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July 27, 2010

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

**Subject: Quarterly Summary Report - Second Quarter 2010**  
**Site: 76 Station No. 5191/5043**  
**449 Hegenberger Road**  
**Oakland, California**  
**Fuel Leak Case No. RO0000219**

Dear Ms. Jakub;

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

If you have any questions or need additional information, please call:

Liz Bermudez  
Pacific Convenience & Fuel  
2603 Camino Ramon, Suite 350  
San Ramon, California 94583  
Tel: (925) 884-0860  
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Sincerely,

**PACIFIC CONVENIENCE & FUEL**

**LIZ BERMUDEZ**  
Senior Paralegal

Attachment



## **Quarterly Summary Report – Second Quarter 2010**

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

**Alameda County Health Care Services Agency  
Fuel Leak Case No. R0000219  
San Francisco Bay Regional Water Quality Control  
Board (Region 2) No. 01-1601**

**Delta Project No. I42705191**

**Submitted to:**

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

**Submitted by:**

Delta Consultants  
11050 White Rock Road, Suite 110  
Rancho Cordova, CA 95670 USA  
+1 800.477.7411

### SITE INFORMATION

Station Number:	<b>76 Station No. 5191/5043</b>
Site Address:	449 Hegenberger Road, Oakland, California, 94621
Contact:	Mr. Dennis Dettloff Senior Project Manager Delta Consultants (Delta) 11050 White Rock Road, Suite 110 Rancho Cordova, California 95670
Consulting Company:	Delta
Delta Project No.:	I42705191
Contact/ Primary Agency:	Ms. Barbara Jakub, Hazardous Materials Specialist Alameda County Health Care Services Agency

#### **WORK PERFORMED THIS QUARTER [Second Quarter 2010]:**

1. Blaine Tech Services, Inc. (Blaine Tech) conducted the second quarter 2010 groundwater monitoring and sampling event on June 30, 2010.
2. Delta obtained access to off-site monitoring wells MW-7 and MW-8.
3. Delta installed two monitoring/extraction wells, MW-11 and MW-12, and two monitoring wells, MW-12A and MW-13, as proposed in the work plan submitted to the Alameda County Health Care Services Agency (ACHCSA) on February 19, 2010.

#### **WORK PROPOSED FOR NEXT QUARTER [Third Quarter 2010]:**

1. Delta will complete and submit the second quarter 2010 monitoring report contained herein.
2. Blaine Tech will conduct the third quarter 2010 groundwater monitoring and sampling activities.

#### **BACKGROUND**

The subject site is an operating 76 station located on the southwestern corner of Hegenberger Road and Edgewater Drive in Oakland, California. Station facilities include three underground storage tanks (USTs), two dispenser islands, a station building, and a carwash. A total of ten groundwater monitoring wells are located at or near the site (**Figures 1 and 2**).

Previous investigation information and site history are presented as **Attachment A**. Blaine Tech's procedures for groundwater monitoring and sampling, and equipment decontamination are presented as **Attachment B**. The groundwater monitoring and sampling field data sheets are presented as **Attachment C**. The groundwater sampling certified analytical report and chain-of-custody documentation are each presented in **Attachment D**. The waste disposal manifest is presented as **Attachment E**.

Site summary data has been tabled in the following:

- **Table 1** summarizes the current groundwater gauging and analytical data.
- **Table 2** summarizes the historical groundwater gauging and analytical data.
- **Table 2a** summarizes the additional historical groundwater analytical data.
- **Table 3** summarizes the historical groundwater flow direction and gradient information.
- **Table 4** summarizes historical well construction detail.

**SAMPLING AND MONITORING INFORMATION**

Current Phase of Project:	Groundwater monitoring
Frequency of Monitoring:	Quarterly (MW-3, 6, 7, 8, 9,10, 11, 12, 12A, and 13)
Frequency of Sampling:	Quarterly (MW-6, 10, 11, 12, 12A, and 13) Semi-Annual (2 <sup>nd</sup> and 4 <sup>th</sup> Quarter, MW-3, 7, 8, and 9)
Have Light Non-Aqueous Phase Liquids (LNAPL) Been Measured On-site, Historically?	Yes, last observed in MW-6 4Q09
Historic Range in Depth to Water (DTW; feet [ft] below top of casing [BTOC] 1Q92 to 2Q10):	0.07 feet (MW-9, 1Q05) to 6.4 feet (MW-6, 3Q96)
Local Water Supply Wells:	See <b>Attachment A</b>

**CURRENT QUARTER MONITORING DATA**

Wells Monitored:	MW-3, 6, 7, 8, 9, and 10
Wells Sampled:	MW-3, 6, 7, 8, 9, and 10
Monitoring and Sampling Date:	June 30, 2010
LNAPL Measured This Quarter:	No
Cumulative LNAPL Recovered to Date:	n/a
DTW Range (ft BTOC):	2.32 feet (MW-9) to 4.45 feet (MW-7)
Average Change in Groundwater Elevation Since Last Event (ft above mean sea level):	0.36 Decrease
Groundwater Flow Direction and Gradient (ft/ft):	Southeast at 0.009 ft/ft

**CURRENT QUARTER ANALYTICAL DATA**

Constituents	Number of Detections Above LRL of the Samples Collected : Total Samples Collected	Minimum Reported Concentration, in µg/L (Sample ID)	Maximum Reported Concentration, in µg/L (Sample ID)
TPHg	2:6	261 (MW-3)	78,700 (MW-6)
Benzene	1:6	<0.50 (MW-3,7,8,9, and 10)	2,130 (MW-6)
MTBE	3:6	0.85 (MW-9)	89 (MW-3)
TPH-DRO	6:6	53.4 (MW-10)	170,000 (MW-6)

**Explanations:**

µg/L = Micrograms per liter

LRL = Laboratory reporting limit organics

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tertiary-butyl ether

TPH-DRO = Total petroleum hydrocarbons - Diesel range

## GROUNDWATER MONITORING AND SAMPLING

### Monitoring and Sampling procedures

Quarterly groundwater monitoring and sampling was conducted at Station No. 5191/5043 on June 30, 2010 by Blaine Tech. Water levels were gauged in six of the ten monitoring wells at the site. Measured depths to groundwater and respective groundwater elevations are summarized in **Table 1**. Depths to water were measured to within 0.01 feet BTOC in wells MW-3, MW-6, MW-7, MW-8, MW-9, and MW-10 using a water level indicator. Historic gauging data and laboratory analytical results are summarized in **Table 2**.

All monitoring and sampling activities for this site were performed by Blaine Tech during the second quarter 2010 and reviewed and certified by a California Professional Geologist.

### Groundwater Sample Analysis

Groundwater samples collected from monitoring wells MW-3, MW-6, MW-7, MW-8, MW-9, and MW-10 were submitted to Pace Analytical Services (Pace) of Seattle, WA, a California state-certified laboratory (No.01153CA). Samples were analyzed for the presence of TPH-DRO [silica gel treated] by Environmental Protection Agency (EPA) Method 8015B, TPHg by the California LUFT Method, benzene, toluene, ethylbenzene, total xylenes (collectively BTEX), MTBE, and ethanol by EPA Method 8260, nitrite N by Standard Method (SM) 4500-NO<sub>2</sub> B, nitrogen, nitrate, and nitrogen NO<sub>2</sub> plus NO<sub>3</sub> by EPA Method 353.2, sulfate by EPA Method 300.0, and total iron and dissolved iron by EPA Method 6010.

### Quality Assurance/Quality Control

No significant issues were noted by Pace Analytical during sample analysis that would have an adverse affect on the quality of the data.

### Purge and Rinse Water Disposal

Approximately 33 gallons of generated groundwater during this quarterly groundwater sampling event were temporarily stored by Blaine Tech in a 2000-gallon poly tank. The generated groundwater was transported for proper disposal at Seaport Environmental in Redwood City, California. The method of containment and disposal is reported in Blaine Tech's procedures for groundwater sampling presented as **Attachment B**. A copy of the waste manifest documentation is presented as **Attachment E**.

## DISCUSSION AND CONCLUSION

With the recent installation of four additional wells, this site now has eight on-site and two off-site monitoring wells. The eight on-site wells are monitored on a quarterly basis. Monitoring wells MW-3, MW-7, MW-8, and MW-9 are sampled during the 2<sup>nd</sup> and 4<sup>th</sup> quarters while monitoring wells MW-6 and MW-10 are sampled quarterly. Beginning in early third quarter 2010, the four new wells, MW-11, MW-12, MW-12A, and MW-13, will also be sampled quarterly. The second quarter 2010 groundwater monitoring and sampling event was performed by Blaine Tech on June 30, 2010. The average groundwater elevation decreased 0.36 feet from the March 2010 event. Depth to groundwater in the site monitoring wells ranged from 2.32 feet (MW-9) to 4.45 feet (MW-7) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the southeast at 0.009 foot

per foot (ft/ft) during the current event which is consistent with the historical groundwater flow direction and gradient.

#### **Contaminants of Concern:**

**TPHg:** TPHg was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-3 (261 µg/L) and MW-6 (78,700 µg/L) during the current event.

**TPH-DRO:** TPH-DRO was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-3 (89.7 µg/L), MW-6 (170,000 µg/L), MW-7 (66 µg/L), MW-8 (182 µg/L), MW-9 (95 µg/L), and MW-10 (53.4 µg/L) during the current event.

**Benzene:** Benzene was above the laboratory's indicated reporting limits in the groundwater sample collected and submitted for analysis from monitoring well MW-6 (2,130 µg/L) during the current event.

**MTBE:** MTBE was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-3 (89 µg/L), MW-6 (5.8 µg/L), and MW-9 (0.85 µg/L) during the current event.

Additionally, toluene was above the laboratory's indicated reporting limit in the groundwater sample collected and submitted for analysis from monitoring well MW-6 (281 µg/L); ethylbenzene was above the laboratory's indicated reporting limit in the groundwater sample collected and submitted for analysis from monitoring well MW-6 (2,860 µg/L); and total xylenes were above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring well MW-6 (8,400 µg/L) during the current event.

The second quarter 2010 groundwater elevation contour map is presented as **Figure 3**. Groundwater concentrations are shown on **Figure 4**. A groundwater flow direction rose diagram is presented as **Figure 5**.

## **RECOMMENDATIONS**

### **Characterization Status**

During the second quarter 2010, monitoring well MW-3 groundwater analytical results indicated that MTBE increased in concentration while TPHg and TPH-DRO concentrations decreased. Analytical results from the groundwater sample collected from monitoring well MW-6 indicated that TPHg, benzene, and TPH-DRO increased in concentration while MTBE concentrations decreased. Analytical results from the groundwater sample collected from monitoring wells MW-7 and MW-8 have remained constant for TPHg, MTBE, and benzene while an increase in concentration of TPH-DRO was reported during the second quarter 2010. Analytical results from the groundwater sample collected from monitoring well MW-9 indicated that TPHg and benzene remained constant in concentrations while TPH-DRO and MTBE concentrations increased. Analytical results from the groundwater sample collected from monitoring well MW-10 indicated a decrease in benzene and TPH-DRO. TPHg and MTBE concentrations in monitoring well MW-10 remained below the laboratory's indicated reporting limits, as shown in **Table 2**.

### **Remediation Activities**

Batch extraction using monitoring/extraction wells MW-11 and MW-12 and monitoring well MW-12A was conducted on July 7 and 8, 2010. The details of this extraction event were presented in the Site Investigation Report submitted on July 27, 2010.

### **Recent Correspondence**

Alameda County Health Care Services Agency approved Delta's work plan in a letter dated April 22, 2010.

## REMARKS

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

Please contact either of the undersigned at 800-477-7411 if you have questions.

Sincerely,

**DELTA CONSULTANTS**



Tara L. Bosch  
Staff Engineer



Dennis S. Dettloff, P.G.  
Senior Project Manager  
California Professional Geologist No. 7480



## Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Plan
- Figure 3 – Groundwater Elevation Contour Map
- Figure 4 – Groundwater Concentration Map
- Figure 5 – Groundwater Flow Direction Rose Diagram

## Tables

- Table 1 – Current Ground Water Gauging and Analytical Data
- Table 2 – Historical Ground Water Gauging and Analytical Data
- Table 2a – Additional Historical Ground Water Gauging and Analytical Data
- Table 3 – Groundwater Gradient and Flow Direction Data
- Table 4 – Well Construction Details

## Attachments

- Attachment A – Previous Investigations and Site History Summary
- Attachment B – Blaine Tech's Procedures for Groundwater Monitoring and Sampling, and Equipment Decontamination
- Attachment C – Groundwater Monitoring and Sampling Field Data Sheets
- Attachment D – Groundwater Sampling Certified Laboratory Analytical Report and Chain-of-Custody Documentation
- Attachment E – Waste Disposal Manifest



