	5.60	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/15/1999	8.52	2.40	NP	6.12	**91**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/14/1999	8.52	3.03	NP	5.49	**120**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/21/1999	8.52	3.11	NP	5.41	**110**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	1/20/2000	8.52	3.06	NP	5.46	**583**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/13/2000	8.52	2.84	NP	5.68	**80**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/14/2000	8.52	3.39	NP	5.13	**113**	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/17/2001	8.52	3.46	NP	5.06	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/1/2001	8.52	3.51	NP	5.01	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--	--	--	--	--
	1/31/2002	8.52	2.75	NP	5.77	**260**	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--	--
	4/18/2002	8.52	2.98	NP	5.54	**160**	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--	--
	7/28/2002	8.52	2.41	NP	6.11	**140**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	10/9/2002	8.52	2.09	NP	6.43	**120**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	1/2/2003	8.52	1.98	NP	6.54	**210**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	4/1/2003	8.52	2.66	NP	5.86	**220**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	7/1/2003	8.52	3.08	NP	5.44	**170**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	<500	--	--
	10/2/2003	8.52	3.89	NP	4.63	**350**	**540**	**3.9**	**15**	**29**	**80**	--	<2.0	--	--	--	--	<500	--	--
	1/9/2004	8.52	2.38	NP	6.14	**180**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	<500	--	--
	4/26/2004	8.52	2.89	NP	5.63	**100**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<50	--	--
	7/22/2004	8.52	3.25	NP	5.27	**250**	<50	<0.5	<0.5	<0.5	<1	--	<0.5	--	--	--	--	<1000	--	--
	10/29/2004	8.52	3.06	NP	5.46	**120**	<50	<0.50	<0.50	**0.82**	**2.5**	--	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.52	1.92	NP	6.60	**140**	**58**	<0.50	**0.61**	**1.2**	**4.0**	--	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.52	2.22	NP	6.30	**140**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<50	--	--
	9/27/2005	8.52	2.43	NP	6.09	<200	<50	<0.50	<0.50	**1.2**	<1.0	--	<0.50	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.52	2.89	NP	5.63	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/23/2006	8.52	2.12	NP	6.40	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	6/23/2006	8.52	2.65	NP	5.87	<230	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/26/2006	8.52	2.75	NP	5.77	**110**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	12/22/2006	8.52	2.58	NP	5.94	**100**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	3/30/2007	8.52	2.74	NP	5.78	**120**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	6/28/2007	8.52	2.90	NP	5.62	**140**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	9/25/2007	8.52	3.26	NP	5.26	**110**	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	12/28/2007	8.52	2.64	NP	5.88	**110**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/22/2008	8.52	2.31	NP	6.21	<50	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	6/23/2008	8.52	3.13	NP	5.39	<58	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/19/2008	8.52	3.72	NP	4.80	**79**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	12/31/2008	8.52	2.98	NP	5.54	**110**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/27/2009	8.52	2.49	NP	6.03	**89**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	5/28/2009	8.52	3.12	NP	5.40	**91**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/17/2009	8.52	3.63	NP	4.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	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	--	--

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	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2014	11.32	3.24	NP	8.08	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	<5.0	<5.0	--	--
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	--	--

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	6/23/2006	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	--	--
	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/12/2014	10.94	2.39	NP	8.55	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**3.3**	--	--	--	<5.0	<5.0	--	--
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**	--	--	--	--	--	--	--	--

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	10/21/1999	8.62	4.09	NP	4.53	**96**	**140**	**22**	**0.59**	**1.7**	**7.7**	**5.3**	--	--	--	--	--	--	--	--
	1/20/2000	8.62	3.92	NP	4.70	**252**	ND	**0.73**	**0.86**	ND	ND	**5.2**	--	--	--	--	--	--	--	--
	4/13/2000	8.62	3.85	NP	4.77	**69**	**67**	**54**	ND	**2.6**	ND	**3.8**	--	--	--	--	--	--	--	--
	7/14/2000	8.62	4.18	NP	4.44	**149**	ND	**0.547**	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/26/2000	8.62	3.96	NP	4.66	**83**	ND	**3.3**	ND	**0.83**	**1.5**	ND	--	--	--	--	--	--	--	--
	1/3/2001	8.62	4.14	NP	4.48	**126**	**52.7**	**5.15**	ND	**0.823**	**1.57**	ND	--	--	--	--	--	--	--	--
	4/4/2001	8.62	3.88	NP	4.74	**75**	**129**	**28.1**	**1.67**	**4.97**	**10.1**	ND	--	--	--	--	--	--	--	--
	7/17/2001	8.62	4.08	NP	4.54	ND	ND	**4.1**	ND	**1.0**	**1.8**	ND	--	--	--	--	--	--	--	--
	10/1/2001	8.62	4.22	NP	4.40	**100**	**140**	**30**	**0.51**	**4.0**	**12**	<5.0	--	--	--	--	--	--	--	--
	1/31/2002	8.62	3.68	NP	4.94	**170**	**110**	**16**	<0.50	**2.3**	**5.6**	<2.5	--	--	--	--	--	--	--	--
	4/18/2002	8.62	4.01	NP	4.61	**130**	<50	**11**	<0.50	**1.4**	**4.5**	<2.5	--	--	--	--	--	--	--	--
	7/28/2002	8.62	4.11	NP	4.51	**58**	**67**	**15**	<0.50	**0.94**	**7.3**	--	<2.0	--	--	--	--	--	--	--
	10/9/2002	8.62	3.97	NP	4.65	<94	<50	**0.67**	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	1/2/2003	8.62	3.03	NP	5.59	**64**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	4/1/2003	8.62	3.83	NP	4.79	**76**	<50	**11**	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--
	7/1/2003	8.62	4.13	NP	4.49	**87**	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	<500	--	--
	10/2/2003	8.62	4.05	NP	4.57	**160**	**77**	9.9	**0.78**	**2.3**	**4.9**	--	<2.0	--	--	--	--	<500	--	--
	1/9/2004	8.62	3.40	NP	5.22	**74**	**53**	**1.2**	<0.50	**0.70**	**1.6**	--	<2.0	--	--	--	--	<500	--	--
	4/26/2004	8.62	3.89	NP	4.73	<50	**<50**	**2.8**	**1.3**	**1.0**	**2.9**	--	<0.50	--	--	--	--	<50	--	--
	7/22/2004	8.62	3.73	NP	4.89	<200	<50	<0.5	<0.5	<0.5	<1	--	<0.5	--	--	--	--	<1000	--	--
	10/29/2004	8.62	3.41	NP	5.21	<50	**100**	**2.0**	**1.2**	**1.1**	**3.6**	--	<0.50	--	--	--	--	<50	--	--
	1/10/2005	8.62	2.68	NP	5.94	**94**	**84**	**7.8**	**2.7**	**2.2**	**8.9**	--	<0.50	--	--	--	--	<50	--	--
	6/15/2005	8.62	4.63	NP	3.99	**62**	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<50	--	--
	9/27/2005	8.62	3.96	NP	4.66	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	<0.50	<0.50	<0.50	<10	<250	--	--
	12/13/2005	8.62	3.75	NP	4.87	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	3/23/2006	8.62	3.13	NP	5.49	<200	50	**13**	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	6/23/2006	8.62	3.90	NP	4.72	<200	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	--	--	--	<250	--	--
	9/26/2006	8.62	3.66	NP	4.96	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	--	--	--	<250	--	--
	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	--	--

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	6/11/2012	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	--	--
	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	--	--
	6/12/2014	10.97	3.92	NP	7.05	<50	<50	**4.4**	<0.50	<0.50	**0.91**	--	<0.50	--	--	--	<5.0	<8.0	--	--
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	--	--
	6/12/2014	10.53	2.51	NP	8.02	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**3.7**	--	--	--	<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**	**4.5**	--	**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	--	--
	6/12/2014	11.01	3.96	NP	7.05	<50	**200**	**30**	**3.3**	**4.2**	**6.1**	--	**920**	--	--	--	**8.6**	<9.0	--	--
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	--	--

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	12/5/2011	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	--	--
	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	--	--
	6/12/2014	11.29	4.37	NP	6.92	<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	--	--
	6/12/2014	11.08	4.08	NP	7.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**36**	--	--	--	**43**	<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	3.60	NP	8.40	**250**	**40,000**	**1,600**	**41**	**2,900**	**6,700**	--	<9.0	--	--	--	<50	<90	--	--
	6/12/2014	12.00	4.51	NP	7.49	**64**	**36,000**	**1,600**	**43**	**3,000**	**6,500**	--	<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

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-15	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	--	--
	6/12/2014	11.11	3.15	NP	7.96	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**100**	--	--	--	**31**	<5.0	--	--
MW-16	6/2/2011	10.98	3.00	NP	7.98	**509 T4**	**1,420 1n**	**79**	<0.50	**4.2**	<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	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	--	--
	6/12/2014	10.98	3.67	NP	7.31	<50	<50	<0.50	<0.50	<0.50	<0.50	--	**92**	--	--	--	**440**	<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**	--	--
	6/12/2014	11.52	4.49	NP	7.03	**87**	**17,000**	**3,600**	**410**	**650**	**1,100**	--	<3.0	--	--	--	**300**	<30	--	--

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
	06/12/14	0.020	0	0	0	0	0	0	**0**	0	**1**	0	0	0	0	0	0	0
		0.024 Average	**0**	**0**	**0**	**0**	**0**	**1**	**34**	**1**	**15**	**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: Mark McCulloch Blaine Tech Services Date: 6-12-14 Weather: clear

(Print Full Name & Company*)