## Figures

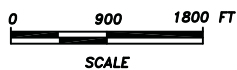
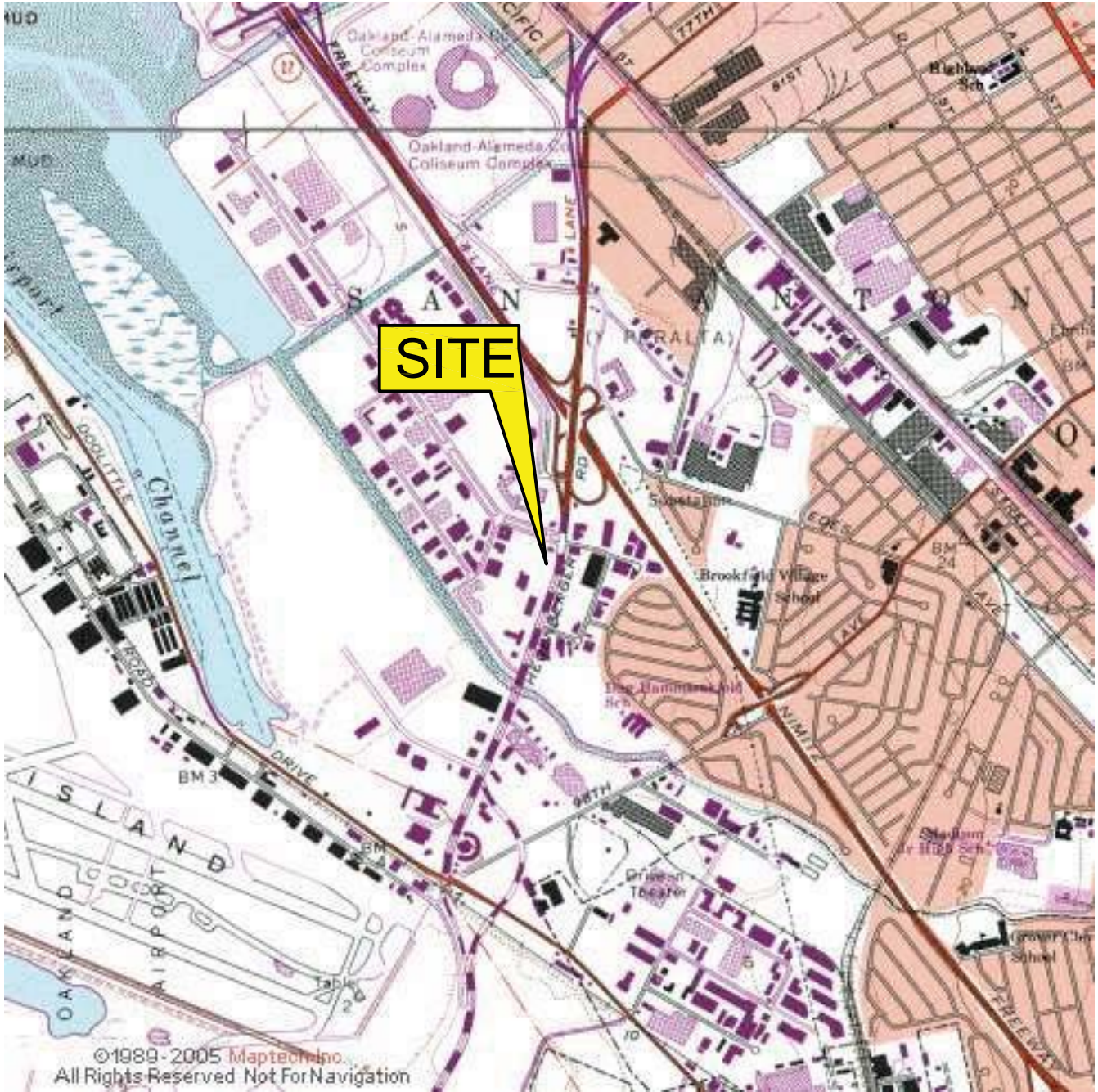


FIGURE 1

SITE LOCATION MAP

76 Station No. 5191/5043  
449 HEGENBERGER ROAD  
OAKLAND, CALIFORNIA

PROJECT NO. 142611270	DRAWN BY JH 06/02/09
FILE NO. 11270-SiteLocator	PREPARED BY DD
REVISION NO.	REVIEWED BY

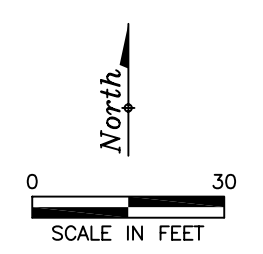
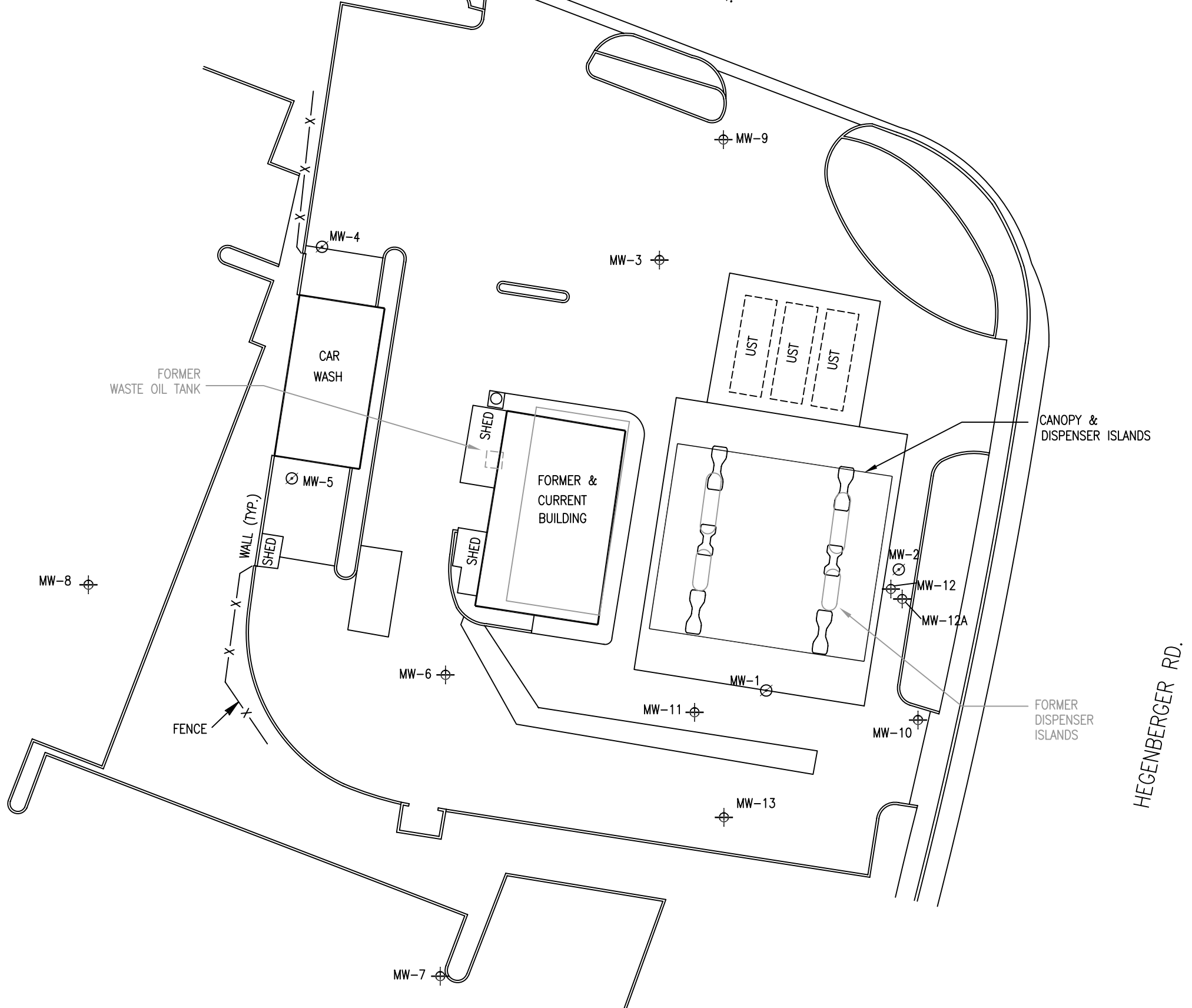


SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE (1973)

EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL









**FIGURE 2  
SITE MAP**

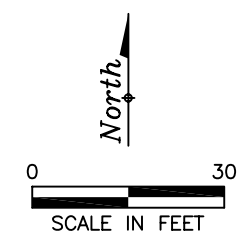
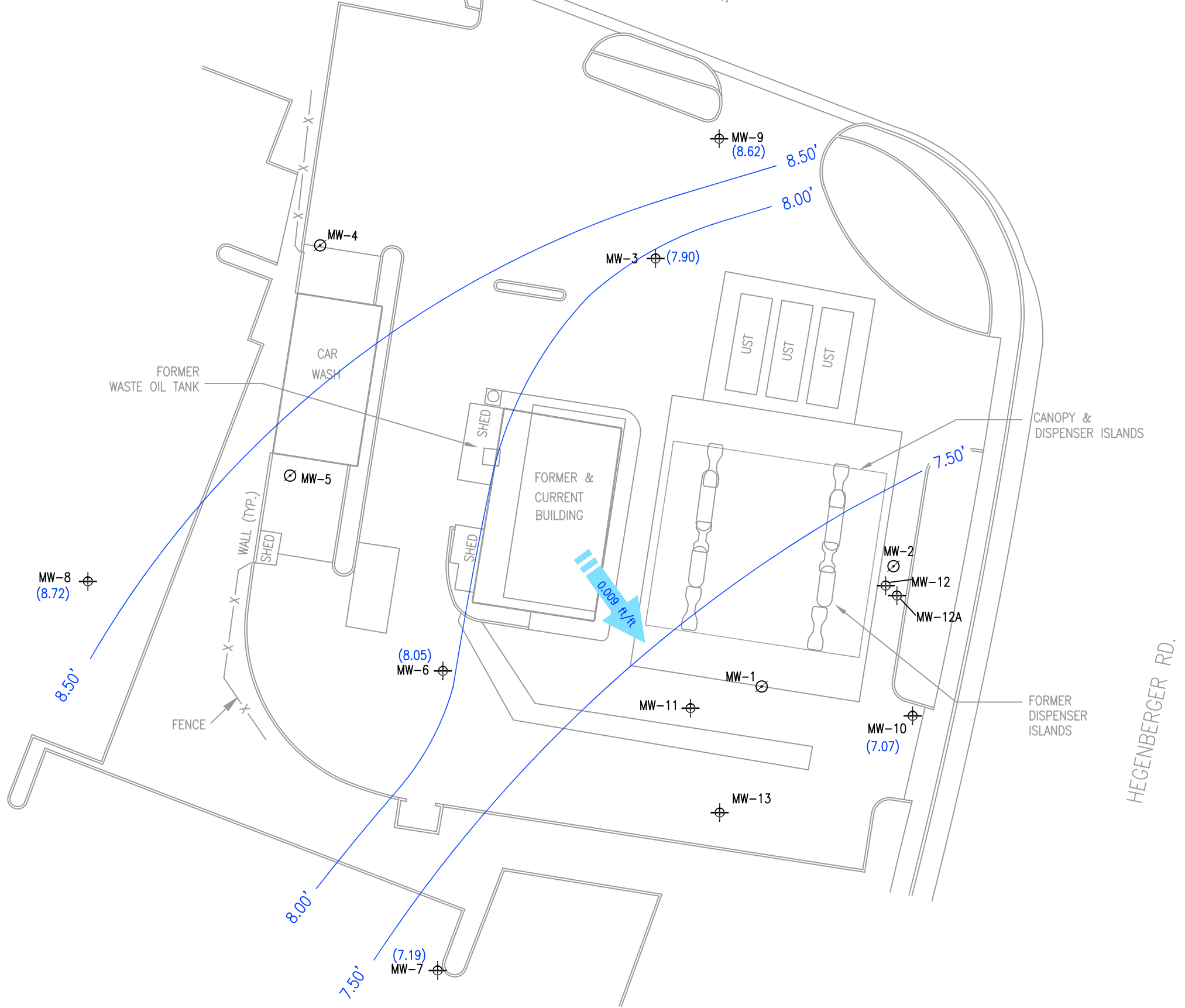
76 STATION NO. 5191/5043  
449 HEGENBERGER ROAD  
OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY JF	DRAWN BY JH	
DATE 07/23/10	REVIEWED BY DD	FILE NAME 5191-SiteS	


EDGEWATER DR.

LEGEND

-  MW- MONITORING WELL
-  MW- ABANDONED MONITORING WELL
-  (7.90) GROUNDWATER ELEVATION IN FEET MEAN SEA LEVEL (ft/msl)
-  8.00' - - GROUNDWATER CONTOUR LINE (ft/msl)  
-DASHED WHERE INFERRED  
(CONTOUR INTERVAL: 0.50 ft)
-  0.009 ft/ft  GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT



**FIGURE 3**  
**GROUNDWATER ELEVATION CONTOUR MAP**  
 JUNE 30, 2010  
 76 STATION NO. 5191/5043  
 449 HEGENBERGER ROAD  
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY JF	DRAWN BY JH	
DATE 07/26/10	REVIEWED BY DD	FILE NAME 5191-SiteS	



EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL

TPH-DRO	95	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHg	<50	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	<0.50	BENZENE
MTBE	0.85	METHYL TERTIARY-BUTYL ETHER

CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)  
 <0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMITS

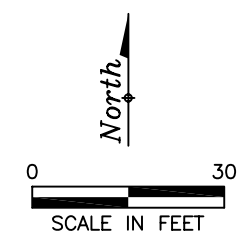
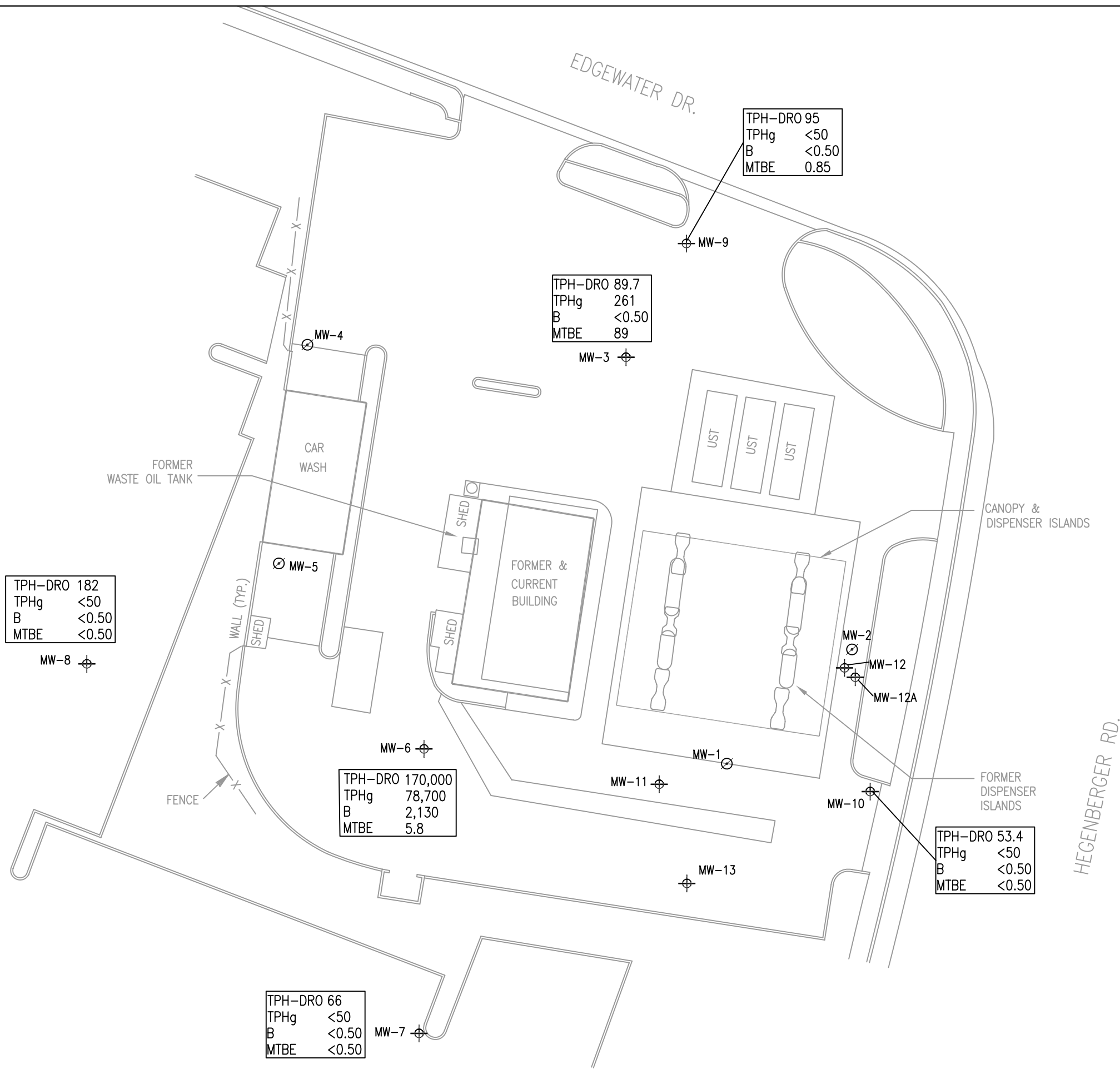
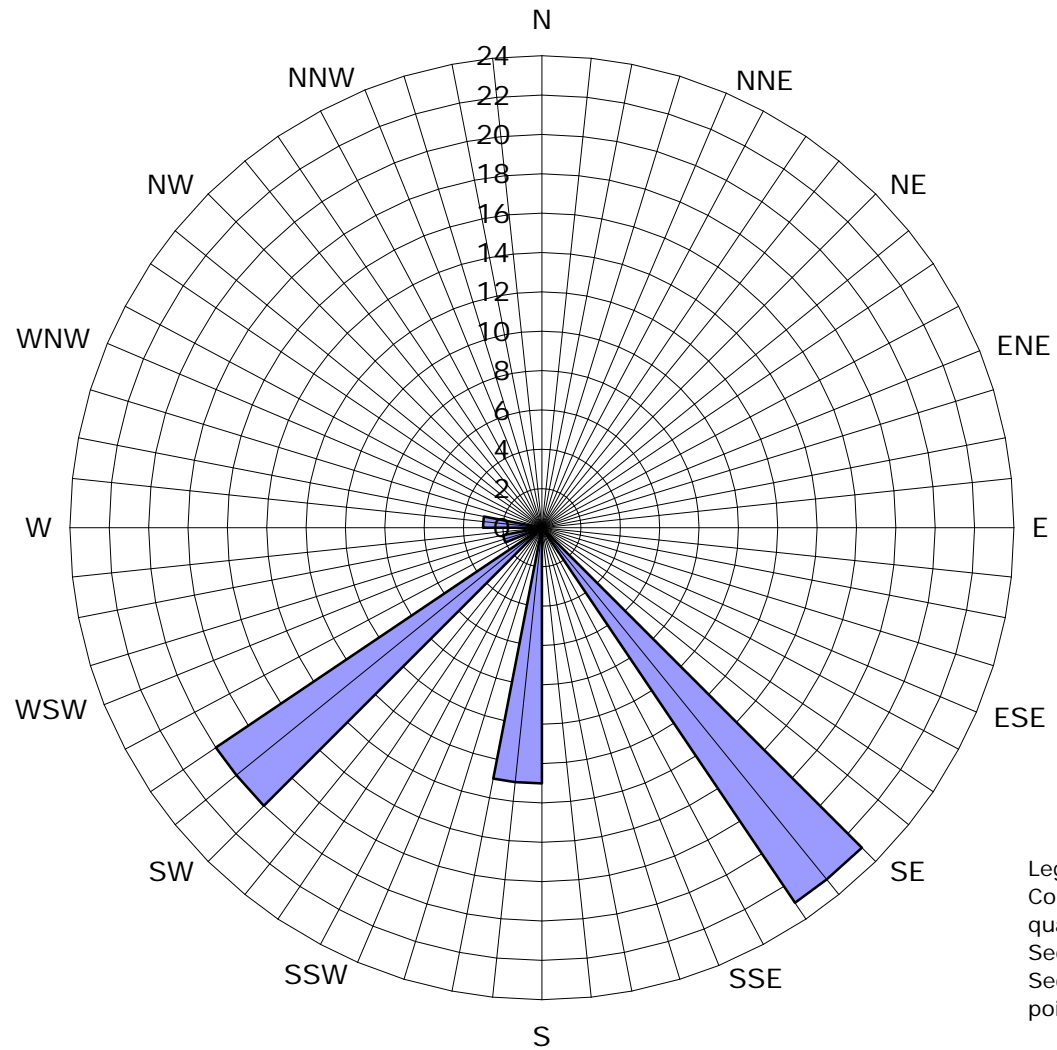


FIGURE 4  
 GROUNDWATER CONCENTRATION MAP  
 JUNE 30, 2010  
 76 STATION NO. 5191/5043  
 449 HEGENBERGER ROAD  
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY JF	DRAWN BY JH
DATE 07/26/10	REVIEWED BY DD	FILE NAME 5191-SiteS

**Figure 5**  
**Historic Groundwater Flow Directions**  
**76 Station No. 5191/5043**  
 449 Hegenberger Road  
 Oakland, California



Legend  
 Concentric circles represent  
 quarterly monitoring events  
 Second Quarter 1992 through  
 Second Quarter 2010 61 data  
 points shown

■ Groundwater Flow Direction

## Tables



**TABLE 1**  
**CURRENT GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8260B) (ug/L)	Ethanol (ug/L)	Diesel Range Organics 8015 (ug/L)	Iron SW6010 Dissolved (ug/L)	Iron SW6010 Total (ug/L)	Nitrate as N (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Sulfate (mg/L)
MW-3	6/30/2010	8.04	2.91	NP	5.13	261	<0.50	<0.50	<0.50	<1.5	89	<250	89.7	10700	10700	<50.0	95	75.7	<5.000
MW-6	6/30/2010	8.87	3.5	NP	5.37	78700	2130	281	2860	8400	5.8	<250	170000	2310	946	<50.0	57.9	69.3	<5.000
MW-7	6/30/2010	8.83	4.45	NP	4.38	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<250	66	7550	836	<50.0	73.9	73.6	191
MW-8	6/30/2010	8.52	2.6	NP	5.92	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<250	182	8000	8000	<50.0	68.2	59.7	2360
MW-9	6/30/2010	8.29	2.32	NP	5.97	<50.0	<0.50	<0.50	<0.50	<1.5	0.85	<250	95	8820	8820	<50.0	14.9	<50.0	19
MW-10	6/30/2010	8.62	3.9	NP	4.72	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	<250	53.4	1860	1860	2120	68.1	2190	70.8

**Gauging Notes:**

TOC - Top of Casing

ft - Feet

NP - LNAPL not present

LNAPL - Light non-aqueous phase liquid

\* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)

-- - No information available

NGV - No guidance value

**Analytical Notes:**

< - Not detected at or above indicated laboratory reporting limit

ug/L - micrograms/liter



**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA															
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)	
MW-1	2/18/1992	NSVD	NG	NG	NG	150000	--	17000	26000	5200	26000	--	--	--	--	--	--	--	--	--	
	5/20/1992	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/31/1992	NSVD	NG	NG	NG	64000	--	13000	12000	2500	22000	--	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	5/4/1993	8.96	2.13	0.1	6.91	LPH	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	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	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	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	LPH
	6/25/1994	7.38	2.49	0.01	4.9	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/27/1994	7.38	3.1	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	LPH
11/14/1994	7.38	2.97	0.12	4.5	LPH	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	LPH	
5/18/1995	NSVD	WD	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	29000	--	1000	5300	260	7900	--	--	--	--	--	--	--	--	--	
	5/20/1992	NSVD	NG	NG	NG	24000	--	2200	7600	630	11000	--	--	--	--	--	--	--	--	--	
	8/31/1992	NSVD	NG	NG	NG	9000	--	1800	640	140	2000	--	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	29000	--	2000	3400	1200	6900	--	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	18000	--	1600	3000	ND	6900	--	--	--	--	--	--	--	--	--	
	5/4/1993	8.96	2.48	NP	6.48	63000	--	3200	17000	470	17000	--	--	--	--	--	--	--	--	--	
	8/4/1993	8.96	3.2	NP	5.76	45000	--	2100	6600	1400	12000	--	--	--	--	--	--	--	--	--	
	11/3/1993	8.58	3.37	NP	5.21	72000	--	3700	16000	3700	20000	--	--	--	--	--	--	--	--	--	
	2/7/1994	8.58	2.4	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	42000	--	2500	1300	2300	13000	--	--	--	--	--	--	--	--	--	
	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	35000	--	2400	850	1700	15000	--	--	--	--	--	--	--	--	--	--
11/14/1994	8.58	2.13	NP	6.45	43000	--	2200	6500	1800	14000	--	--	--	--	--	--	--	--	--	--	
2/21/1995	8.58	1.65	NP	6.93	44000	--	2200	3200	1300	1500	--	--	--	--	--	--	--	--	--	--	
5/18/1995	NSVD	WD	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	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	210	--	1	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	790	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	3300	--	320	ND	96	6.1	--	--	--	--	--	--	--	--	--	
	5/4/1993	7.84	4.32	NP	3.52	1800	--	95	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	8/4/1993	7.84	4.94	NP	2.9	210	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	11/3/1993	7.42	4.53	NP	2.89	640	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	2/7/1994	7.42	2.4	NP	5.02	2700	--	110	ND	17	ND	--	--	--	--	--	--	--	--	--	
	5/19/1994	7.42	3.6	NP	3.82	1800	--	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	130	--	1.1	0.54	ND	0.97	--	--	--	--	--	--	--	--	--	--
	11/14/1994	7.42	3.18	NP	4.24	1600	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
	2/21/1995	7.42	1.81	NP	5.61	3800	--	350	ND	130	22	--	--	--	--	--	--	--	--	--	--
	5/18/1995	7.42	4.56	NP	2.86	1300	--	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	WI
7/26/1996	7.42	WI	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	WO	
1/29/1997	7.42	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	
4/15/1997	7.42	WI	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	3.5	NP	3.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-3	7/15/1997	8.04	3.71	NP	4.33	240	--	ND	ND	ND	ND	490	--	--	--	--	--	--	--	--
	10/9/1997	8.04	3.7	NP	4.34	270	--	1.1	ND	2.4	1.4	910	--	--	--	--	--	--	--	--
	1/14/1998	8.04	2.16	NP	5.88	310	--	ND	ND	0.62	0.65	140	--	--	--	--	--	--	--	--
	4/1/1998	8.04	2.2	NP	5.84	370	--	5.7	ND	ND	ND	93	--	--	--	--	--	--	--	--
	7/15/1998	8.04	3.38	NP	4.66	460	--	ND	ND	ND	ND	230	--	--	--	--	--	--	--	--
	10/16/1998	8.04	2.3	NP	5.74	330	--	4.7	ND	ND	ND	60	--	--	--	--	--	--	--	--
	1/25/1999	8.04	2.42	NP	5.62	420	--	1.5	ND	ND	ND	180	--	--	--	--	--	--	--	--
	4/15/1999	8.04	2.16	NP	5.88	290	--	0.54	ND	ND	ND	160	--	--	--	--	--	--	--	--
	7/14/1999	8.04	2.35	NP	5.69	290	--	3.2	ND	ND	ND	160	--	--	--	--	--	--	--	--
	10/21/1999	8.04	2.49	NP	5.55	360	--	0.77	ND	ND	ND	82	--	--	--	--	--	--	--	--
	1/20/2000	8.04	2.38	NP	5.66	ND	--	0.81	ND	ND	ND	54	--	--	--	--	--	--	--	--
	4/13/2000	8.04	2.76	NP	5.28	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	345	--	ND	ND	ND	ND	94.7	--	--	--	--	--	--	--	--
	10/26/2000	8.04	3.12	NP	4.92	480	--	6	ND	ND	ND	120	--	--	--	--	--	--	--	--
	1/3/2001	8.04	3.65	NP	4.39	364	--	1.59	ND	ND	ND	118	--	--	--	--	--	--	--	--
	4/4/2001	8.04	3.98	NP	4.06	417	--	1.24	ND	ND	0.802	237	--	--	--	--	--	--	--	--
	7/17/2001	8.04	3.12	NP	4.92	480	--	ND	ND	ND	ND	150	--	--	--	--	--	--	--	--
	10/1/2001	8.04	3.25	NP	4.79	310	--	1	<0.50	<0.50	<0.50	53	--	--	--	--	--	--	--	--
	1/31/2002	8.04	2.27	NP	5.77	250	--	3.5	<1.0	<1.0	<1.0	110	--	--	--	--	--	--	--	--
	4/18/2002	8.04	3.55	NP	4.49	300	--	<2.0	<2.0	<2.0	<2.0	--	59	--	--	--	--	--	--	--
	7/28/2002	8.04	2.55	NP	5.49	--	500	<0.50	<0.50	<0.50	<1.0	--	130	--	--	--	--	--	--	--
	10/9/2002	8.04	2.47	NP	5.57	--	690	<5	<5	<5	<10	--	120	--	--	--	--	--	--	--
	1/2/2003	8.04	1.7	NP	6.34	--	310	<0.50	<0.50	<0.50	<1.0	--	110	<100	<500	<2.0	<2.0	<2.0	<2.0	<2.0
	4/1/2003	8.04	3.48	NP	4.56	--	250	<1.0	<1.0	<1.0	<2.0	--	210	--	--	--	--	--	--	--
	7/1/2003	8.04	2.65	NP	5.39	--	450	<2.5	<2.5	<2.5	<5.0	--	70	--	<2500	--	--	--	--	--
	10/2/2003	8.04	3.12	NP	4.92	--	<250	<2.5	<2.5	<2.5	<5.0	--	210	--	<2500	--	--	--	--	--
	1/9/2004	8.04	2.39	NP	5.65	--	300	<0.50	0.53	0.53	1.5	--	66	--	<500	--	--	--	--	--
	4/26/2004	8.04	3.11	NP	4.93	--	440	2.5	5.5	2.9	9.4	--	81	--	<50	--	--	--	--	--
	7/22/2004	8.04	2.51	NP	5.53	--	420	<0.5	<0.5	<0.5	<1	--	72	--	<1000	--	--	--	--	--
	10/29/2004	8.04	2	NP	6.04	--	460	5.6	15	10	46	--	48	--	<50	--	--	--	--	--
	1/10/2005	8.04	1.52	NP	6.52	--	280	<0.50	0.62	<0.50	2.4	--	64	--	<50	--	--	--	--	--
	6/15/2005	8.04	2	NP	6.04	--	460	<0.50	0.7	0.56	1.9	--	110	--	<50	--	--	--	--	--
	9/27/2005	8.04	1.9	NP	6.14	--	210	<0.50	0.6	<0.50	<1.0	--	100	79	<250	<0.50	<0.50	<0.50	--	--
12/13/2005	8.04	2.35	NP	5.69	--	230	<0.50	<0.50	<0.50	<1.0	--	92	--	<250	--	--	--	--	--	
3/23/2006	8.04	1.84	NP	6.2	--	290	<0.50	<0.50	<0.50	<1.0	--	88	--	<250	--	--	--	--	--	
6/23/2006	8.04	2.26	NP	5.78	--	500	<0.50	<0.50	<0.50	<1.0	--	75	--	<250	--	--	--	--	--	
9/26/2006	8.04	2.08	NP	5.96	--	270	<0.50	<0.50	<0.50	<0.50	--	73	--	<250	--	--	--	--	--	
12/22/2006	8.04	1.88	NP	6.16	--	260	<0.50	<0.50	<0.50	1.2	--	71	--	<250	--	--	--	--	--	
3/30/2007	8.04	2.47	NP	5.57	--	390	<0.50	<0.50	<0.50	<0.50	--	120	--	<250	--	--	--	--	--	
6/28/2007	8.04	2.54	NP	5.5	--	370	<0.50	<0.50	<0.50	<0.50	--	55	--	<250	--	--	--	--	--	
9/25/2007	8.04	2.56	NP	5.48	--	350	<0.50	<0.50	<0.50	<0.50	--	61	--	<250	--	--	--	--	--	
12/28/2007	8.04	2.29	NP	5.75	--	260	<0.50	<0.50	<0.50	<1.0	--	66	--	<250	--	--	--	--	--	
3/22/2008	8.04	3.26	NP	4.78	--	390	<0.50	<0.50	<0.50	<1.0	--	39	--	<250	--	--	--	--	--	
6/23/2008	8.04	2.6	NP	5.44	--	200	<0.50	<0.50	<0.50	<1.0	--	46	--	<250	--	--	--	--	--	
9/19/2008	8.04	3.45	NP	4.59	--	180	<0.50	<0.50	<0.50	<1.0	--	120	--	<250	--	--	--	--	--	
12/31/2008	8.04	2.55	NP	5.49	--	190	<0.50	<0.50	<0.50	<1.0	--	38	--	<250	--	--	--	--	--	
3/27/2009	8.04	2.37	NP	5.67	--	150	<0.50	<0.50	<0.50	<1.0	--	50	--	<250	--	--	--	--	--	
5/28/2009	8.04	3.32	NP	4.72	--	190	<0.50	<0.50	<0.50	<1.0	--	60	--	<250	--	--	--	--	--	
9/17/2009	8.04	2.63	NP	5.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2009	8.04	2.13	NP	5.91	--	300	<0.50	<0.50	0.78	<1.5	--	43.1	--	<250	--	--	--	--	--	
3/29/2010	8.04	2.22	NP	5.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
6/30/2010	8.04	2.91	NP	5.13	--	261	<0.50	<0.50	<0.50	<1.5	--	89	--	<250	--	--	--	--	--	
MW-4	8/31/1992	NSVD	NG	NG	NG	240	--	ND	ND	ND	0.54	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	420	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	ND	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	