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	G	G	G	G	G	~~YES~~	2	0811	3.23	13.90			1/2 tabs stripped
12	MW-6	G	G	G	G	G	N	2	0858	3.79	12.61			
2	MW-7	G	G	G	G	G	N	2	0757	5.76	12.99			
1	MW-8	G	G	G	G	G	N	2	0750	3.24	14.70			
4	MW-9	G	G	G	G	G	YES	2	0805	2.39	12.60			2/3 bolts missing, 1/3 tabs broken
7	MW-10	G	G	G	G	G	N	2	0824	3.92	12.64			
6	MW-11	G	G	G	G	G	N	4	0819	2.51	19.52			2/2 tabs stripped,
11	MW-12	G	G	G	G	G	N	4	0849	3.96	19.40			
3	MW-12A	G	G	G	G	G	N	2	0801	4.37	32.67			
8	MW-13	G	G	G	G	G	N	2	0829	4.08	14.54			
13	MW-14	G	G	G	G	G	N	2	0906	4.51	12.75			
9	MW-15	G	G	G	G	G	N	2	0836	3.15	12.69			
10	MW-16	G	G	G	G	G	N	2	0842	3.67	12.62			
14	MW-17	G	G	G	G	G	N	2	0914	4.49	12.60			

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 Rd. Oakland, CA		
Project No:	270594	Field Technician:	Mark McCollock
Field Point:	MW-3	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.23	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	13.90	Water Column Height (ft):	10.67

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): 10.67 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:** 1035 **Stop Time:** 1040

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								
1035	20.8	6.76	5086	-114	19	1.08	0.9	
1036	20.6	6.69	3379	-117	34	0.53	1.8	
1037	21.5	6.65	3293	-121	35	0.57	2.7	
1038	23.6	6.60	3386	-125	34	0.47	3.6	
1039	23.4	6.62	3372	-131	32	0.43	4.5	
1040	23.1	6.62	3410	-133	31	0.42	5.4	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 5.5

Other Comments: 80% = 5.36 Purged through flow cell
DTW: 8.11 (2 HR)

Sample Info:

Sample ID:	MW-3_20140630	Sample Date and Time:	6-12-14 @ 1414
Selected Analysis:	See COC		

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

Signature: _____ Date: 6-12-14

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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 Rd. Oakland, CA		
Project No:	270519/1	Field Technician:	William Wong
Field Point:	MW-6	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.79	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.61	Water Column Height (ft):	8.82

Purging Info and Calculations:

Purge Method: Low-Flow; (3 casing volumes); Other:_____

Purge Equipment: Disposable Bailer; ~~Electric Submersible~~ 2" reel flow; Peristaltic Pump; Bladder Pump; Other:_____

Sample Collection Method: (Disposable Bailer); Extraction Port; Dedicated Tubing; Disposable Tubing; Other:_____

Water Column Height (ft): 8.82 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:** 1309 **Stop Time:** 1312

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								
1309	23.3	7.22	2584	-125.3	18	2.66	0.8	
1310	22.8	7.14	2940	-128.6	26	2.71	1.5	
1311	22.3	7.06	3295	-130.7	36	2.76	2.2	
1312	21.7	6.99	3650	-132.1	46	2.81	3	
	WELL DEWATERED @ 3 GALS							
1450	22.3	7.90	4268	-96.2	30	2.61	—	
Post-Purge								

Did Well dewater? (Yes) No Total Purge volume (gal): 3

Other Comments: 80% : 7.32; DTW: 7.14; Purged through flowcell

Sample Info:

Sample ID: MW-6_20140630 Sample Date and Time: 6/12/14 / 1450

Selected Analysis: see SOW

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

Signature: _____ Date: 6/12/14

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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:	270519	Field Technician:	Mark McCulloch
Field Point:	MW-7	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	5.76	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.99	Water Column Height (ft):	7.23

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): 7.23 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.2

Casing Volume (gal): 3.6 X Specified Volumes: 3 = Calculated Purge (gal): 10.8

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

Purge: **Start Time:** 0935 **Stop Time:** 0939

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								
0936	20.0	6.85	14086	-132	46	0.53	0.6	
0937	19.1	6.76	14139	-127	44	0.94	1.2	
0938	19.6	6.94	9324	-106	42	0.62	1.8	
0939	21.2	6.87	2959	-35	46	0.86	2.4	
	WELL DEWATERED AT 2.5 GAL							
1353	22.0	6.95	6121	-104	52	2.71	GRAB	
Post-Purge								

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

Other Comments: 80% = 7.20 Purged through flow cell
DTW: 9.16 (2 HR)

Sample Info:

Sample ID:	MW-7_20140630	Sample Date and Time:	6-12-14 @ 1353
Selected Analysis:	see COC		

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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 Heyenberger Oakland, CA		
Project No:	2705194	Field Technician:	Mark McCulloch
Field Point:	MW-8	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.24	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	14.70	Water Column Height (ft):	11.46

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/ BEI)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 11.46 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:** 0921 **Stop Time:** 0928

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								
0923	17.0	7.06	1346	-48	470	3.77	1	
0924	17.9	6.49	13528	-118	42	4.12	2	
0925	19.6	6.52	12916	-126	22	3.36	3	
0926	22.0	6.50	12716	-127	20	2.06	4	
0927	22.3	6.53	13395	-141	18	1.12	5	
0928	22.4	6.55	13420	-143	16	1.08	6	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 6

Other Comments: 80% = 5.53 DTW 3.50 Purged through flow cell

Sample Info:

Sample ID:	MW-8_20140630	Sample Date and Time:	6-12-14 @ 1340
Selected Analysis:	see COC		

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Signature: _____ Date: 6-12-14

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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 Rd. Oakland, CA		
Project No:	270519.1	Field Technician:	Mark McCulloch
Field Point:	MW-9	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	2.39	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.60	Water Column Height (ft):	10.21

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/ BLD
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 10.21 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.7

Casing Volume (gal): 1.7 X Specified Volumes: 3 = Calculated Purge (gal): 5.1

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

Purge: **Start Time:** 1011 **Stop Time:** 1017

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								
1012	19.1	6.89	3217	1.7	17	0.44	0.85	
1013	18.9	6.70	5716	-110	150	1.63	1.70	
1014	20.6	6.79	2311	-121	37	0.88	2.50	
1015	22.1	6.75	1274	-126	23	0.54	3.40	
1016	23.0	6.70	1517	-128	20	0.56	4.25	
1017	23.1	6.71	1489	-129	18	0.54	5.10	
	WELL DEWATERED AT 5.5 GAL							
1405	21.8	7.13	1877	-107	29	3.49	GRAB	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 5.5

Other Comments: 80% 4.43 Purged through flow cell
DTW: 8.91 (2 HR)

Sample Info:

Sample ID:	MW-9_20140630	Sample Date and Time:	6-12-14 @ 1405
Selected Analysis:	See COC		

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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 Rd. Oakland, CA		
Project No:	270519.1	Field Technician:	Mark McCulloch
Field Point:	MW-10	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.92	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):	8.72

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): 8.72 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:** 1118 **Stop Time:** 1124

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								
1119	20.9	7.21	1216	-83	29	0.18	0.75	
1120	20.4	7.20	1181	-87	23	1.94	1.5	
1121	20.4	6.92	2977	-67	20	0.30	2.25	
1122	20.8	6.89	2815	-70	17	0.30	3.0	
1123	20.8	6.89	2579	-76	17	0.29	3.75	
1124	20.8	6.89	2381	-80	16	0.29	4.5	
Post-Purge								

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

Other Comments: 80% = 5.66 DTW: 4.31 Purged through flow cell

Sample Info:

Sample ID:	MW-10_20140630	Sample Date and Time:	6-12-14 @ 1126
Selected Analysis:	see COC		

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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 Rd Oakland CA		
Project No:	270519 V	Field Technician:	Mark McCulloch
Field Point:	MW-11	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	2.51	Well Diameter (in):	2 (4) 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.52	Water Column Height (ft):	17.01

Purging Info and Calculations:

Purge Method:
Low-Flow
3 casing volumes
Other:_____

Purge Equipment:
Disposable Bailer
Electric Submersible
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
Disposable Bailer w/ BED
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 17.01 X Conversion Factor (gal/ft): 0.66 = Casing Volume (gal): 11.2

Casing Volume (gal): 11.2 X Specified Volumes: 3 = Calculated Purge (gal): 33.6

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

Purge: **Start Time:** 1050 **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								
1053	20.3	7.27	1209	-114	36	0.25	5.6	
1055	21.0	7.25	1212	-104	23	0.18	11.2	
1057	21.2	7.24	1225	-100	12	0.17	16.8	
1100	21.2	7.25	1219	-97	8	0.16	22.4	
1102	21.3	7.25	1219	-92	6	0.16	28.0	
1105	21.3	7.25	1221	-90	5	0.15	33.6	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 34

Other Comments: 80%=5.91 Purged through flow cell
DTW: 4.09

Sample Info:

Sample ID:	MW-11_20140630
Sample Date and Time:	6-12-14 @ 1105
Selected Analysis:	see coc

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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 Heegenberger Rd. Oakland, CA		
Project No:	270519	Field Technician:	Mark McCulloch
Field Point:	MW-12	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.96	Well Diameter (in):	2 (4) 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	19.40	Water Column Height (ft):	15.44

Purging Info and Calculations:

Purge Method:
Low-Flow
3 casing volumes
Other:_____

Purge Equipment:
Disposable Bailer
Electric Submersible
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 15.44 X Conversion Factor (gal/ft): 0.66 = Casing Volume (gal): 10.2

Casing Volume (gal): 10.2 X Specified Volumes: 3 = Calculated Purge (gal): 30.6

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

Purge: **Start Time:** 1254 **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								
1257	19.5	6.32	24069	-79	11	0.19	5.1	
1300	19.4	6.35	23524	-95	7	0.17	10.2	
1302	19.7	6.53	21410	-128	7	0.14	15.3	
1305	19.9	6.54	22032	-125	7	0.13	20.4	
1307	19.8	6.47	22741	-119	7	0.12	25.5	
1310	19.8	6.46	22878	-114	7	0.12	30.6	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 31

Other Comments: 80% = 7.04 DTW: 4.81 Purged through flow cell cedr

Sample Info:

Sample ID:	MW-12_20140630	Sample Date and Time:	6-12-14 @ 1445
Selected Analysis:	SCE COC		

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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:	270519	Field Technician:	Mark McCulloch
Field Point:	MW-12A	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	4.37	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	32.67	Water Column Height (ft):	28.30

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
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 28.30 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 4.8

Casing Volume (gal): 4.8 X Specified Volumes: 3 = Calculated Purge (gal): 14.4

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

Purge: **Start Time:** 0948 **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								
0949	19.6	6.72	2565	-5	>1000	1.59	2.4	
0951	19.4	6.72	3301	-10	808	0.28	4.8	
0954	19.4	6.74	3309	-16	175	0.22	7.2	
0956	19.4	6.75	3262	-19	42	0.20	9.6	
0958	19.4	6.76	3234	-20	33	0.19	12	
1000	19.4	6.76	3224	-21	31	0.19	14.4	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 14.5

Other Comments: 80% 10.03 Purged through flow cell
DTW 4.53

Sample Info:

Sample ID:	MW-12A_20140630	Sample Date and Time:	6-12-14 @ 1002
Selected Analysis:	see COC		

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Signature: _____ Date: 6-12-14

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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:	4149 Hegenberger Rd. Oakland CA		
Project No:	270519	Field Technician:	Mark McCollach
Field Point:	MW-13	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	4.08	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):	10.46

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
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 10.46 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:** 1140 **Stop Time:** 1148

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								
1141	20.7	6.90	2097	-85	8	0.33	0,9	
1142	20.2	6.91	1943	-83	6	0.40	1.8	
1143	20.0	7.37	2909	-158	405	0.53	2.7	
1144	20.8	7.43	2751	-156	189	0.24	3.6	
1145	20.8	7.42	2907	-160	67	0.21	4.5	
1146	20.6	7.40	3125	-161	49	0.20	5.4	
1147	20.5	7.39	3347	-163	46	0.19	6.3	
1148	20.4	7.36	3462	-162	44	0.19	7.2	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 7.2

Other Comments: 80% = 6.17 Purged through flow cell
DTW: 6.01

Sample Info:

Sample ID:	MW-13_20140630	Sample Date and Time:	6-12-14 1159
Selected Analysis:	See COC		

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Signature: _____ Date: 6-12-14

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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:	999 MELVENBERGER RD, OAKLAND, CA		
Project No:	2705191	Field Technician:	WILLIAM WONG
Field Point:	MW-14	Date:	6/12/14
Depth to Water (DTW) (ft bgs):	4.51	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.75	Water Column Height (ft):	8.24

Purging Info and Calculations:

Purge Method:
Low-Flow
(3 casing volumes)
Other:_____

Purge Equipment:
Disposable Bailer
(Electric Submersible 2" redi-flo)
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 8.24 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.4

Casing Volume (gal): 1.4 X Specified Volumes: 3 = Calculated Purge (gal): 4.2

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

Purge: **Start Time:** 1323 **Stop Time:** 1328

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge								
1324	20.0	7.19	11907	-166.3	32	4.62	0.7	
1325	19.8	7.19	12712	-166.5	27	4.10	1.4	
1326	19.6	7.18	13517	-166.7	22	3.68	2.1	
1327	19.3	7.17	14322	-166.8	20	3.36	2.8	
1328	18.9	7.17	15933	-166.9	18	1.98	3.5	
	WELL DEWATERED @						4.0 GALS	
1330	19.5	7.44	13587	-112.2	20	2.54	----	
Post-Purge								

Did Well dewater? (Yes) No Total Purge volume (gal): 4

Other Comments:
DO%: 6.16
DTW: 7.43 (2HR)
Purged thru flowcell
FD-1_20140630 @ 1535

Sample Info:

Sample ID:	MW-14_20140630	Sample Date and Time:	6/12/14 1530
Selected Analysis:	see SOW		

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Signature: _____ Date: 6/12/14

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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 Rd. Oakland, CA		
Project No:	270519.V	Field Technician:	Mark McCulloch
Field Point:	MW-15	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.15	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.69	Water Column Height (ft):	9.54

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~~
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:

Water Column Height (ft): 9.54 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:** 1205 **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								
1206	20.1	7.29	4115	-138	23	0.27	0.8	
1207	19.9	7.28	4230	-133	123	0.84	1.6	
1208	20.4	6.91	4819	-111	28	0.65	2.4	
1209	20.7	6.70	2337	-105	22	0.62	3.2	
1210	21.3	6.52	1966	-109	23	0.52	4.0	
1211	21.5	6.48	2681	-113	25	0.47	4.8	
1212	21.4	6.50	2873	-115	27	0.43	5.6	
1213	21.3	6.51	3035	-116	28	0.39	6.4	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 6.5

Other Comments: 80% 5.05 Purged through flow cell
DTW: 9.82 (2HR)

Sample Info:

Sample ID:	MW-15_20140630	Sample Date and Time:	6-12-14 / 1405
Selected Analysis:	See coc		

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

Signature: Date: 6-12-14

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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 Rd. Oakland, CA		
Project No:	270591	Field Technician:	Mark McCulloch
Field Point:	MW-16	Date:	6-12-14
Depth to Water (DTW) (ft bgs):	3.67	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.62	Water Column Height (ft):	8.95

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
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 8.95 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:** 1228 **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								
1228	20.9	6.74	4605	-114	49	0.40	0.75	
1229	21.0	6.78	6162	-118	29	0.32	1.5	
1230	21.9	7.06	3609	-120	14.4	0.98	2.25	
1231	22.4	6.90	3008	-111	41	0.78	3.00	
1232	23.7	6.82	2965	-103	32	0.64	3.75	
1233	24.0	6.81	2979	-105	30	0.59	4.50	
Post-Purge								

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

Other Comments: 80% = 5.46 Purged through flow cell
DTW: 5.53 (2 HR)

Sample Info:

Sample ID:	MW-16_20140630	Sample Date and Time:	6-12-14 / 1435
Selected Analysis:	see COC		

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

Signature: _____ Date: 6-12-14

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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 HELEN BERGER RD, OAKLAND, CA		
Project No:	270519	Field Technician:	WILLIAM WOMB
Field Point:	MW-17	Date:	6/12/14
Depth to Water (DTW) (ft bgs):	4.49	Well Diameter (in):	(2) 4 6 8 ___
Depth to LNAPL (ft bgs):		Thickness of LNAPL (ft):	
Total Depth of Well (ft bgs):	12.60	Water Column Height (ft):	8.11

Purging Info and Calculations:

Purge Method:
Low-Flow
(3 casing volumes)
Other:_____

Purge Equipment:
Disposable Bailer
(Electric Submersible 2" redi-flo)
Peristaltic Pump
Bladder Pump
Other:_____

Sample Collection Method:
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Disposable Tubing
Other:_____

Water Column Height (ft): 8.11 X Conversion Factor (gal/ft): 0.17 = Casing Volume (gal): 1.4

Casing Volume (gal): 1.4 X Specified Volumes: 3 = Calculated Purge (gal): 4.2

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

Purge: **Start Time:** 1342 **Stop Time:** 1347

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								
1342	21.1	8.19	35359	-130.6	25	2.93	0.7	
1343	20.7	7.89	35372	-132.8	26	2.85	1.4	
1344	20.4	7.59	35385	-134.9	26	2.78	2.1	
1345	20.2	7.29	35504	-137.0	26	2.70	2.8	
1346	20.0	6.77	35623	-139.2	36	2.60	3.5	
1347	19.6	6.67	35633	-141.8	40	2.50	4.2	
Post-Purge								

Did Well dewater? Yes (No) Total Purge volume (gal): 4.2

Other Comments: 800/0: 6.11 purged thru flocell

DTW: 9.24 (2 HR)

Sample Info:

Sample ID: MW-17_20140630 Sample Date and Time: 6/12/14 @ 1550

Selected Analysis: SEE SOW

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

Signature: _____ Date: 6/12/14

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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

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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: 1 of 2
Cooler # ____ of ____

2Q14 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_201406
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 LP; SOIL SO; OIL OL; WIPE FW; 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: 8015TPHDiesel W/ Silic	8260 GC/MS GRO	8260BtexMtbeTBA	8260Ethanol	Comments/Lab Sample I.D.
1	MW-10_20140630	WG		6-12-14	1126	6	N									X	X	X	X	
2	MW-11_20140630	WG			1108	6	N									X	X	X	X	
3	MW-12_20140630	WG			1445	6	N									X	X	X	X	
4	MW-12A_20140630	WG			1002	6	N									X	X	X	X	
5	MW-13_20140630	WG			1159	6	N									X	X	X	X	
6	MW-14_20140630	WG			1530	6	N									X	X	X	X	
7	MW-15_20140630	WG			1415	6	N									X	X	X	X	
8	MW-16_20140630	WG			1435	6	N									X	X	X	X	
9	MW-17_20140630	WG			1550	6	N									X	X	X	X	
10	MW-3_20140630	WG		↓	1414	6	N									X	X	X	X	
11	MW-6_20140630	WG		06-12-14	1450	6	N									X	X	X	X	
12	TB1_20140630	W		06-12-14	0725		N									X	X	X	X	

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	6-12-2014				

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

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark McCulloch

SIGNATURE of SAMPLER: [signature] DATE Signed 6-12-2014 Time: 1715

Temp in °C | Samples on Ice? | Sample intact? | Trip Blank?

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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.

2Q14 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_201406
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 — 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 DC WD; SLUDGE SL; RINSEATE WR; 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	8015TPHDiesel W/ Silic	8260 GC/MS GRO	8260Btex/MtbeTBA	8260Ethanol	Comments/Lab Sample I.D.
1	MW-7_20140630	WG		6-12-14	1353	6	N				✓					X	X	X	X	
2	MW-8_20140630	WG		6-12-14	1340	6	N				✓					X	X	X	X	
3	MW-9_20140630	WG		6-12-14	1405	6	N				✓					X	X	X	X	
4	~~TB2_20140630~~ DO	W														X	X	X	X	
5	FD1_20140630	W		6-12-14	1535	6	N				✓					X	X	X	X	
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	6-12-2014	1710			

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
	Y/N	Y/N	Y/N	Y/N

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark McCulloch

SIGNATURE of SAMPLER: [signature] DATE Signed 6-12-14 Time: 1715

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	COP-449 HEGENBERGER RD. OAKLAND, CA	PROJECT NUMBER	140612-WW1

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI Pro Plus	10B102050	6/12/14 0630	pH: 4, 7, 10 cond: 3900 uS	pH: 7.00; 10.00 4.00 cond: 3902 uS	YES	25.9°C	MW
"	"	"	ORP: 231 mV DO: 10 mg/L	ORP: 231 mV DO: 10.00 mg/L	YES	25.9°C	MW

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 4149 Hegenberger Oakland, CA				PROJECT NUMBER 140612-MM1			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
YSI PRO PLUS		6-12-14 0620	pH 7.0 10.0 4.0	pH 7.03 9.98 4.01	yes		MM
↓	↓	↓	Cond 3900 uS	Cond 3902 uS	yes		mm
↓	↓	↓	ORP DO 100%	ORP DO 100.9%	yes		mm

Appendix D

Certified Laboratory Analytical Report and Data Validation Form

Is the Data Set Valid?	Preservation Temperature
(circle) **Yes / No**	*(if Known)*: ~0.8 °C

Antea™Group Laboratory Data Validation Sheet

Project/Client: 76 Station No. 5191 / COP-ELT
Project #: I42705191
Date of Validation: 6/23/14 **Date of Analysis:** 6/17/14 - 6/20/14
Sample Date: 6/12/14 **Completed By:** ETW
Signature:

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

Analytical Lab Used and Report # (if any): Kiff # 98422

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:

MRL for Ethanol has been increased due to the presence of an interfering compound for sample MW-10_20140630.