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**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA															
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)	
MW-4	5/4/1993	9	4.09	NP	4.91	110	--	0.95	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	8/4/1993	9	5.01	NP	3.99	250	--	ND	3.5	ND	4.1	--	--	--	--	--	--	--	--	--	
	11/3/1993	8.41	4.23	NP	4.18	130	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	2/7/1994	8.41	3.35	NP	5.06	56	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	5/19/1994	8.41	3.92	NP	4.49	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	59	--	ND	0.6	ND	ND	--	--	--	--	--	--	--	--	--	--
	11/14/1994	8.41	4.05	NP	4.36	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	WD	
MW-5	8/31/1992	NSVD	NG	NG	NG	78	--	0.89	ND	ND	13	--	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	930	--	70	290	0.79	14	--	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	5700	--	38	ND	620	170	--	--	--	--	--	--	--	--	--	
	5/4/1993	8.95	4.37	NP	4.58	7400	--	41	ND	1000	35	--	--	--	--	--	--	--	--	--	
	8/4/1993	8.95	5.81	NP	3.14	1500	--	130	1	460	11	--	--	--	--	--	--	--	--	--	
	11/3/1993	8.95	5.68	NP	3.27	13000	--	350	ND	3500	530	--	--	--	--	--	--	--	--	--	
	2/7/1994	8.95	5.11	NP	3.84	2000	--	87	ND	370	110	--	--	--	--	--	--	--	--	--	
	5/19/1994	8.95	5.09	NP	3.86	260	--	44	ND	32	4.1	--	--	--	--	--	--	--	--	--	
	6/25/1994	8.95	4.55	NP	4.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/27/1994	8.95	5.72	NP	3.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/15/1994	8.95	5.68	NP	3.27	1600	--	110	ND	340	72	--	--	--	--	--	--	--	--	--	--
11/14/1994	8.95	5.63	NP	3.32	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	WD	
MW-6	8/31/1992	NSVD	NG	NG	NG	ND	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	
	11/30/1992	NSVD	NG	NG	NG	9200	--	550	ND	740	1600	--	--	--	--	--	--	--	--	--	
	2/4/1993	NSVD	NG	NG	NG	3600	--	340	ND	290	550	--	--	--	--	--	--	--	--	--	
	5/4/1993	9.12	3.72	NP	5.4	4900	--	360	18	450	430	--	--	--	--	--	--	--	--	--	
	8/4/1993	9.12	5.15	NP	3.97	3400	--	390	ND	440	190	--	--	--	--	--	--	--	--	--	
	11/3/1993	8.87	5.25	NP	3.62	1400	--	320	ND	200	7.7	--	--	--	--	--	--	--	--	--	
	2/7/1994	8.87	4.55	NP	4.32	4900	--	650	ND	250	35	--	--	--	--	--	--	--	--	--	--
	5/19/1994	8.87	4.62	NP	4.25	3600	--	300	1.7	210	41	--	--	--	--	--	--	--	--	--	--
	8/15/1994	8.87	5.08	NP	3.79	1300	--	130	6.7	54	57	--	--	--	--	--	--	--	--	--	--
	11/14/1994	8.87	5.3	NP	3.57	730	--	50	ND	ND	39	--	--	--	--	--	--	--	--	--	--
	2/21/1995	8.87	5.37	NP	3.5	2000	--	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	WI
	8/17/1995	8.87	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI	WI
	7/26/1996	8.87	6.4	3.33	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/28/1996	8.87	4.1	0.21	4.93	LPH	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	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	LPH
	12/4/1996	8.87	3.65	0.5	5.6	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/19/1996	8.87	4.8	2.2	5.72	LPH	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	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	LPH
	1/27/1997	8.87	4	1.75	6.18	LPH	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	LPH
	2/11/1997	8.87	4.65	1.2	5.12	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/24/1997	8.87	4.81	1.1	4.89	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/10/1997	8.87	4.6	0.95	4.98	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/17/1997	8.87	4.5	0.89	5.04	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
3/31/1997	8.87	4.65	1	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
4/15/1997	8.87	4.9	1.03	4.74	LPH	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	LPH	
5/15/1997	8.87	4.6	0.25	4.46	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
5/27/1997	8.87	4.5	0.25	4.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	

**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-6	6/9/1997	8.87	4.6	0.2	4.42	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/24/1997	8.87	4.5	0.25	4.56	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/9/1997	8.87	4.8	0.6	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	4.5	0.1	4.45	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/20/1997	8.87	4.55	0.1	4.4	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	3.9	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	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	1.6	6.4	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/26/1998	8.87	4.11	0.5	5.14	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/15/1998	8.87	5.03	0.3	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	2.4	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	0.1	5.03	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/28/1998	8.87	3.9	0.2	5.12	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/25/1999	8.87	4.18	0.6	5.14	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/22/1999	8.87	4.07	0.22	4.97	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	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	4.2	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	130000	--	2900	8600	2000	16000	ND	--	--	--	--	--	--	--	--
	2/26/2000	8.87	3.98	NP	4.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	8.87	4.14	NP	4.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2000	8.87	4.04	NP	4.83	140000	--	5000	14000	3600	27000	7700	--	--	--	--	--	--	--	--
	5/26/2000	8.87	4.41	NP	4.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/17/2000	8.87	4.35	NP	4.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/14/2000	8.87	4.47	NP	4.4	259000	--	7670	13700	6860	40700	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	110000	--	7000	6200	3700	12000	670	43	--	--	--	--	--	--	--	
1/3/2001	8.87	4.52	NP	4.35	84700	--	3950	4130	3650	11800	ND	ND	--	--	--	--	--	--	--	
4/4/2001	8.87	4.29	NP	4.58	69800	--	2060	2840	3650	10900	ND	47.8	ND	ND	ND	ND	ND	ND	ND	
7/17/2001	8.87	4.37	NP	4.5	100000	--	3200	3300	3400	12000	ND	--	--	--	--	--	--	--	--	
10/1/2001	8.87	4.45	NP	4.42	110000	--	3200	2400	4500	13000	<1000	--	--	--	--	--	--	--	--	
1/31/2002	8.87	4.03	NP	4.84	230000	--	2400	1800	5400	16000	<2500	--	--	--	--	--	--	--	--	
4/18/2002	8.87	3.45	NP	5.42	94000	--	6800	13000	3000	19000	<500	--	--	--	--	--	--	--	--	
7/28/2002	8.87	2.24	NP	6.63	--	110000	530	170	3200	7300	--	<100	--	--	--	--	--	--	--	
10/9/2002	8.87	3.53	NP	5.34	--	970000	10000	39000	13000	94000	--	<2000	--	--	--	--	--	--	--	
1/2/2003	8.87	2.34	NP	6.53	--	270000	6100	15000	5400	37000	--	<200	--	--	--	--	--	--	--	
4/1/2003	8.87	3.17	NP	5.7	--	3000000	8000	39000	37000	260000	--	<2000	--	--	--	--	--	--	--	
7/1/2003	8.87	3.55	NP	5.32	--	38000	2100	990	2700	6500	--	<100	--	<25000	--	--	--	--	--	

**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-6	10/2/2003	8.87	3.82	NP	5.05	--	100000	5600	6900	4700	18000	--	<800	--	<200000	--	--	--	--	--
	1/9/2004	8.87	2.8	NP	6.07	--	170000	2800	3300	4700	16000	--	<200	--	<50000	--	--	--	--	--
	4/26/2004	8.87	3.4	NP	5.47	--	97000	5900	9000	5100	23000	--	<50	--	<5000	--	--	--	--	--
	7/22/2004	8.87	3.54	NP	5.33	--	110000	4100	5100	4000	16000	--	<200	--	<300000	--	--	--	--	--
	10/29/2004	8.87	3.03	NP	5.84	--	100000	5200	6100	4200	15000	--	<50	--	<5000	--	--	--	--	--
	1/10/2005	8.87	2.35	NP	6.52	--	71000	1600	3700	2100	9900	--	<50	--	<5000	--	--	--	--	--
	6/15/2005	8.87	2.47	NP	6.4	--	130000	800	1800	2200	9300	--	<50	--	<5000	--	--	--	--	--
	9/27/2005	8.87	2.55	NP	6.32	--	13000	82	120	430	990	--	0.56	<10	<250	1.8	<0.50	<0.50	--	--
	12/13/2005	8.87	3.28	NP	5.59	--	68000	1500	1100	2200	7700	--	<50	--	<25000	--	--	--	--	--
	3/23/2006	8.87	2.87	NP	6	--	41000	290	140	1500	2700	--	<50	--	<25000	--	--	--	--	--
	6/23/2006	8.87	3.15	NP	5.72	--	50000	2200	1400	1900	5700	--	<12	--	<6200	--	--	--	--	--
	9/26/2006	8.87	3.08	NP	5.79	--	130000	2200	1000	2900	8800	--	<50	--	<25000	--	--	--	--	--
	12/22/2006	8.87	2.9	NP	5.97	--	90000	940	610	1900	4700	--	<50	--	<25000	--	--	--	--	--
	3/30/2007	8.87	3.26	NP	5.61	--	210000	1100	560	3400	12000	--	<10	--	<5000	--	--	--	--	--
	6/28/2007	8.87	3.46	NP	5.41	--	67000	2200	1300	2700	10000	--	<25	--	<12000	--	--	--	--	--
	9/25/2007	8.87	3.52	NP	5.35	--	56000	2900	720	2400	9000	--	<25	--	<12000	--	--	--	--	--
	12/28/2007	8.87	3.27	NP	5.6	--	78000	28000	2700	4000	8100	--	16000	--	<12000	--	--	--	--	--
	3/22/2008	8.87	2.48	NP	6.39	--	66000	380	150	1500	2400	--	<25	--	<12000	--	--	--	--	--
	6/23/2008	8.87	3.54	NP	5.33	--	59000	1600	130	1800	4100	--	25	--	<12000	--	--	--	--	--
	9/19/2008	8.87	4.06	NP	4.81	--	65000	2000	230	2000	4500	--	<12	--	<6200	--	--	--	--	--
12/31/2008	8.87	3.45	NP	5.42	--	91000	2000	320	5300	13000	--	<50	--	<25000	--	--	--	--	--	
3/27/2009	8.87	3.09	NP	5.78	--	150000	1300	240	2800	7200	--	<50	--	<25000	--	--	--	--	--	
5/28/2009	8.87	3.49	NP	5.38	--	53000	1700	200	2300	5400	--	<50	--	<25000	--	--	--	--	--	
9/17/2009	8.87	3.64	NP	5.23	--	77000	2100	1400	2600	8500	--	<12	--	<6200	--	--	--	--	--	
12/17/2009	8.87	3.14	NP	5.73	--	59100	1730	199	2260	5460	--	20.3	--	<250	--	--	--	--	--	
3/29/2010	8.87	3.16	NP	5.71	--	48400	1980	208	3070	8070	--	12.1	--	<250	--	--	--	--	--	
6/30/2010	8.87	3.5	NP	5.37	--	78700	2130	281	2860	8400	--	5.8	--	<250	--	--	--	--	--	
MW-7	5/27/1997	8.83	4.5	NP	4.33	68	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	6/1/1997	8.83	4.54	NP	4.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/15/1997	8.83	4.7	NP	4.13	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/9/1997	8.83	4.3	NP	4.53	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/14/1998	8.83	2.88	NP	5.95	ND	--	ND	ND	ND	ND	36	--	--	--	--	--	--	--	
	4/1/1998	8.83	3.13	NP	5.7	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	7/15/1998	8.83	4.45	NP	4.38	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/16/1998	8.83	3.45	NP	5.38	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/25/1999	8.83	3.22	NP	5.61	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	4/15/1999	8.83	3.11	NP	5.72	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	7/14/1999	8.83	3.34	NP	5.49	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/21/1999	8.83	3.43	NP	5.4	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/20/2000	8.83	3.29	NP	5.54	ND	--	ND	ND	ND	ND	4.2	--	--	--	--	--	--	--	
	4/13/2000	8.83	3.39	NP	5.44	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	7/14/2000	8.83	4.42	NP	4.41	ND	--	ND	ND	ND	ND	7.83	--	--	--	--	--	--	--	
	7/17/2001	8.83	5.06	NP	3.77	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/1/2001	8.83	4.98	NP	3.85	<50	--	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--	--	--	--	
	1/31/2002	8.83	3.88	NP	4.95	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--	
	4/18/2002	8.83	4.03	NP	4.8	<50	--	<0.50	<0.50	<0.50	<0.50	5.7	--	--	--	--	--	--	--	
	7/28/2002	8.83	3.59	NP	5.24	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.9	--	--	--	--	--	--	
10/9/2002	8.83	4.53	NP	4.3	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.9	--	--	--	--	--	--		
1/3/2003	8.83	3.36	NP	5.47	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--		
4/1/2003	8.83	3.94	NP	4.89	--	71	<0.50	<0.50	0.71	<1.0	--	3.4	--	--	--	--	--	--		
7/1/2003	8.83	4.6	NP	4.23	--	64	<0.50	<0.50	0.77	2	--	35	--	<500	--	--	--	--		
10/2/2003	8.83	5.46	NP	3.37	--	<50	<0.50	<0.50	<0.50	<1.0	--	4.9	--	<500	--	--	--	--		
1/9/2004	8.83	3.55	NP	5.28	--	54	<0.50	<0.50	<0.50	<1.0	--	2.4	--	<500	--	--	--	--		
4/26/2004	8.83	4.49	NP	4.34	--	<50	<0.50	<0.50	<0.50	1.5	--	2.3	--	<50	--	--	--	--		
7/22/2004	8.83	4.93	NP	3.9	--	82	0.9	2	3.5	9.9	--	1.4	--	<1000	--	--	--	--		