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/2014

Laboratory Results

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

Subject : 16 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 number 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 : 88422
Date : 06/20/2014

Subject : 16 Water Samples
Project Name : 2705191
Project Number :

Case Narrative

The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample MW-10_20140630.

At the time of receipt by the laboratory, the temperature of the sample was -0.8 degrees C.

KIFF Analytical LLC

Analysis Summary

Report Number : 88422

Date : 06/20/14

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

Project Name :2705191
Project Number :

			Sample Name	MW-10_20140630		MW-11_20140630		MW-12_20140630		MW-12A_2014063		MW-13_20140630		MW-14_20140630		MW-15_20140630	
			Sample Date	06/12/14		06/12/14		06/12/14		06/12/14		06/12/14		06/12/14		06/12/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Benzene	EPA 8260B	ug/L		0.50	**4.4**	0.50	ND	0.90	**30**	0.50	ND	0.50	ND	9.0	**1600**	0.50	ND
Ethylbenzene	EPA 8260B	ug/L		0.50	ND	0.50	ND	0.90	**4.2**	0.50	ND	0.50	ND	9.0	**3000**	0.50	ND
Toluene	EPA 8260B	ug/L		0.50	ND	0.50	ND	0.90	**3.3**	0.50	ND	0.50	ND	9.0	**43**	0.50	ND
Total Xylenes	EPA 8260B	ug/L		0.50	**0.91**	0.50	ND	0.90	**6.1**	0.50	ND	0.50	ND	9.0	**6500**	0.50	ND
Ethanol	EPA 8260B	ug/L		8.0	ND	5.0	ND	9.0	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	**3.7**	2.0	**920**	0.50	ND	0.50	**36**	9.0	ND	0.50	**100**
Tert-Butanol	EPA 8260B	ug/L		5.0	ND	5.0	ND	5.0	**8.6**	5.0	ND	5.0	**43**	50	ND	5.0	**31**
TPH as Gasoline	EPA 8260B	ug/L		50	ND	50	ND	90	**200**	50	ND	50	ND	900	**36000**	50	ND
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%			99.7		97.1		99.9		103		99.9		103		104
Toluene - d8 (Surr)	EPA 8260B	%			99.7		99.5		100		98.8		99.8		99.4		100
TPH as Diesel (Silica Gel)	M EPA 8015	ug/L		50	ND	50	ND	50	ND	50	ND	50	ND	50	**64**	50	ND
Octacosane (Silica Gel Surr)	M EPA 8015	%			106		108		113		113		118		114		116

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 : 88422

Date : 06/20/14

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

Project Name :2705191
Project Number :

			Sample Name	MW-16_20140630		MW-17_20140630		MW-3_20140630		MW-6_20140630		TB1_20140630		MW-7_20140630		MW-8_20140630	
			Sample Date	06/12/14		06/12/14		06/12/14		06/12/14		06/12/14		06/12/14		06/12/14	
Analyte	Method	Units		MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results	MRL	Results
Benzene	EPA 8260B	ug/L		0.50	ND	5.0	**3600**	0.50	ND	5.0	**390**	0.50	ND	0.50	ND	0.50	ND
Ethylbenzene	EPA 8260B	ug/L		0.50	ND	3.0	**650**	0.50	ND	5.0	**690**	0.50	ND	0.50	ND	0.50	ND
Toluene	EPA 8260B	ug/L		0.50	ND	3.0	**410**	0.50	ND	5.0	**17**	0.50	ND	0.50	ND	0.50	ND
Total Xylenes	EPA 8260B	ug/L		0.50	ND	3.0	**1100**	0.50	ND	5.0	**1600**	0.50	ND	0.50	ND	0.50	ND
Ethanol	EPA 8260B	ug/L		5.0	ND	30	ND	5.0	ND	50	ND	5.0	ND	5.0	ND	5.0	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L		0.50	**92**	3.0	ND	0.50	**28**	5.0	**12**	0.50	ND	0.50	ND	0.50	ND
Tert-Butanol	EPA 8260B	ug/L		5.0	**440**	15	**300**	5.0	**74**	25	**180**	5.0	ND	5.0	ND	5.0	ND
TPH as Gasoline	EPA 8260B	ug/L		50	ND	300	**17000**	50	**310**	500	**35000**	50	ND	50	ND	50	ND
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%			102		103		100		101		99.8		102		99.3
Toluene - d8 (Surr)	EPA 8260B	%			99.9		99.1		99.6		103		99.5		103		99.7
TPH as Diesel (Silica Gel)	M EPA 8015	ug/L		50	ND	50	**87**	50	ND	50	**570**	50	ND	50	ND	50	ND
Octacosane (Silica Gel Surr)	M EPA 8015	%			109		113		103		116		125		127		114

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 : 88422

Date : 06/20/14

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

Project Name :2705191
Project Number :

			Sample Name	MW-9_20140630	FD1_20140630	
			Sample Date	06/12/14	06/12/14	
Analyte	Method	Units	MRL	Results	MRL	Results
Benzene	EPA 8260B	ug/L	0.50	ND	15	**1600**
Ethylbenzene	EPA 8260B	ug/L	0.50	ND	15	**2900**
Toluene	EPA 8260B	ug/L	0.50	ND	15	**42**
Total Xylenes	EPA 8260B	ug/L	0.50	ND	15	**6400**
Ethanol	EPA 8260B	ug/L	5.0	ND	150	ND
Methyl-t-butyl ether (MTBE)	EPA 8260B	ug/L	0.50	**3.3**	15	ND
Tert-Butanol	EPA 8260B	ug/L	5.0	ND	70	ND
TPH as Gasoline	EPA 8260B	ug/L	50	ND	1500	**35000**
1,2-Dichloroethane-d4 (Surr)	EPA 8260B	%		99.6		104
Toluene - d8 (Surr)	EPA 8260B	%		99.7		99.9
TPH as Diesel (Silica Gel)	M EPA 8015	ug/L	50	ND	60	**67**
Octacosane (Silica Gel Surr)	M EPA 8015	%		98.0		128

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 : 88422

Date : 06/20/14

Project Name : **2705191**

Project Number :

Sample : **MW-10_20140630** Matrix : Water Lab Number : 88422-01

Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**4.4**	0.50	ug/L	EPA 8260B	06/17/14 20:03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/17/14 20:03
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/17/14 20:03
Total Xylenes	**0.91**	0.50	ug/L	EPA 8260B	06/17/14 20:03
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/17/14 20:03
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/17/14 20:03
Ethanol	< 8.0	8.0	ug/L	EPA 8260B	06/17/14 20:03
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/17/14 20:03
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	06/17/14 20:03
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	06/17/14 20:03
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 22:13
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	06/18/14 22:13

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-11_20140630** Matrix : Water Lab Number : 88422-02
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 09:21
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 09:21
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 09:21
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 09:21
Methyl-t-butyl ether (MTBE)	**3.7**	0.50	ug/L	EPA 8260B	06/18/14 09:21
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/18/14 09:21
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/18/14 09:21
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/18/14 09:21
1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery	EPA 8260B	06/18/14 09:21
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	06/18/14 09:21
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 22:48
Octacosane (Silica Gel Surr)	108		% Recovery	M EPA 8015	06/18/14 22:48

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-12_20140630** Matrix : Water Lab Number : 88422-03
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**30**	0.90	ug/L	EPA 8260B	06/20/14 02:24
Toluene	**3.3**	0.90	ug/L	EPA 8260B	06/20/14 02:24
Ethylbenzene	**4.2**	0.90	ug/L	EPA 8260B	06/20/14 02:24
Total Xylenes	**6.1**	0.90	ug/L	EPA 8260B	06/20/14 02:24
Methyl-t-butyl ether (MTBE)	**920**	2.0	ug/L	EPA 8260B	06/18/14 12:54
Tert-Butanol	**8.6**	5.0	ug/L	EPA 8260B	06/20/14 02:24
Ethanol	< 9.0	9.0	ug/L	EPA 8260B	06/20/14 02:24
TPH as Gasoline	**200**	90	ug/L	EPA 8260B	06/20/14 02:24
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	06/20/14 02:24
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	06/20/14 02:24
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 23:24
Octacosane (Silica Gel Surr)	113		% Recovery	M EPA 8015	06/18/14 23:24

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-12A_20140630** Matrix : Water Lab Number : 88422-04
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 12:19
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 12:19
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 12:19
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 12:19
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/18/14 12:19
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/18/14 12:19
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/18/14 12:19
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/18/14 12:19
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/18/14 12:19
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	06/18/14 12:19
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 23:59
Octacosane (Silica Gel Surr)	113		% Recovery	M EPA 8015	06/18/14 23:59

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-13_20140630** Matrix : Water Lab Number : 88422-05
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 14:10
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 14:10
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 14:10
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 14:10
Methyl-t-butyl ether (MTBE)	**36**	0.50	ug/L	EPA 8260B	06/19/14 14:10
Tert-Butanol	**43**	5.0	ug/L	EPA 8260B	06/19/14 14:10
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 14:10
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 14:10
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	06/19/14 14:10
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	06/19/14 14:10
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/19/14 00:34
Octacosane (Silica Gel Surr)	118		% Recovery	M EPA 8015	06/19/14 00:34

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-14_20140630** Matrix : Water Lab Number : 88422-06
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**1600**	9.0	ug/L	EPA 8260B	06/19/14 15:26
Toluene	**43**	9.0	ug/L	EPA 8260B	06/19/14 15:26
Ethylbenzene	**3000**	9.0	ug/L	EPA 8260B	06/19/14 15:26
Total Xylenes	**6500**	9.0	ug/L	EPA 8260B	06/19/14 15:26
Methyl-t-butyl ether (MTBE)	< 9.0	9.0	ug/L	EPA 8260B	06/19/14 15:26
Tert-Butanol	< 50	50	ug/L	EPA 8260B	06/19/14 15:26
Ethanol	< 90	90	ug/L	EPA 8260B	06/19/14 15:26
TPH as Gasoline	**36000**	900	ug/L	EPA 8260B	06/19/14 15:26
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/19/14 15:26
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	06/19/14 15:26
TPH as Diesel (Silica Gel)	**64**	50	ug/L	M EPA 8015	06/19/14 01:09
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	06/19/14 01:09

KIFF Analytical LLC

Report Number : 88422

Date : 06/20/14

Project Name : **2705191**

Project Number :

Sample : **MW-15_20140630** Matrix : Water Lab Number : 88422-07

Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 13:36
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 13:36
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 13:36
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 13:36
Methyl-t-butyl ether (MTBE)	**100**	0.50	ug/L	EPA 8260B	06/19/14 13:36
Tert-Butanol	**31**	5.0	ug/L	EPA 8260B	06/19/14 13:36
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 13:36
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 13:36
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	06/19/14 13:36
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	06/19/14 13:36
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/19/14 01:31
Octacosane (Silica Gel Surr)	116		% Recovery	M EPA 8015	06/19/14 01:31

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-16_20140630** Matrix : Water Lab Number : 88422-08
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 23:24
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 23:24
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 23:24
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 23:24
Methyl-t-butyl ether (MTBE)	**92**	0.50	ug/L	EPA 8260B	06/19/14 23:24
Tert-Butanol	**440**	5.0	ug/L	EPA 8260B	06/19/14 23:24
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 23:24
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 23:24
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/19/14 23:24
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	06/19/14 23:24
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/19/14 01:02
Octacosane (Silica Gel Surr)	109		% Recovery	M EPA 8015	06/19/14 01:02

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-17_20140630** Matrix : Water Lab Number : 88422-09
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**3600**	5.0	ug/L	EPA 8260B	06/20/14 12:49
Toluene	**410**	3.0	ug/L	EPA 8260B	06/19/14 16:05
Ethylbenzene	**650**	3.0	ug/L	EPA 8260B	06/19/14 16:05
Total Xylenes	**1100**	3.0	ug/L	EPA 8260B	06/19/14 16:05
Methyl-t-butyl ether (MTBE)	< 3.0	3.0	ug/L	EPA 8260B	06/19/14 16:05
Tert-Butanol	**300**	15	ug/L	EPA 8260B	06/19/14 16:05
Ethanol	< 30	30	ug/L	EPA 8260B	06/19/14 16:05
TPH as Gasoline	**17000**	300	ug/L	EPA 8260B	06/19/14 16:05
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/19/14 16:05
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	06/19/14 16:05
TPH as Diesel (Silica Gel)	**87**	50	ug/L	M EPA 8015	06/19/14 00:32
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	113		% Recovery	M EPA 8015	06/19/14 00:32

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-3_20140630** Matrix : Water Lab Number : 88422-10
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:56
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:56
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:56
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:56
Methyl-t-butyl ether (MTBE)	**28**	0.50	ug/L	EPA 8260B	06/19/14 12:56
Tert-Butanol	**74**	5.0	ug/L	EPA 8260B	06/19/14 12:56
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 12:56
TPH as Gasoline	**310**	50	ug/L	EPA 8260B	06/19/14 12:56
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	06/19/14 12:56
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	06/19/14 12:56
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/19/14 00:03
Octacosane (Silica Gel Surr)	103		% Recovery	M EPA 8015	06/19/14 00:03

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-6_20140630** Matrix : Water Lab Number : 88422-11
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**390**	5.0	ug/L	EPA 8260B	06/20/14 11:18
Toluene	**17**	5.0	ug/L	EPA 8260B	06/20/14 11:18
Ethylbenzene	**690**	5.0	ug/L	EPA 8260B	06/20/14 11:18
Total Xylenes	**1600**	5.0	ug/L	EPA 8260B	06/20/14 11:18
Methyl-t-butyl ether (MTBE)	**12**	5.0	ug/L	EPA 8260B	06/20/14 11:18
Tert-Butanol	**180**	25	ug/L	EPA 8260B	06/20/14 11:18
Ethanol	< 50	50	ug/L	EPA 8260B	06/20/14 11:18
TPH as Gasoline	**35000**	500	ug/L	EPA 8260B	06/20/14 11:18
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	06/20/14 11:18
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	06/20/14 11:18
TPH as Diesel (Silica Gel)	**570**	50	ug/L	M EPA 8015	06/18/14 23:33
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	116		% Recovery	M EPA 8015	06/18/14 23:33

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **TB1_20140630** Matrix : Water Lab Number : 88422-12
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:21
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:21
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:21
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:21
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 12:21
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 12:21
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 12:21
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 12:21
1,2-Dichloroethane-d4 (Surr)	99.8		% Recovery	EPA 8260B	06/19/14 12:21
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	06/19/14 12:21
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 23:04
Octacosane (Silica Gel Surr)	125		% Recovery	M EPA 8015	06/18/14 23:04

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-7_20140630** Matrix : Water Lab Number : 88422-13
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14 12:56
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14 12:56
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14 12:56
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/14 12:56
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/14 12:56
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/14 12:56
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/14 12:56
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/20/14 12:56
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/20/14 12:56
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	06/20/14 12:56
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 22:35
Octacosane (Silica Gel Surr)	127		% Recovery	M EPA 8015	06/18/14 22:35

KIFF Analytical LLC

Report Number : 88422

Date : 06/20/14

Project Name : **2705191**

Project Number :

Sample : **MW-8_20140630** Matrix : Water Lab Number : 88422-14

Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:47
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:47
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:47
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:47
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:47
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 11:47
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 11:47
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 11:47
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	06/19/14 11:47
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	06/19/14 11:47
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/19/14 01:45
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	06/19/14 01:45

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **MW-9_20140630** Matrix : Water Lab Number : 88422-15
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:13
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:13
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:13
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14 11:13
Methyl-t-butyl ether (MTBE)	**3.3**	0.50	ug/L	EPA 8260B	06/19/14 11:13
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 11:13
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14 11:13
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14 11:13
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	06/19/14 11:13
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	06/19/14 11:13
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14 22:05
Octacosane (Silica Gel Surr)	98.0		% Recovery	M EPA 8015	06/18/14 22:05

KIFF Analytical LLC

Report Number : 88422
Date : 06/20/14

Project Name : **2705191**
Project Number :

Sample : **FD1_20140630** Matrix : Water Lab Number : 88422-16
Sample Date :06/12/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**1600**	15	ug/L	EPA 8260B	06/19/14 17:17
Toluene	**42**	15	ug/L	EPA 8260B	06/19/14 17:17
Ethylbenzene	**2900**	15	ug/L	EPA 8260B	06/19/14 17:17
Total Xylenes	**6400**	15	ug/L	EPA 8260B	06/19/14 17:17
Methyl-t-butyl ether (MTBE)	< 15	15	ug/L	EPA 8260B	06/19/14 17:17
Tert-Butanol	< 70	70	ug/L	EPA 8260B	06/19/14 17:17
Ethanol	< 150	150	ug/L	EPA 8260B	06/19/14 17:17
TPH as Gasoline	**35000**	1500	ug/L	EPA 8260B	06/19/14 17:17
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	06/19/14 17:17
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	06/19/14 17:17
TPH as Diesel (Silica Gel)	**67**	60	ug/L	M EPA 8015	06/18/14 21:36
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	128		% Recovery	M EPA 8015	06/18/14 21:36

Report Number : 88422

Date : 06/20/14

QC Report : Method Blank Data

Project Name : **2705191**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/18/14
Octacosane (Silica Gel Surr)	104		%	M EPA 8015	06/18/14
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/17/14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/17/14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/17/14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/17/14
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/17/14
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/17/14
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/17/14
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/17/14
1,2-Dichloroethane-d4 (Surr)	96.6		%	EPA 8260B	06/17/14
Toluene - d8 (Surr)	99.4		%	EPA 8260B	06/17/14
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	06/19/14
Toluene - d8 (Surr)	99.8		%	EPA 8260B	06/19/14

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/14
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/14
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/14
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	06/19/14
Toluene - d8 (Surr)	99.6		%	EPA 8260B	06/19/14
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/14
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/14
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/14
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/20/14
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	06/20/14
Toluene - d8 (Surr)	103		%	EPA 8260B	06/20/14

KIFF ANALYTICAL, LLC

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

Report Number : 88422

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/20/14

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
TPH-D (Si Gel)														
	88422-14	<50	1000	1000	821	805	ug/L	M EPA 8015	6/18/14	82.1	80.5	2.01	70-130	25
Benzene														
	88422-01	4.4	39.9	40.0	44.8	45.0	ug/L	EPA 8260B	6/17/14	101	102	0.534	70.0-130	25
Ethanol														
	88422-01	7.0	99.8	100	99.7	96.7	ug/L	EPA 8260B	6/17/14	92.9	89.8	3.47	55.0-150	25
Ethylbenzene														
	88422-01	<0.50	39.9	40.0	43.3	43.7	ug/L	EPA 8260B	6/17/14	108	109	0.756	70.0-130	25
Methyl-t-butyl ether														
	88422-01	<0.50	40.0	40.1	40.4	40.4	ug/L	EPA 8260B	6/17/14	101	100	0.312	70.0-130	25
P + M Xylene														
	88422-01	0.91	39.9	40.0	41.6	41.8	ug/L	EPA 8260B	6/17/14	102	102	0.442	70.0-130	25
Tert-Butanol														
	88422-01	<5.0	200	200	200	200	ug/L	EPA 8260B	6/17/14	100	100	0.101	70.0-130	25
Toluene														
	88422-01	<0.50	39.9	40.0	41.4	41.4	ug/L	EPA 8260B	6/17/14	104	104	0.0341	70.0-130	25
Benzene														
	88422-08	<0.50	40.0	40.0	41.3	40.4	ug/L	EPA 8260B	6/20/14	103	101	2.16	70.0-130	25