**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	10/29/2004	8.83	3.71	NP	5.12	--	210	0.67	1.6	1.7	5.8	--	<0.50	--	<50	--	--	--	--	--
	1/10/2005	8.83	2.77	NP	6.06	--	74	0.51	2.2	1.7	7	--	<0.50	--	<50	--	--	--	--	--
	6/15/2005	8.83	3.4	NP	5.43	--	<50	<0.50	<0.50	<0.50	<1.0	--	0.88	--	<50	--	--	--	--	--
	9/27/2005	8.83	3.44	NP	5.39	--	<50	0.59	1.2	<0.50	<1.0	--	0.96	<10	<250	<0.50	<0.50	<0.50	--	--
	12/13/2005	8.83	3.98	NP	4.85	--	<50	<0.50	<0.50	<0.50	<1.0	--	0.65	--	<250	--	--	--	--	--
	3/23/2006	8.83	3.37	NP	5.46	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	6/23/2006	8.83	5.25	NP	3.58	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/26/2006	8.83	4.13	NP	4.7	--	<50	<0.50	<0.50	<0.50	<0.50	--	0.77	--	<250	--	--	--	--	--
	12/22/2006	8.83	3.63	NP	5.2	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	3/30/2007	8.83	4.31	NP	4.52	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	6/28/2007	8.83	4.62	NP	4.21	--	<50	<0.50	<0.50	<0.50	<0.50	--	0.54	--	<250	--	--	--	--	--
	9/25/2007	8.83	4.65	NP	4.18	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/28/2007	8.83	3.99	NP	4.84	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/22/2008	8.83	4.08	NP	4.75	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	6/23/2008	8.83	4.1	NP	4.73	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/19/2008	8.83	4.86	NP	3.97	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	12/31/2008	8.83	4.17	NP	4.66	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
3/27/2009	8.83	4	NP	4.83	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	
5/28/2009	8.83	4.71	NP	4.12	--	<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	8.83	4.45	NP	4.38	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	
MW-8	5/27/1997	8.52	3.42	NP	5.1	310	--	0.88	0.67	15	70	ND	--	--	--	--	--	--	--	--
	6/1/1997	8.52	3.46	NP	5.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/1997	8.52	3.49	NP	5.03	ND	--	ND	ND	2.7	3.8	ND	--	--	--	--	--	--	--	--
	10/9/1997	8.52	3.73	NP	4.79	590	--	1.4	ND	32	4.1	ND	--	--	--	--	--	--	--	--
	1/14/1998	8.52	1.92	NP	6.6	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/1/1998	8.52	2.38	NP	6.14	ND	--	ND	ND	ND	ND	4.7	--	--	--	--	--	--	--	--
	7/15/1998	8.52	3.53	NP	4.99	ND	--	ND	ND	0.56	1.1	ND	--	--	--	--	--	--	--	--
	10/16/1998	8.52	3.04	NP	5.48	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	1/25/1999	8.52	2.92	NP	5.6	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/15/1999	8.52	2.4	NP	6.12	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/14/1999	8.52	3.03	NP	5.49	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/21/1999	8.52	3.11	NP	5.41	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	1/20/2000	8.52	3.06	NP	5.46	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	4/13/2000	8.52	2.84	NP	5.68	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/14/2000	8.52	3.39	NP	5.13	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	7/17/2001	8.52	3.46	NP	5.06	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	10/1/2001	8.52	3.51	NP	5.01	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--	--	--	--
	1/31/2002	8.52	2.75	NP	5.77	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--
	4/18/2002	8.52	2.98	NP	5.54	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	--	--	--	--	--
	7/28/2002	8.52	2.41	NP	6.11	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--
	10/9/2002	8.52	2.09	NP	6.43	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--
	1/2/2003	8.52	1.98	NP	6.54	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--
	4/1/2003	8.52	2.66	NP	5.86	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--
	7/1/2003	8.52	3.08	NP	5.44	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	<500	--	--	--	--
10/2/2003	8.52	3.89	NP	4.63	--	540	3.9	15	29	80	--	<2.0	--	<500	--	--	--	--	--	
1/9/2004	8.52	2.38	NP	6.14	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	<500	--	--	--	--	
4/26/2004	8.52	2.89	NP	5.63	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<50	--	--	--	--	
7/22/2004	8.52	3.25	NP	5.27	--	<50	<0.5	<0.5	<0.5	<0.5	<1	--	<0.5	--	<1000	--	--	--	--	
10/29/2004	8.52	3.06	NP	5.46	--	<50	<0.50	<0.50	0.82	2.5	--	<0.50	--	<50	--	--	--	--	--	
1/10/2005	8.52	1.92	NP	6.6	--	58	<0.50	0.61	1.2	4	--	<0.50	--	<50	--	--	--	--	--	
6/15/2005	8.52	2.22	NP	6.3	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<50	--	--	--	--	
9/27/2005	8.52	2.43	NP	6.09	--	<50	<0.50	<0.50	<0.50	1.2	<1.0	--	<0.50	<10	<250	<0.50	<0.50	<0.50	--	
12/13/2005	8.52	2.89	NP	5.63	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	

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**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-8	3/23/2006	8.52	2.12	NP	6.4	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	6/23/2006	8.52	2.65	NP	5.87	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/26/2006	8.52	2.75	NP	5.77	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/22/2006	8.52	2.58	NP	5.94	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	3/30/2007	8.52	2.74	NP	5.78	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	6/28/2007	8.52	2.9	NP	5.62	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	9/25/2007	8.52	3.26	NP	5.26	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/28/2007	8.52	2.64	NP	5.88	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	3/22/2008	8.52	2.31	NP	6.21	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	6/23/2008	8.52	3.13	NP	5.39	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/19/2008	8.52	3.72	NP	4.8	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	12/31/2008	8.52	2.98	NP	5.54	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/27/2009	8.52	2.49	NP	6.03	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	5/28/2009	8.52	3.12	NP	5.4	--	<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	8.52	2.6	NP	5.92	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	
MW-9	2/21/1995	8.29	1.98	NP	6.31	70	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	
	5/18/1995	8.29	3.47	NP	4.82	52	--	ND	1.1	ND	1.9	--	--	--	--	--	--	--	--	
	8/17/1995	8.29	1.49	NP	6.8	ND	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	
	7/26/1996	8.29	0.28	NP	8.01	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/28/1996	8.29	1.15	NP	7.14	ND	--	ND	ND	ND	ND	7.6	--	--	--	--	--	--	--	
	1/29/1997	8.29	1.05	NP	7.24	ND	--	ND	ND	ND	ND	5.4	--	--	--	--	--	--	--	
	4/15/1997	8.29	1.88	NP	6.41	ND	--	ND	ND	ND	ND	5.4	--	--	--	--	--	--	--	
	5/27/1997	8.29	1.05	NP	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/15/1997	8.29	1.9	NP	6.39	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/9/1997	8.29	1.76	NP	6.53	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/14/1998	8.29	1.26	NP	7.03	ND	--	ND	ND	ND	ND	3	--	--	--	--	--	--	--	
	4/1/1998	8.29	0.85	NP	7.44	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	7/15/1998	8.29	1.52	NP	6.77	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/16/1998	8.29	0.81	NP	7.48	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/25/1999	8.29	0.92	NP	7.37	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	
	4/15/1999	8.29	0.9	NP	7.39	75	--	21	ND	ND	1.1	680	--	--	--	--	--	--	--	
	7/14/1999	8.29	1.04	NP	7.25	ND	--	1.9	ND	ND	ND	260	--	--	--	--	--	--	--	
	10/21/1999	8.29	1.23	NP	7.06	ND	--	ND	ND	ND	ND	170	--	--	--	--	--	--	--	
	1/20/2000	8.29	1.18	NP	7.11	ND	--	1.1	ND	ND	ND	35	--	--	--	--	--	--	--	
	4/13/2000	8.29	1.08	NP	7.21	160	--	0.64	ND	ND	ND	53	--	--	--	--	--	--	--	
	7/14/2000	8.29	1.43	NP	6.86	ND	--	ND	ND	ND	ND	20.2	--	--	--	--	--	--	--	
	10/26/2000	8.29	1.38	NP	6.91	240	--	2.9	ND	ND	ND	56	--	--	--	--	--	--	--	
	1/3/2001	8.29	1.66	NP	6.63	166	--	0.763	0.776	ND	1.28	50.2	--	--	--	--	--	--	--	
	4/4/2001	8.29	1.27	NP	7.02	296	--	0.738	ND	ND	0.907	135	--	--	--	--	--	--	--	
	7/17/2001	8.29	1.38	NP	6.91	ND	--	ND	ND	ND	ND	13	--	--	--	--	--	--	--	
	10/1/2001	8.29	1.93	NP	6.36	51	--	<0.50	<0.50	<0.50	<0.50	5	--	--	--	--	--	--	--	
	1/31/2002	8.29	2.08	NP	6.21	<50	--	<0.50	<0.50	<0.50	<0.50	5.8	--	--	--	--	--	--	--	
	4/18/2002	8.29	1.76	NP	6.53	<50	--	<0.50	<0.50	<0.50	<0.50	5.1	--	--	--	--	--	--	--	
	7/28/2002	8.29	1.57	NP	6.72	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.5	--	--	--	--	--	--	
	10/9/2002	8.29	1.45	NP	6.84	--	<50	<0.50	<0.50	<0.50	<1.0	--	17	--	--	--	--	--	--	
	1/2/2003	8.29	1.18	NP	7.11	--	<50	<0.50	<0.50	<0.50	<1.0	--	8.6	--	--	--	--	--	--	
4/1/2003	8.29	2.04	NP	6.25	--	<50	<0.50	<0.50	<0.50	<1.0	--	9.4	--	--	--	--	--	--		
7/1/2003	8.29	2.8	NP	5.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.2	--	<500	--	--	--	--		
10/2/2003	8.29	2.7	NP	5.59	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	<500	--	--	--	--		
1/9/2004	8.29	1.9	NP	6.39	--	74	<0.50	0.98	2.3	6.2	--	<2.0	--	<500	--	--	--	--		
4/26/2004	8.29	1.62	NP	6.67	--	51	<0.50	<0.50	<0.50	<1.0	--	0.51	--	<50	--	--	--	--		
7/22/2004	8.29	1.88	NP	6.41	--	<50	<0.5	<0.5	<0.5	<1	--	0.78	--	<1000	--	--	--	--		
10/29/2004	8.29	1.28	NP	7.01	--	<50	<0.50	<0.50	<0.50	1	--	<0.50	--	<50	--	--	--	--		