KIFF ANALYTICAL, LLC

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

Report Number : 88422

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/20/2014

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
Ethanol														
	88422-08	<5.0	100	100	96.6	99.5	ug/L	EPA 8260B	6/20/14	96.6	99.5	2.97	55.0-150	25
Ethylbenzene														
	88422-08	<0.50	40.0	40.0	42.9	42.2	ug/L	EPA 8260B	6/20/14	107	106	1.54	70.0-130	25
Methyl-t-butyl ether														
	88422-08	92	40.1	40.1	130	130	ug/L	EPA 8260B	6/20/14	92.7	94.4	1.84	70.0-130	25
P + M Xylene														
	88422-08	<0.50	40.0	40.0	40.9	40.3	ug/L	EPA 8260B	6/20/14	102	101	1.40	70.0-130	25
Tert-Butanol														
	88422-08	440	200	200	614	627	ug/L	EPA 8260B	6/20/14	88.6	94.9	6.87	70.0-130	25
Toluene														
	88422-08	<0.50	40.0	40.0	41.1	40.3	ug/L	EPA 8260B	6/20/14	103	101	1.87	70.0-130	25
Benzene														
	88462-01	<0.50	40.0	40.0	35.9	40.8	ug/L	EPA 8260B	6/20/14	89.7	102	12.8	70.0-130	25
Benzene														
	88451-13	<0.50	40.0	40.0	38.2	39.4	ug/L	EPA 8260B	6/19/14	95.5	98.4	3.07	70.0-130	25
Ethanol														
	88451-13	<5.0	100	100	98.7	94.2	ug/L	EPA 8260B	6/19/14	98.7	94.2	4.73	55.0-150	25

KIFF ANALYTICAL, LLC

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

Report Number : 88422

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/20/2014

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														
	88451-13	<0.50	40.0	40.0	39.9	40.7	ug/L	EPA 8260B	6/19/14	99.9	102	1.96	70.0-130	25
P + M Xylene														
	88451-13	<0.50	40.0	40.0	40.9	41.5	ug/L	EPA 8260B	6/19/14	102	104	1.47	70.0-130	25
Tert-Butanol														
	88451-13	<5.0	200	200	198	201	ug/L	EPA 8260B	6/19/14	98.8	101	1.79	70.0-130	25
Toluene														
	88451-13	<0.50	40.0	40.0	39.0	40.0	ug/L	EPA 8260B	6/19/14	97.5	100	2.45	70.0-130	25
Benzene														
	88462-02	<0.50	40.0	40.0	46.6	45.4	ug/L	EPA 8260B	6/20/14	116	113	2.80	70.0-130	25
Ethanol														
	88462-02	<5.0	100	100	108	105	ug/L	EPA 8260B	6/20/14	108	105	2.59	55.0-150	25
Ethylbenzene														
	88462-02	<0.50	40.0	40.0	45.1	44.7	ug/L	EPA 8260B	6/20/14	113	112	1.00	70.0-130	25
Methyl-t-butyl ether														
	88462-02	<0.50	40.1	40.1	44.6	44.0	ug/L	EPA 8260B	6/20/14	111	110	1.26	70.0-130	25
P + M Xylene														
	88462-02	<0.50	40.0	40.0	42.7	42.4	ug/L	EPA 8260B	6/20/14	107	106	0.760	70.0-130	25

KIFF ANALYTICAL, LLC

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

Report Number : 88422

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/20/2014

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
Tert-Butanol														
	88462-02	<5.0	200	200	223	214	ug/L	EPA 8260B	6/20/14	111	107	3.82	70.0-130	25
Toluene														
	88462-02	<0.50	40.0	40.0	47.9	46.7	ug/L	EPA 8260B	6/20/14	120	117	2.65	70.0-130	25

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
TPH-D (Si Gel)	1000	ug/L	M EPA 8015	6/18/14	78.7	70-130
Benzene	40.0	ug/L	EPA 8260B	6/17/14	101	70.0-130
Ethanol	100	ug/L	EPA 8260B	6/17/14	103	55.0-150
Ethylbenzene	40.0	ug/L	EPA 8260B	6/17/14	107	70.0-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	6/17/14	94.2	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	6/17/14	102	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	6/17/14	100	70.0-130
Toluene	40.0	ug/L	EPA 8260B	6/17/14	101	70.0-130
Benzene	40.0	ug/L	EPA 8260B	6/19/14	104	70.0-130
Ethanol	100	ug/L	EPA 8260B	6/19/14	104	55.0-150
Ethylbenzene	40.0	ug/L	EPA 8260B	6/19/14	109	70.0-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	6/19/14	101	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	6/19/14	103	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	6/19/14	104	70.0-130
Toluene	40.0	ug/L	EPA 8260B	6/19/14	103	70.0-130
Benzene	40.1	ug/L	EPA 8260B	6/20/14	100	70.0-130
Benzene	40.0	ug/L	EPA 8260B	6/19/14	95.3	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
Ethanol	100	ug/L	EPA 8260B	6/19/14	92.0	55.0-150
Ethylbenzene	40.0	ug/L	EPA 8260B	6/19/14	98.4	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	6/19/14	101	70.0-130
TPH as Gasoline	483	ug/L	EPA 8260B	6/19/14	89.8	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	6/19/14	98.1	70.0-130
Toluene	40.0	ug/L	EPA 8260B	6/19/14	97.4	70.0-130
Benzene	39.9	ug/L	EPA 8260B	6/20/14	112	70.0-130
Ethanol	99.8	ug/L	EPA 8260B	6/20/14	106	55.0-150
Ethylbenzene	39.9	ug/L	EPA 8260B	6/20/14	112	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	6/20/14	106	70.0-130
P + M Xylene	39.9	ug/L	EPA 8260B	6/20/14	106	70.0-130
TPH as Gasoline	482	ug/L	EPA 8260B	6/20/14	107	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	6/20/14	109	70.0-130
Toluene	39.9	ug/L	EPA 8260B	6/20/14	117	70.0-130

KIFF ANALYTICAL, LLC

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

88422

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: 1 of 2
Cooler # ____ of ____

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2Q14 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_201406
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: 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 W; 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: 8015TPHDiesel W/ Silic	8260 GC/MS GRO	8260BtexMtbeTBA	8260Ethanol	Comments/Lab Sample I.D.	
1	MW-10_20140630	WG		6-12-14	1126	6	N									x	x	x	x		01
2	MW-11_20140630	WG			1108	6	N									x	x	x	x		02
3	MW-12_20140630	WG			1445	6	N									x	x	x	x		03
4	MW-12A_20140630	WG			1002	6	N									x	x	x	x		04
5	MW-13_20140630	WG			1159	6	N									x	x	x	x		05
6	MW-14_20140630	WG			1530	6	N									x	x	x	x		06
7	MW-15_20140630	WG			1415	6	N									x	x	x	x		07
8	MW-16_20140630	WG			1435	6	N									x	x	x	x		08
9	MW-17_20140630	WG			1550	6	N									x	x	x	x		09
10	MW-3_20140630	WG			1414	6	N									x	x	x	x		10
11	MW-6_20140630	WG		06-12-14	1450	6	N									x	x	x	x		11
12	TB1_20140630	W		06-12-14	0725		N									x	x	x	x		12

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	6-12-2014				
			Kiff Analytical	06/13/14	1455

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
	Y / N	Y / N	Y / N	Y / N

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark McCulloch

SIGNATURE of SAMPLER:

DATE Signed: 6-12-2014 Time: 1715

88422

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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.

2Q14 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_201406
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

MATRIX		MATRIX	
DRINKING WATER	WP	WATER	W
GROUND WATER	WG	SURFACE WATER	WS
WASTE WATER	WW	WATER QC	WQ
FREE PRODUCT	LF	SLUDGE	SL
SOIL	SO	RINSEATE	WH
OIL	OL	OTHER	OT
WIPE	SW	ANIMAL TISSUE	TA
AMBIENT AIR	AA		
SVE AIR	AE		
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	Requested Analyses: 8015TPHDiesel W/ Silic	8260 GC/MS GRO	8260Btex/Mtbe/TBA	8260Ethanol	Comments/Lab Sample I.D.
1	MW-7_20140630	WG		6-12-14	1353	6	N				✓					X	X	X	X	13
2	MW-8_20140630	WG		6-12-14	1340	6	N				✓					X	X	X	X	14
3	MW-9_20140630	WG		6-12-14	1405	6	N				✓					X	X	X	X	15
4	~~TB2_20140630~~ DO	W														X	X	X	X	
5	FD1_20140630	W		6-12-14	1535	6	N				✓					X	X	X	X	16
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Additional Comments/Special Instructions:

Global ID: T0600101476

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	6-12-2014	1710			
			Kiff Analytical	06/13/14	1155

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) UPS COURIER ~~FEDEX~~ US MAIL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark McCulloch

SIGNATURE of SAMPLER:

DATE Signed: 6-12-2014 Time: 1715

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 88422

Sample Receipt	Initials/Date: Eyj 061314	Storage Time: 1455	Sample Login	Initials/Date: Eyj 061614

TAT: ☒ Standard ☐ Rush ☐ Split ☐ None

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

Temp °C -0.8 ☐ N/A	Therm ID	Time 1005	Coolant present ☒ Yes ☐ No ☐ Water	☒ Temp Excursion

For Shipments Only:	Cooler Receipt Initials/Date/Time: Eyj 061314 1005	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: Sample -12 has 2 containers. The number is not listed on the COC. Samples 01-12 have HCl stickers on the containers. Eyj 061314 1455