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**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-9	1/10/2005	8.29	0.07	NP	8.22	--	93	0.6	2.3	2.4	9	--	<0.50	--	<50	--	--	--	--	--
	6/15/2005	8.29	1.7	NP	6.59	--	<50	<0.50	<0.50	<0.50	<1.0	--	6.6	--	<50	--	--	--	--	--
	9/27/2005	8.29	1.98	NP	6.31	--	<50	<0.50	0.73	<0.50	<1.0	--	2.3	<10	<250	<0.50	<0.50	<0.50	--	--
	12/13/2005	8.29	2.26	NP	6.03	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.9	--	<250	--	--	--	--	--
	3/23/2006	8.29	1.32	NP	6.97	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.7	--	<250	--	--	--	--	--
	6/23/2006	8.29	1.98	NP	6.31	--	<50	<0.50	<0.50	<0.50	<1.0	--	1.9	--	<250	--	--	--	--	--
	9/26/2006	8.29	2.52	NP	5.77	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/22/2006	8.29	1.98	NP	6.31	--	<50	<0.50	0.57	1.8	4.6	--	1.6	--	<250	--	--	--	--	--
	3/30/2007	8.29	2.01	NP	6.28	--	<50	<0.50	<0.50	<0.50	<0.50	--	3.4	--	<250	--	--	--	--	--
	6/28/2007	8.29	1.9	NP	6.39	--	<50	<0.50	<0.50	<0.50	<0.50	--	4.9	--	<250	--	--	--	--	--
	9/25/2007	8.29	1.57	NP	6.72	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/28/2007	8.29	1.98	NP	6.31	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/22/2008	8.29	0.8	NP	7.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	0.61	--	<250	--	--	--	--	--
	6/23/2008	8.29	1.8	NP	6.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/19/2008	8.29	2.43	NP	5.86	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.9	--	<250	--	--	--	--	--
	12/31/2008	8.29	2.66	NP	5.63	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/27/2009	8.29	2.01	NP	6.28	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	5/28/2009	8.29	2.2	NP	6.09	--	<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	--	<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	8.29	2.32	NP	5.97	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	0.85	--	<250	--	--	--	--	--	
MW-10	2/21/1995	8.62	4.69	NP	3.93	1500	--	250	26	9.1	160	--	--	--	--	--	--	--	--	
	5/18/1995	8.62	4.92	NP	3.7	810	--	520	ND	18	23	--	--	--	--	--	--	--	--	
	8/17/1995	8.62	4.05	NP	4.57	67	--	25	ND	2.4	ND	--	--	--	--	--	--	--	--	
	7/26/1996	8.62	4.08	NP	4.54	ND	--	3.7	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/28/1996	8.62	4.09	NP	4.53	ND	--	1.1	ND	ND	ND	ND	--	--	--	--	--	--	--	
	1/29/1997	8.62	2.94	NP	5.68	210	--	41	0.67	7.2	4.8	11	--	--	--	--	--	--	--	
	4/15/1997	8.62	4.07	NP	4.55	110	--	12	ND	0.77	ND	9.7	--	--	--	--	--	--	--	
	5/27/1997	8.62	4.4	NP	4.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	7/15/1997	8.62	4.19	NP	4.43	ND	--	2.1	ND	0.67	0.73	ND	--	--	--	--	--	--	--	
	10/9/1997	8.62	4.75	NP	3.87	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	230	--	66	1.7	12	17	6.4	--	--	--	--	--	--	--	
	7/15/1998	8.62	4.21	NP	4.41	290	--	98	45	21	38	21	--	--	--	--	--	--	--	
	10/16/1998	8.62	4.11	NP	4.51	160	--	44	0.96	2.5	10	17	--	--	--	--	--	--	--	
	1/25/1999	8.62	3.26	NP	5.36	140	--	27	ND	2.8	6.8	23	--	--	--	--	--	--	--	
	4/15/1999	8.62	3.63	NP	4.99	120	--	18	ND	1.8	5.1	14	--	--	--	--	--	--	--	
	7/14/1999	8.62	3.89	NP	4.73	280	--	55	3.2	11	31	6.1	--	--	--	--	--	--	--	
	10/21/1999	8.62	4.09	NP	4.53	140	--	22	0.59	1.7	7.7	5.3	--	--	--	--	--	--	--	
	1/20/2000	8.62	3.92	NP	4.7	ND	--	0.73	0.86	ND	ND	5.2	--	--	--	--	--	--	--	
	4/13/2000	8.62	3.85	NP	4.77	67	--	54	ND	2.6	ND	3.8	--	--	--	--	--	--	--	
	7/14/2000	8.62	4.18	NP	4.44	ND	--	0.547	ND	ND	ND	ND	--	--	--	--	--	--	--	
	10/26/2000	8.62	3.96	NP	4.66	ND	--	3.3	ND	0.83	1.5	ND	--	--	--	--	--	--	--	
	1/3/2001	8.62	4.14	NP	4.48	52.7	--	5.15	ND	0.823	1.57	ND	--	--	--	--	--	--	--	
	4/4/2001	8.62	3.88	NP	4.74	129	--	28.1	1.67	4.97	10.1	ND	--	--	--	--	--	--	--	
	7/17/2001	8.62	4.08	NP	4.54	ND	--	4.1	ND	1	1.8	ND	--	--	--	--	--	--	--	
	10/1/2001	8.62	4.22	NP	4.4	140	--	30	0.51	4	12	<5.0	--	--	--	--	--	--	--	
1/31/2002	8.62	3.68	NP	4.94	110	--	16	<0.50	2.3	5.6	<2.5	--	--	--	--	--	--	--		
4/18/2002	8.62	4.01	NP	4.61	<50	--	11	<0.50	1.4	4.5	<2.5	--	--	--	--	--	--	--		
7/28/2002	8.62	4.11	NP	4.51	--	67	15	<0.50	0.94	7.3	--	<2.0	--	--	--	--	--	--		
10/9/2002	8.62	3.97	NP	4.65	--	<50	0.67	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--		
1/2/2003	8.62	3.03	NP	5.59	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--		
4/1/2003	8.62	3.83	NP	4.79	--	<50	11	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--		
7/1/2003	8.62	4.13	NP	4.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	<500	--	--	--	--		



**TABLE 2**  
**HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA**  
**COP ELT 2705191**  
**449 HEGENBERGER RD**  
**OAKLAND, CALIFORNIA**

Well I.D.	Date	GROUND WATER GAUGING DATA				GROUND WATER ANALYTICAL DATA														
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPH-g (SW8015M) (ug/L)	TPH-g (8260 GC/MS) (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8021B) (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-10	10/2/2003	8.62	4.05	NP	4.57	--	77	9.9	0.78	2.3	4.9	--	<2.0	--	<500	--	--	--	--	--
	1/9/2004	8.62	3.4	NP	5.22	--	53	1.2	<0.50	0.7	1.6	--	<2.0	--	<500	--	--	--	--	--
	4/26/2004	8.62	3.89	NP	4.73	--	<50	2.8	1.3	1	2.9	--	<0.50	--	<50	--	--	--	--	--
	7/22/2004	8.62	3.73	NP	4.89	--	<50	<0.5	<0.5	<0.5	<1	--	<0.5	--	<1000	--	--	--	--	--
	10/29/2004	8.62	3.41	NP	5.21	--	100	2	1.2	1.1	3.6	--	<0.50	--	<50	--	--	--	--	--
	1/10/2005	8.62	2.68	NP	5.94	--	84	7.8	2.7	2.2	8.9	--	<0.50	--	<50	--	--	--	--	--
	6/15/2005	8.62	4.63	NP	3.99	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<50	--	--	--	--	--
	9/27/2005	8.62	3.96	NP	4.66	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	<10	<250	<0.50	<0.50	<0.50	--	--
	12/13/2005	8.62	3.75	NP	4.87	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/23/2006	8.62	3.13	NP	5.49	--	50	13	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	6/23/2006	8.62	3.9	NP	4.72	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	9/26/2006	8.62	3.66	NP	4.96	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/22/2006	8.62	3.56	NP	5.06	--	<50	<0.50	<0.50	<0.50	1.8	--	<0.50	--	<250	--	--	--	--	--
	3/30/2007	8.62	3.93	NP	4.69	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	6/28/2007	8.62	4.03	NP	4.59	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	9/25/2007	8.62	3.91	NP	4.71	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--
	12/28/2007	8.62	3.64	NP	4.98	--	<50	2.1	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	3/22/2008	8.62	4	NP	4.62	--	64	13	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--
	6/23/2008	8.62	3.9	NP	4.72	--	94	30	0.53	3.4	3.5	--	<0.50	--	<250	--	--	--	--	--
	9/19/2008	8.62	3.85	NP	4.77	--	130	15	1.7	5.7	11	--	<0.50	--	<250	--	--	--	--	--
12/31/2008	8.62	3.69	NP	4.93	--	82	11	<0.50	0.81	1.7	--	<0.50	--	<250	--	--	--	--	--	
3/27/2009	8.62	3.75	NP	4.87	--	210	28	1.4	1.2	3.9	--	<0.50	--	<250	--	--	--	--	--	
5/28/2009	8.62	3.66	NP	4.96	--	<50	0.91	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	
9/17/2009	8.62	3.85	NP	4.77	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	
12/17/2009	8.62	3	NP	5.62	--	<50.0	1.2	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	
3/29/2010	8.62	3.81	NP	4.81	--	<50.0	0.77	<0.50	<0.50	3.4	--	<0.50	--	<250	--	--	--	--	--	
6/30/2010	8.62	3.9	NP	4.72	--	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	

**Gauging Notes:**

TOC - Top of Casing  
ft - Feet  
NP - LNAPL not present  
LNAPL - Light non-aqueous phase liquid  
\* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)  
NG - Not gauged  
WD - Well Destroyed  
WI - Well Inaccessible  
WO - Well Obstruction  
NSVD - Not surveyed  
-- - No information available  
NGV - No guidance value

**Analytical Notes:**

-- - No information available  
< - Not detected at or above indicated laboratory reporting limit  
DRY - Well was Dry; sample could not be taken  
IW - Insufficient Water  
ND - Not detected, and detection limit is not known  
NS - Well not sampled.  
UG/L - micrograms/liter  
WD - Well Destroyed  
WI - Well Inaccessible

TABLE 2a  
 ADDITIONAL HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA  
 COP ELT 2705191  
 449 HEGENBERGER RD  
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-1	2/18/1992	13000	--	--	--	--	--	--	--	--
	5/20/1992	--	--	--	--	--	--	--	--	--
	8/31/1992	8900	--	--	--	--	--	--	--	--
	11/30/1992	--	--	--	--	--	--	--	--	--
	2/4/1993	--	--	--	--	--	--	--	--	--
	5/4/1993	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/4/1993	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/3/1993	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/7/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/19/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/25/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/27/1994	--	--	--	--	--	--	--	--	--
	8/15/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/14/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/21/1995	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
5/18/1995	WD	WD	WD	WD	WD	WD	WD	WD	WD	
MW-2	2/18/1992	4300	--	--	--	--	--	--	--	--
	5/20/1992	4300	--	--	--	--	--	--	--	--
	8/31/1992	1600	--	--	--	--	--	--	--	--
	11/30/1992	5700	--	--	--	--	--	--	--	--
	2/4/1993	6100	--	--	--	--	--	--	--	--
	5/4/1993	7100	--	--	--	--	--	--	--	--
	8/4/1993	1800	--	--	--	--	--	--	--	--
	11/3/1993	2600	--	--	--	--	--	--	--	--
	2/7/1994	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/19/1994	3000	--	--	--	--	--	--	--	--
	6/25/1994	--	--	--	--	--	--	--	--	--
	7/27/1994	--	--	--	--	--	--	--	--	--
	8/15/1994	2800	--	--	--	--	--	--	--	--
	11/14/1994	10000	--	--	--	--	--	--	--	--
	2/21/1995	2000	--	--	--	--	--	--	--	--
5/18/1995	WD	WD	WD	WD	WD	WD	WD	WD	WD	
MW-3	2/18/1992	ND	--	--	--	--	--	--	--	--
	5/20/1992	WI	WI	WI	WI	WI	WI	WI	WI	WI
	8/31/1992	92	--	--	--	--	--	--	--	--
	11/30/1992	94	--	--	--	--	--	--	--	--
	2/4/1993	550	--	--	--	--	--	--	--	--
	5/4/1993	250	--	--	--	--	--	--	--	--
	8/4/1993	100	--	--	--	--	--	--	--	--
	11/3/1993	160	--	--	--	--	--	--	--	--
	2/7/1994	620	--	--	--	--	--	--	--	--
	5/19/1994	480	--	--	--	--	--	--	--	--
	6/25/1994	--	--	--	--	--	--	--	--	--
	7/27/1994	--	--	--	--	--	--	--	--	--
	8/15/1994	110	--	--	--	--	--	--	--	--
	11/14/1994	150	--	--	--	--	--	--	--	--
	2/21/1995	850	--	--	--	--	--	--	--	--
	5/18/1995	150	--	--	--	--	--	--	--	--
	8/17/1995	WI	WI	WI	WI	WI	WI	WI	WI	WI
	7/26/1996	WI	WI	WI	WI	WI	WI	WI	WI	WI
	10/28/1996	WO	WO	WO	WO	WO	WO	WO	WO	WO
	1/29/1997	WI	WI	WI	WI	WI	WI	WI	WI	WI
	4/15/1997	WI	WI	WI	WI	WI	WI	WI	WI	WI
	5/27/1997	--	--	--	--	--	--	--	--	--
	6/1/1997	610	--	--	--	--	--	--	--	--
	7/15/1997	240	--	--	--	--	--	--	--	--
	10/9/1997	500	--	--	--	--	--	--	--	--
	1/14/1998	340	--	--	--	--	--	--	--	--
	4/1/1998	320	--	--	--	--	--	--	--	--
	7/15/1998	510	--	--	--	--	--	--	--	--
	10/16/1998	67	--	--	--	--	--	--	--	--
	1/25/1999	120	--	--	--	--	--	--	--	--
	4/15/1999	170	--	--	--	--	--	--	--	--
	7/14/1999	420	--	--	--	--	--	--	--	--
10/21/1999	350	--	--	--	--	--	--	--	--	
1/20/2000	2060	--	--	--	--	--	--	--	--	
4/13/2000	200	--	--	--	--	--	--	--	--	
7/14/2000	423	--	--	--	--	--	--	--	--	
10/26/2000	330	--	--	--	--	--	--	--	--	
1/3/2001	287	--	--	--	--	--	--	--	--	
4/4/2001	360	--	--	--	--	--	--	--	--	

TABLE 2a  
 ADDITIONAL HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA  
 COP ELT 2705191  
 449 HEGENBERGER RD  
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-3	7/17/2001	270	--	--	--	--	--	--	--	--
	10/1/2001	270	--	--	--	--	--	--	--	--
	1/31/2002	250	--	--	--	--	--	--	--	--
	4/18/2002	320	--	--	--	--	--	--	--	--
	7/28/2002	310	--	--	--	--	--	--	--	--
	10/9/2002	700	--	--	--	--	--	--	--	--
	1/2/2003	210	--	--	--	--	--	--	--	--
	4/1/2003	200	--	--	--	--	--	--	--	--
	7/1/2003	380	--	--	--	--	--	--	--	--
	10/2/2003	300	--	--	--	--	--	--	--	--
	1/9/2004	200	--	--	--	--	--	--	--	--
	4/26/2004	160	--	--	--	--	--	--	--	--
	7/22/2004	330	--	--	--	--	--	--	--	--
	10/29/2004	200	--	--	--	--	--	--	--	--
	1/10/2005	250	--	--	--	--	--	--	--	--
	6/15/2005	360	--	--	--	--	--	--	--	--
	9/27/2005	<200	--	--	--	--	--	--	--	--
	12/13/2005	230	--	--	--	--	--	--	--	--
	3/23/2006	260	--	--	--	--	--	--	--	--
	6/23/2006	330	--	--	--	--	--	--	--	--
	9/26/2006	260	--	--	--	--	--	--	--	--
	12/22/2006	250	--	--	--	--	--	--	--	--
	3/30/2007	210	--	--	--	--	--	--	--	--
	6/28/2007	290	--	--	--	--	--	--	--	--
	9/25/2007	210	--	--	--	--	--	--	--	--
	12/28/2007	150	--	--	--	--	--	--	--	--
	3/22/2008	230	--	--	--	--	--	--	--	--
	6/23/2008	130	--	--	--	--	--	--	--	--
9/19/2008	93	--	--	--	--	--	--	--	--	
12/31/2008	110	--	--	--	--	--	--	--	--	
3/27/2009	130	--	--	--	--	--	--	--	--	
5/28/2009	120	--	--	--	--	--	--	--	--	
9/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2009	136	12300	12300	<50.0	<50.0	--	<50.0	--	--	
3/29/2010	--	--	--	--	--	--	--	--	--	
6/30/2010	89.7	10700	10700	<50.0	--	95	75.7	--	<5.000	
MW-4	8/31/1992	90	--	--	--	--	--	--	--	--
	11/30/1992	61	--	--	--	--	--	--	--	--
	2/4/1993	ND	--	--	--	--	--	--	--	--
	5/4/1993	ND	--	--	--	--	--	--	--	--
	8/4/1993	81	--	--	--	--	--	--	--	--
	11/3/1993	68	--	--	--	--	--	--	--	--
	2/7/1994	ND	--	--	--	--	--	--	--	--
	5/19/1994	90	--	--	--	--	--	--	--	--
	6/25/1994	--	--	--	--	--	--	--	--	--
	7/27/1994	--	--	--	--	--	--	--	--	--
	8/15/1994	72	--	--	--	--	--	--	--	--
	11/14/1994	ND	--	--	--	--	--	--	--	--
	2/21/1995	WD	WD	WD	WD	WD	WD	WD	WD	WD
MW-5	8/31/1992	690	--	--	--	--	--	--	--	--
	11/30/1992	470	--	--	--	--	--	ND	--	--
	2/4/1993	5500	--	--	--	--	--	ND	--	--
	5/4/1993	4600	--	--	--	--	--	ND	--	--
	8/4/1993	970	--	--	--	--	--	ND	--	--
	11/3/1993	2100	--	--	--	--	--	--	--	--
	2/7/1994	830	--	--	--	--	--	--	--	--
	5/19/1994	600	--	--	--	--	--	--	--	--
	6/25/1994	--	--	--	--	--	--	--	--	--
	7/27/1994	--	--	--	--	--	--	--	--	--
	8/15/1994	860	--	--	--	--	--	--	--	--
11/14/1994	290	--	--	--	--	--	--	--	--	
2/21/1995	WD	WD	WD	WD	WD	WD	WD	WD	WD	
MW-6	8/31/1992	750	--	--	--	--	--	--	--	--
	11/30/1992	1400	--	--	--	--	--	--	--	--
	2/4/1993	890	--	--	--	--	--	--	--	--
	5/4/1993	1800	--	--	--	--	--	--	--	--
	8/4/1993	1100	--	--	--	--	--	--	--	--
	11/3/1993	390	--	--	--	--	--	--	--	--
	2/7/1994	970	--	--	--	--	--	--	--	--
5/19/1994	1400	--	--	--	--	--	--	--	--	
8/15/1994	790	--	--	--	--	--	--	--	--	

TABLE 2a  
 ADDITIONAL HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA  
 COP ELT 2705191  
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 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-6	11/14/1994	800	--	--	--	--	--	--	--	--
	2/21/1995	730	--	--	--	--	--	--	--	--
	5/18/1995	WI	WI	WI	WI	WI	WI	WI	WI	WI
	8/17/1995	WI	WI	WI	WI	WI	WI	WI	WI	WI
	7/26/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/28/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/13/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/25/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/4/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/19/1996	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/8/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/14/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/27/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/29/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/11/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/24/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/10/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/17/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/31/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/15/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/28/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/15/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/27/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/9/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/24/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/9/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/15/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/21/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/6/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/20/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/2/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/9/1997	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	1/14/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	2/12/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/3/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	4/1/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	5/26/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	6/15/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/15/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/21/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/30/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	10/16/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH
11/6/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
11/25/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
12/28/1998	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
1/25/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
2/22/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
3/22/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
4/15/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
5/28/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
6/29/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
7/14/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
8/23/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
9/30/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
10/21/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
11/29/1999	--	--	--	--	--	--	--	--	--	
12/20/1999	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	LPH	
1/20/2000	67600	--	--	--	--	--	--	--	--	
2/26/2000	--	--	--	--	--	--	--	--	--	
3/31/2000	--	--	--	--	--	--	--	--	--	
4/13/2000	8700	--	--	--	--	--	--	--	--	
5/26/2000	--	--	--	--	--	--	--	--	--	
6/17/2000	--	--	--	--	--	--	--	--	--	
7/14/2000	133000	--	--	--	--	--	--	--	--	
8/24/2000	--	--	--	--	--	--	--	--	--	
9/27/2000	--	--	--	--	--	--	--	--	--	
10/26/2000	61000	--	--	--	--	--	--	--	--	
1/3/2001	929	--	--	--	--	--	--	--	--	
4/4/2001	18000	--	--	--	--	--	--	--	--	
7/17/2001	20000	--	--	--	--	--	--	--	--	
10/1/2001	24000	--	--	--	--	--	--	--	--	

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 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-6	1/31/2002	11000	--	--	--	--	--	--	--	--
	4/18/2002	3500	--	--	--	--	--	--	--	--
	7/28/2002	27000	--	--	--	--	--	--	--	--
	10/9/2002	170000	--	--	--	--	--	--	--	--
	1/2/2003	66000	--	--	--	--	--	--	--	--
	4/1/2003	35000	--	--	--	--	--	--	--	--
	7/1/2003	11000	--	--	--	--	--	--	--	--
	10/2/2003	<50	--	--	--	--	--	--	--	--
	1/9/2004	20000	--	--	--	--	--	--	--	--
	4/26/2004	13000	--	--	--	--	--	--	--	--
	7/22/2004	33000	--	--	--	--	--	--	--	--
	10/29/2004	78000	--	--	--	--	--	--	--	--
	1/10/2005	12000	--	--	--	--	--	--	--	--
	6/15/2005	16000	--	--	--	--	--	--	--	--
	9/27/2005	2500	--	--	--	--	--	--	--	--
	12/13/2005	18000	--	--	--	--	--	--	--	--
	3/23/2006	73000	--	--	--	--	--	--	--	--
	6/23/2006	35000	--	--	--	--	--	--	--	--
	9/26/2006	22000	--	--	--	--	--	--	--	--
	12/22/2006	62000	--	--	--	--	--	--	--	--
	3/30/2007	62000	--	--	--	--	--	--	--	--
	6/28/2007	71000	--	--	--	--	--	--	--	--
	9/25/2007	58000	--	--	--	--	--	--	--	--
	12/28/2007	18000	--	--	--	--	--	--	--	--
	3/22/2008	68000	--	--	--	--	--	--	--	--
	6/23/2008	68000	--	--	--	--	--	--	--	--
9/19/2008	180000	--	--	--	--	--	--	--	--	
12/31/2008	68000	--	--	--	--	--	--	--	--	
3/27/2009	170000	--	--	--	--	--	--	--	--	
5/28/2009	78000	--	--	--	--	--	--	--	--	
9/17/2009	250000	1500	1500	<0.44	--	--	--	--	<0.0010	
12/17/2009	30300	2460	2460	<50.0	<50.0	--	<50.0	--	--	
3/29/2010	106000	1510	1510	<50.0	--	41.3	54.9	--	<1.0	
6/30/2010	170000	2310	2310	<50.0	--	57.9	69.3	--	<5.000	
MW-7	5/27/1997	--	--	--	--	--	--	--	--	--
	6/1/1997	69	--	--	--	--	--	--	--	--
	7/15/1997	ND	--	--	--	--	--	--	--	--
	10/9/1997	190	--	--	--	--	--	--	--	--
	1/14/1998	65	--	--	--	--	--	--	--	--
	4/1/1998	ND	--	--	--	--	--	--	--	--
	7/15/1998	74	--	--	--	--	--	--	--	--
	10/16/1998	ND	--	--	--	--	--	--	--	--
	1/25/1999	ND	--	--	--	--	--	--	--	--
	4/15/1999	ND	--	--	--	--	--	--	--	--
	7/14/1999	69	--	--	--	--	--	--	--	--
	10/21/1999	ND	--	--	--	--	--	--	--	--
	1/20/2000	ND	--	--	--	--	--	--	--	--
	4/13/2000	ND	--	--	--	--	--	--	--	--
	7/14/2000	68	--	--	--	--	--	--	--	--
	7/17/2001	ND	--	--	--	--	--	--	--	--
	10/1/2001	<51	--	--	--	--	--	--	--	--
	1/31/2002	90	--	--	--	--	--	--	--	--
	4/18/2002	78	--	--	--	--	--	--	--	--
	7/28/2002	<50	--	--	--	--	--	--	--	--
	10/9/2002	<96	--	--	--	--	--	--	--	--
	1/3/2003	78	--	--	--	--	--	--	--	--
	4/1/2003	67	--	--	--	--	--	--	--	--
	7/1/2003	68	--	--	--	--	--	--	--	--
	10/2/2003	82	--	--	--	--	--	--	--	--
	1/9/2004	75	--	--	--	--	--	--	--	--
	4/26/2004	<50	--	--	--	--	--	--	--	--
	7/22/2004	<200	--	--	--	--	--	--	--	--
	10/29/2004	54	--	--	--	--	--	--	--	--
	1/10/2005	<50	--	--	--	--	--	--	--	--
	6/15/2005	<50	--	--	--	--	--	--	--	--
	9/27/2005	<200	--	--	--	--	--	--	--	--
12/13/2005	<200	--	--	--	--	--	--	--	--	
3/23/2006	<200	--	--	--	--	--	--	--	--	
6/23/2006	<200	--	--	--	--	--	--	--	--	
9/26/2006	<50	--	--	--	--	--	--	--	--	
12/22/2006	630	--	--	--	--	--	--	--	--	

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 COP ELT 2705191  
 449 HEGENBERGER RD  
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-7	3/30/2007	94	--	--	--	--	--	--	--	--
	6/28/2007	<50	--	--	--	--	--	--	--	--
	9/25/2007	<50	--	--	--	--	--	--	--	--
	12/28/2007	75	--	--	--	--	--	--	--	--
	3/22/2008	<50	--	--	--	--	--	--	--	--
	6/23/2008	<50	--	--	--	--	--	--	--	--
	9/19/2008	<50	--	--	--	--	--	--	--	--
	12/31/2008	<50	--	--	--	--	--	--	--	--
	3/27/2009	<50	--	--	--	--	--	--	--	--
	5/28/2009	<50	--	--	--	--	--	--	--	--
	9/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS
3/29/2010	--	--	--	--	--	--	--	--	--	
6/30/2010	66	7550	7550	<50.0	--	73.9	73.6	--	191	
MW-8	5/27/1997	--	--	--	--	--	--	--	--	--
	6/1/1997	320	--	--	--	--	--	--	--	--
	7/15/1997	ND	--	--	--	--	--	--	--	--
	10/9/1997	390	--	--	--	--	--	--	--	--
	1/14/1998	230	--	--	--	--	--	--	--	--
	4/1/1998	510	--	--	--	--	--	--	--	--
	7/15/1998	140	--	--	--	--	--	--	--	--
	10/16/1998	170	--	--	--	--	--	--	--	--
	1/25/1999	ND	--	--	--	--	--	--	--	--
	4/15/1999	91	--	--	--	--	--	--	--	--
	7/14/1999	120	--	--	--	--	--	--	--	--
	10/21/1999	110	--	--	--	--	--	--	--	--
	1/20/2000	583	--	--	--	--	--	--	--	--
	4/13/2000	80	--	--	--	--	--	--	--	--
	7/14/2000	113	--	--	--	--	--	--	--	--
	7/17/2001	ND	--	--	--	--	--	--	--	--
	10/1/2001	<50	--	--	--	--	--	--	--	--
	1/31/2002	260	--	--	--	--	--	--	--	--
	4/18/2002	160	--	--	--	--	--	--	--	--
	7/28/2002	140	--	--	--	--	--	--	--	--
	10/9/2002	120	--	--	--	--	--	--	--	--
	1/2/2003	210	--	--	--	--	--	--	--	--
	4/1/2003	220	--	--	--	--	--	--	--	--
	7/1/2003	170	--	--	--	--	--	--	--	--
	10/2/2003	350	--	--	--	--	--	--	--	--
	1/9/2004	180	--	--	--	--	--	--	--	--
	4/26/2004	100	--	--	--	--	--	--	--	--
	7/22/2004	250	--	--	--	--	--	--	--	--
	10/29/2004	120	--	--	--	--	--	--	--	--
	1/10/2005	140	--	--	--	--	--	--	--	--
	6/15/2005	140	--	--	--	--	--	--	--	--
	9/27/2005	<200	--	--	--	--	--	--	--	--
	12/13/2005	<200	--	--	--	--	--	--	--	--
	3/23/2006	<200	--	--	--	--	--	--	--	--
	6/23/2006	<230	--	--	--	--	--	--	--	--
9/26/2006	110	--	--	--	--	--	--	--	--	
12/22/2006	100	--	--	--	--	--	--	--	--	
3/30/2007	120	--	--	--	--	--	--	--	--	
6/28/2007	140	--	--	--	--	--	--	--	--	
9/25/2007	110	--	--	--	--	--	--	--	--	
12/28/2007	110	--	--	--	--	--	--	--	--	
3/22/2008	<50	--	--	--	--	--	--	--	--	
6/23/2008	<58	--	--	--	--	--	--	--	--	
9/19/2008	79	--	--	--	--	--	--	--	--	
12/31/2008	110	--	--	--	--	--	--	--	--	
3/27/2009	89	--	--	--	--	--	--	--	--	
5/28/2009	91	--	--	--	--	--	--	--	--	
9/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	
3/29/2010	--	--	--	--	--	--	--	--	--	
6/30/2010	182	8000	8000	<50.0	--	68.2	59.7	--	2360	
MW-9	2/21/1995	71	--	--	--	--	--	--	--	--
	5/18/1995	ND	--	--	--	--	--	--	--	--
	8/17/1995	ND	--	--	--	--	--	--	--	--
	7/26/1996	98	--	--	--	--	--	--	--	--
	10/28/1996	99	--	--	--	--	--	--	--	--
	1/29/1997	54	--	--	--	--	--	--	--	--
	4/15/1997	94	--	--	--	--	--	--	--	--
	5/27/1997	--	--	--	--	--	--	--	--	--