Receipt Details:

Matrix	Container Type	# of Containers
WA	Voa	92

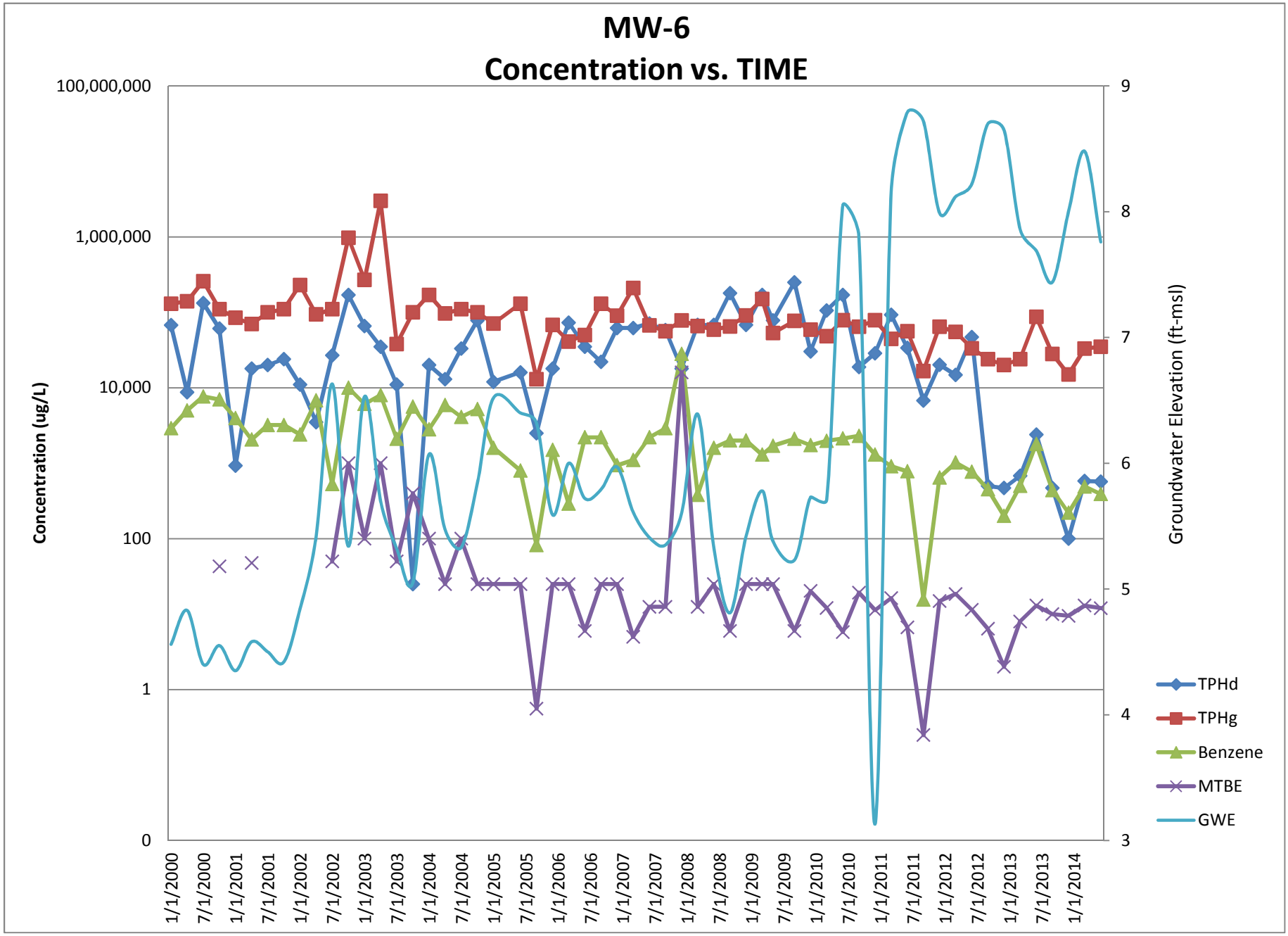
CS Required: ☐

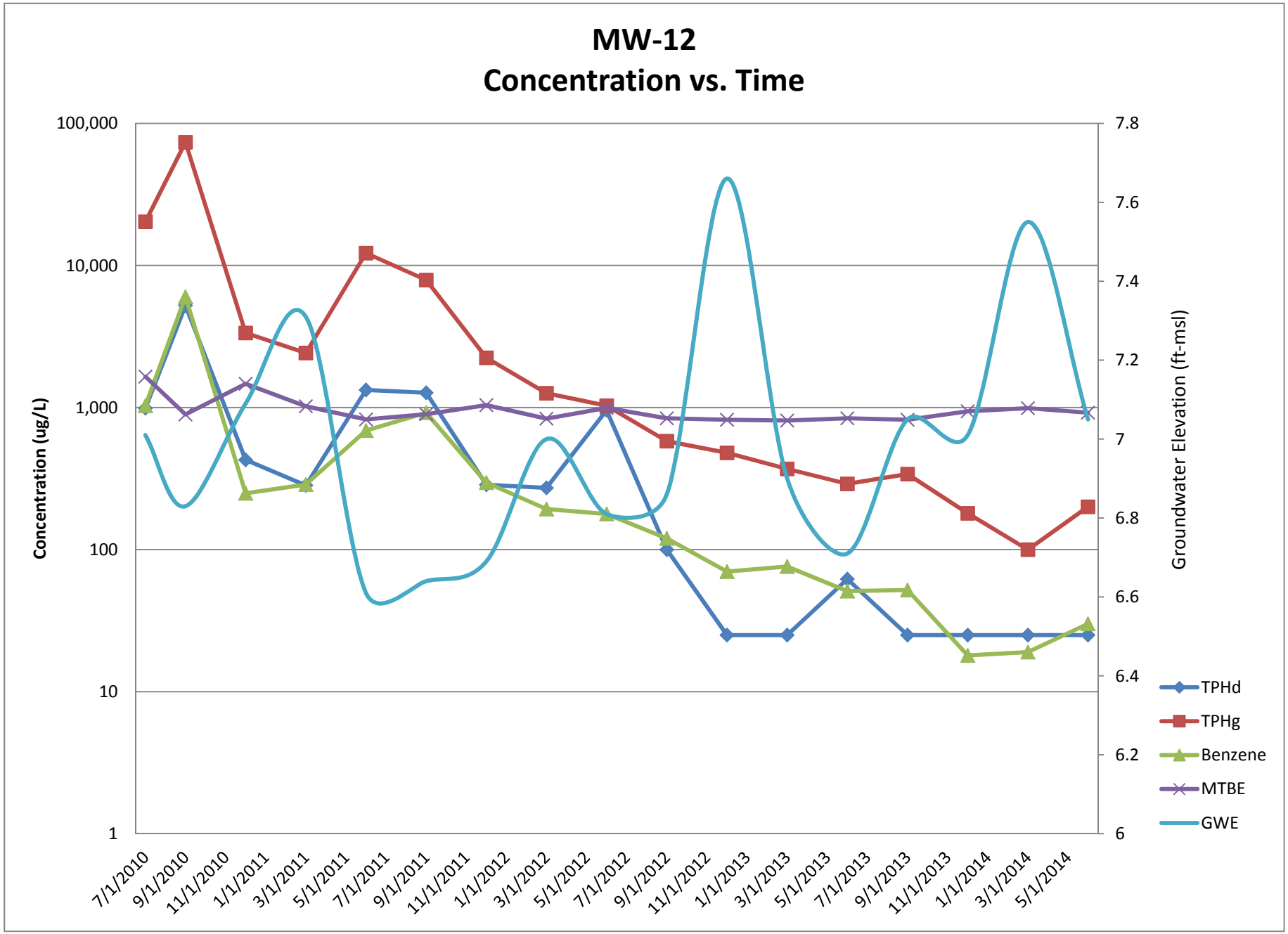
Proceed With Analysis: ☐ YES ☐ NO Init/Date:

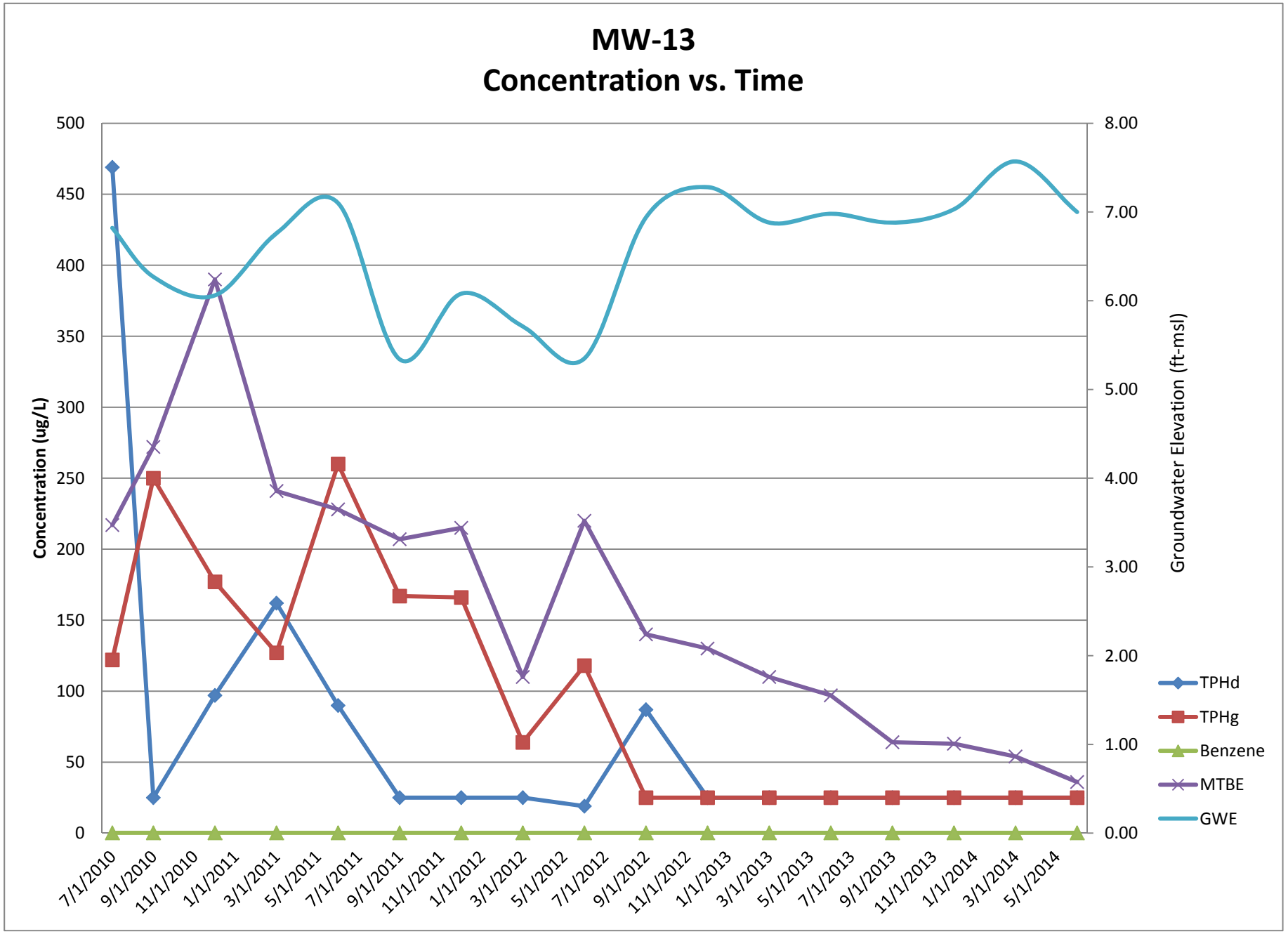
Client Communication:

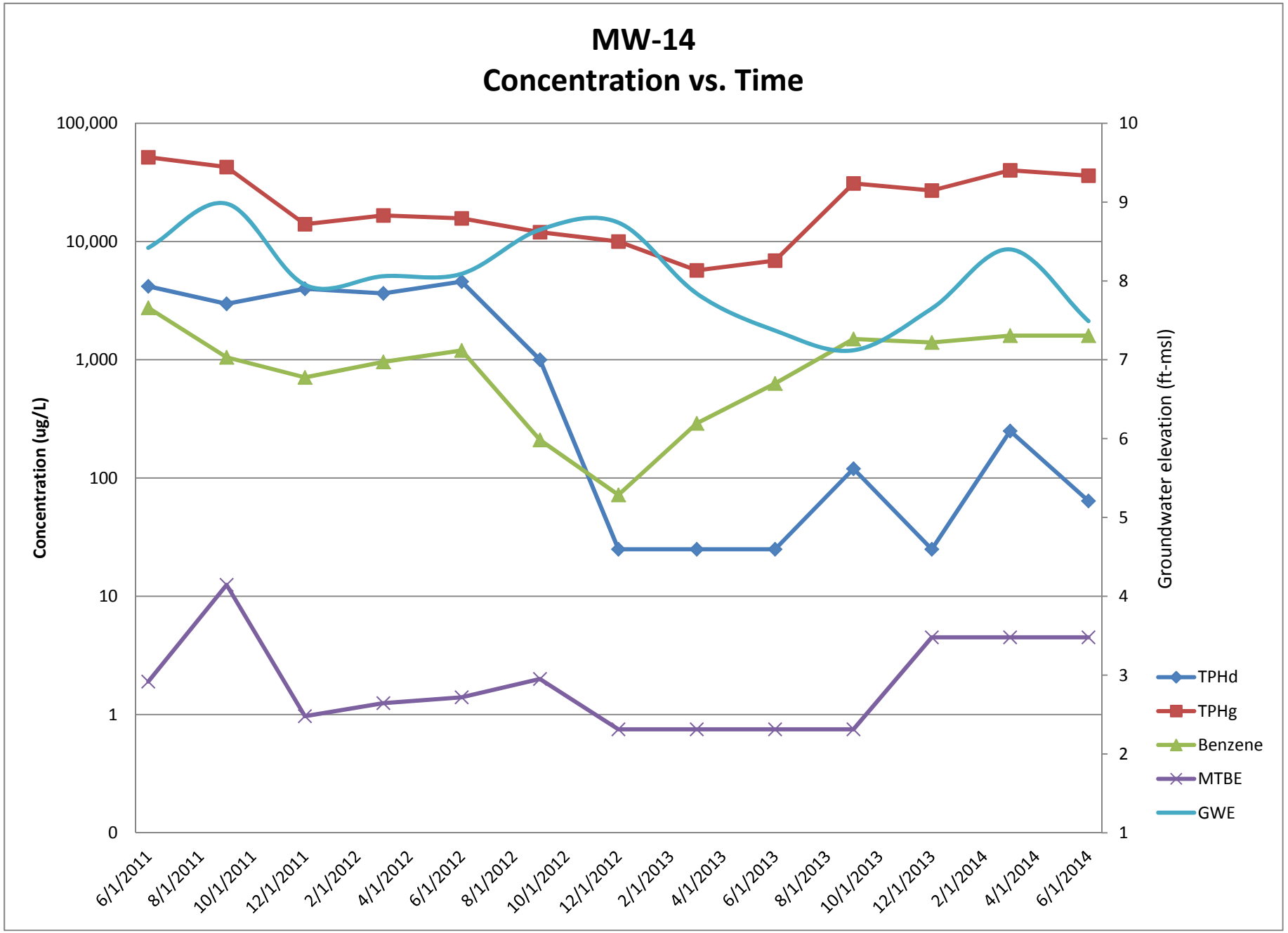
Appendix E

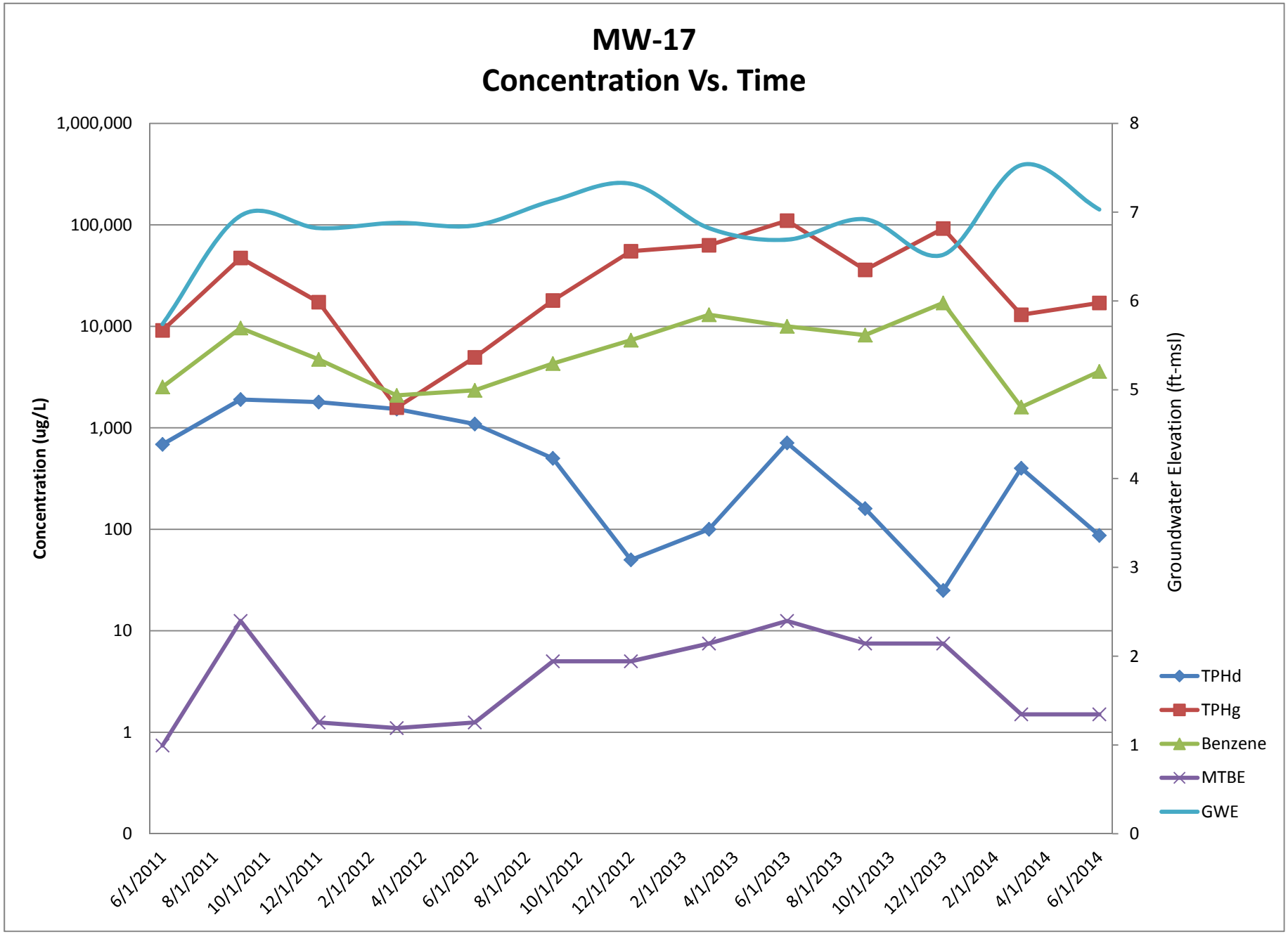
Concentration vs. Time Graphs


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
5/1/2014
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
5/1/2014
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
8/1/2011
10/1/2011
12/1/2011
2/1/2012
4/1/2012
6/1/2012
8/1/2012
10/1/2012
12/1/2012
2/1/2013
4/1/2013
6/1/2013
8/1/2013
10/1/2013
12/1/2013
2/1/2014
4/1/2014
6/1/2014
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
8/1/2011
10/1/2011
12/1/2011
2/1/2012
4/1/2012
6/1/2012
8/1/2012
10/1/2012
12/1/2012
2/1/2013
4/1/2013
6/1/2013
8/1/2013
10/1/2013
12/1/2013
2/1/2014
4/1/2014
6/1/2014
TPHd
TPHg
Benzene
MTBE
GWE