TABLE 2a  
 ADDITIONAL HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA  
 COP ELT 2705191  
 449 HEGENBERGER RD  
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-9	7/15/1997	ND	--	--	--	--	--	--	--	--
	10/9/1997	160	--	--	--	--	--	--	--	--
	1/14/1998	110	--	--	--	--	--	--	--	--
	4/1/1998	110	--	--	--	--	--	--	--	--
	7/15/1998	200	--	--	--	--	--	--	--	--
	10/16/1998	ND	--	--	--	--	--	--	--	--
	1/25/1999	ND	--	--	--	--	--	--	--	--
	4/15/1999	ND	--	--	--	--	--	--	--	--
	7/14/1999	140	--	--	--	--	--	--	--	--
	10/21/1999	210	--	--	--	--	--	--	--	--
	1/20/2000	519	--	--	--	--	--	--	--	--
	4/13/2000	81	--	--	--	--	--	--	--	--
	7/14/2000	107	--	--	--	--	--	--	--	--
	10/26/2000	240	--	--	--	--	--	--	--	--
	1/3/2001	164	--	--	--	--	--	--	--	--
	4/4/2001	240	--	--	--	--	--	--	--	--
	7/17/2001	ND	--	--	--	--	--	--	--	--
	10/1/2001	<52	--	--	--	--	--	--	--	--
	1/31/2002	200	--	--	--	--	--	--	--	--
	4/18/2002	<50	--	--	--	--	--	--	--	--
	7/28/2002	<50	--	--	--	--	--	--	--	--
	10/9/2002	100	--	--	--	--	--	--	--	--
	1/2/2003	<50	--	--	--	--	--	--	--	--
	4/1/2003	56	--	--	--	--	--	--	--	--
	7/1/2003	<50	--	--	--	--	--	--	--	--
	10/2/2003	<50	--	--	--	--	--	--	--	--
	1/9/2004	91	--	--	--	--	--	--	--	--
	4/26/2004	<50	--	--	--	--	--	--	--	--
	7/22/2004	<200	--	--	--	--	--	--	--	--
	10/29/2004	76	--	--	--	--	--	--	--	--
	1/10/2005	77	--	--	--	--	--	--	--	--
	6/15/2005	67	--	--	--	--	--	--	--	--
	9/27/2005	<200	--	--	--	--	--	--	--	--
12/13/2005	<200	--	--	--	--	--	--	--	--	
3/23/2006	<200	--	--	--	--	--	--	--	--	
6/23/2006	<200	--	--	--	--	--	--	--	--	
9/26/2006	<50	--	--	--	--	--	--	--	--	
12/22/2006	150	--	--	--	--	--	--	--	--	
3/30/2007	72	--	--	--	--	--	--	--	--	
6/28/2007	1000	--	--	--	--	--	--	--	--	
9/25/2007	100	--	--	--	--	--	--	--	--	
12/28/2007	56	--	--	--	--	--	--	--	--	
3/22/2008	<50	--	--	--	--	--	--	--	--	
6/23/2008	<50	--	--	--	--	--	--	--	--	
9/19/2008	56	--	--	--	--	--	--	--	--	
12/31/2008	<50	--	--	--	--	--	--	--	--	
3/27/2009	<50	--	--	--	--	--	--	--	--	
5/28/2009	<50	--	--	--	--	--	--	--	--	
9/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	
12/17/2009	47.9	2270	2270	<50.0	<50.0	--	<50.0	--	--	
3/29/2010	--	--	--	--	--	--	--	--	--	
6/30/2010	95	3210	8820	<50.0	--	14.9	<50.0	--	19	
MW-10	2/21/1995	270	--	--	--	--	--	--	--	--
	5/18/1995	75	--	--	--	--	--	--	--	--
	8/17/1995	ND	--	--	--	--	--	--	--	--
	7/26/1996	ND	--	--	--	--	--	--	--	--
	10/28/1996	ND	--	--	--	--	--	--	--	--
	1/29/1997	ND	--	--	--	--	--	--	--	--
	4/15/1997	ND	--	--	--	--	--	--	--	--
	5/27/1997	--	--	--	--	--	--	--	--	--
	7/15/1997	ND	--	--	--	--	--	--	--	--
	10/9/1997	ND	--	--	--	--	--	--	--	--
	1/14/1998	--	--	--	--	--	--	--	--	--
	4/1/1998	62	--	--	--	--	--	--	--	--
	7/15/1998	78	--	--	--	--	--	--	--	--
	10/16/1998	ND	--	--	--	--	--	--	--	--
1/25/1999	ND	--	--	--	--	--	--	--	--	
4/15/1999	ND	--	--	--	--	--	--	--	--	
7/14/1999	180	--	--	--	--	--	--	--	--	
10/21/1999	96	--	--	--	--	--	--	--	--	
1/20/2000	252	--	--	--	--	--	--	--	--	

TABLE 2a  
 ADDITIONAL HISTORICAL GROUND WATER GAUGING AND ANALYTICAL DATA  
 COP ELT 2705191  
 449 HEGENBERGER RD  
 OAKLAND, CALIFORNIA



Well I.D.	Date	GROUND WATER ANALYTICAL DATA								
		Diesel Range Organics SW8015 (ug/L)	Iron SW6010 D (ug/L)	Iron SW6010 T (ug/L)	Nitrate as N (ug/L)	Nitrite as N E353/E351 (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Oil and Grease (ug/L)	Sulfate (mg/L)
MW-10	4/13/2000	69	--	--	--	--	--	--	--	--
	7/14/2000	149	--	--	--	--	--	--	--	--
	10/26/2000	83	--	--	--	--	--	--	--	--
	1/3/2001	126	--	--	--	--	--	--	--	--
	4/4/2001	75	--	--	--	--	--	--	--	--
	7/17/2001	ND	--	--	--	--	--	--	--	--
	10/1/2001	100	--	--	--	--	--	--	--	--
	1/31/2002	170	--	--	--	--	--	--	--	--
	4/18/2002	130	--	--	--	--	--	--	--	--
	7/28/2002	58	--	--	--	--	--	--	--	--
	10/9/2002	<94	--	--	--	--	--	--	--	--
	1/2/2003	64	--	--	--	--	--	--	--	--
	4/1/2003	76	--	--	--	--	--	--	--	--
	7/1/2003	87	--	--	--	--	--	--	--	--
	10/2/2003	160	--	--	--	--	--	--	--	--
	1/9/2004	74	--	--	--	--	--	--	--	--
	4/26/2004	<50	--	--	--	--	--	--	--	--
	7/22/2004	<200	--	--	--	--	--	--	--	--
	10/29/2004	<50	--	--	--	--	--	--	--	--
	1/10/2005	94	--	--	--	--	--	--	--	--
	6/15/2005	62	--	--	--	--	--	--	--	--
	9/27/2005	<200	--	--	--	--	--	--	--	--
	12/13/2005	<200	--	--	--	--	--	--	--	--
	3/23/2006	<200	--	--	--	--	--	--	--	--
	6/23/2006	<200	--	--	--	--	--	--	--	--
	9/26/2006	<50	--	--	--	--	--	--	--	--
	12/22/2006	81	--	--	--	--	--	--	--	--
	3/30/2007	82	--	--	--	--	--	--	--	--
	6/28/2007	57	--	--	--	--	--	--	--	--
	9/25/2007	82	--	--	--	--	--	--	--	--
12/28/2007	62	--	--	--	--	--	--	--	--	
3/22/2008	<50	--	--	--	--	--	--	--	--	
6/23/2008	<50	--	--	--	--	--	--	--	--	
9/19/2008	<50	--	--	--	--	--	--	--	--	
12/31/2008	<50	--	--	--	--	--	--	--	--	
3/27/2009	730	--	--	--	--	--	--	--	--	
5/28/2009	<50	--	--	--	--	--	--	--	--	
9/17/2009	65	9800	9800	12	--	--	--	--	0.084	
12/17/2009	110	3410	3410	1970	60.3	--	2030	--	--	
3/29/2010	82.2	2410	2410	1960	--	18.7	1970	--	73.6	
6/30/2010	53.4	1860	1860	2120	--	68.1	2190	--	70.8	

Analytical Notes:  
 -- - No information available  
 < - Not detected at or above indicated laboratory reporting limit  
 DRY - Well was Dry; sample could not be taken  
 IW - Insufficient Water  
 ND - Not detected, and detection limit is not known  
 NS - Well not sampled.  
 UG/L - micrograms/liter  
 WD - Well Destroyed  
 WI - Well Inaccessible



**TABLE 3**  
**Groundwater Gradient and Flow Direction**  
 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	0	0	0	0
	08/31/92	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	11/30/92	0.04	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
	02/07/94		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	11/14/94	0.03	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	02/21/95	0.08	0	0	0	0	0	0	1	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	
	07/26/96	0.02	0	0	0	0	0	0	1	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	
	01/29/97	0.01	0	0	0	0	0	0	1	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	
	07/15/97	0.10	0	0	0	0	0	0	1	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	
	01/14/98	0.02	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	04/01/98	0.05	0	0	0	0	0	0	0	0	1	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	
	09/30/98	0.05	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	01/25/99	0.05	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	04/15/99	0.04	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	10/21/99	0.03	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	07/14/99	0.04	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	04/13/00	0.050	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	07/14/00	0.033	0	0	0	0	0	0	1	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	
	01/03/01	0.070	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	07/17/01	0.040	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	10/01/01	0.030	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	01/31/02	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	07/28/02	0.020	0	0	0	0	0	0	1	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	
	01/02/03	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	04/01/03	0.008	0	0	0	0	0	0	1	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	
	10/02/03	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	01/09/04	0.010	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	04/26/04	0.010	0	0	0	0	0	0	0	0	1	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	
	10/29/04	0.010	0	0	0	0	0	0	0	0	1	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	
	06/15/05	0.020	0	0	0	0	0	0	1	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	
	12/13/05	0.005	0	0	0	0	0	0	1	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	
	06/23/06	0.010	0	0	0	0	0	0	0	0	1	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	
	12/22/06	0.010	0	0	0	0	0	0	0	0	1	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	
	09/25/07	0.010	0	0	0	0	0	0	0	0	1	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	
	06/28/07	0.010	0	0	0	0	0	0	0	0	1	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	
	06/23/08	0.010	0	0	0	0	0	0	0	0	1	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	
	12/31/08	0.005	0	0	0	0	0	0	1	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	
	05/28/09	0.008	0	0	0	0	0	0	1	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	
	12/17/09	0.008	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	03/29/10	0.010	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	06/30/10	0.009							1									
		<b>0.046 Average</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>20</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	

**Explanation**  
 NA = Not available  
 Number of Events = 60

**Table 4**  
**Well Construction Details**  
 76 Station No. 5191/5043  
 449 Hegenberger Road  
 Oakland, CA



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

## **Attachment A**

### *Previous Investigations and Site History Summary*

## **Attachment A: Previous Investigations and Site History Summary**

76 Station No.5191/5043

449 Hegenberger Road

Oakland, CA

### **PREVIOUS INVESTIGATIONS 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 well MW-3, which was damaged during the UST cavity over excavation in 1995, was fully drilled out and reconstructed in the same borehole.

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, two existing monitoring wells were destroyed in order to accommodate

## **Attachment A: Previous Investigations and Site History Summary**

76 Station No.5191/5043

449 Hegenberger Road

Oakland, CA

the construction of a car wash at the site. Monitoring wells MW-4 and MW-5 were fully drilled out and backfilled with neat cement.

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.

### **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: **Delta Consultants**

## **Attachment B**

*Blaine Tech's Procedures for Groundwater Monitoring and Sampling, and Equipment Decontamination*

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

## SAMPLING PROCEDURES OVERVIEW

### SAFETY

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

### INSPECTION AND GAUGING

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

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

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

### EVACUATION

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

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

### PARAMETER STABILIZATION

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

than once per case volume).

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

## DEWATERED WELLS

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

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

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

## PURGEWATER CONTAINMENT

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

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

## SAMPLE COLLECTION DEVICES

All samples are collected using disposable bailers.

## SAMPLE CONTAINERS

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

## TRIP BLANKS



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

## DUPLICATES

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

## SAMPLE STORAGE

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

## DOCUMENTATION CONVENTIONS

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

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

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

## DECONTAMINATION

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

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

and bailers.

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

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

#### DISSOLVED OXYGEN READINGS

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

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

#### OXYIDATON REDUCTION POTENTIAL READINGS

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

Blaine Tech Services, Inc.  
Standard Operating Procedure

**Purge Water Handling Procedure**

**Purpose**

Control of non-hazardous purge water disposal. This procedure outlines the handling and disposing of non-hazardous purge water for the DELTA/COP portfolio.

**Procedure**

- 1) All purge and rinsate water will be contained in onboard truck tanks or trailers. Water may be commingled with other sites in the same portfolio of DELTA/COP sites.
- 2) A Non-Hazardous Waste manifest will be generated prior to leaving site.
- 3) All water will be offloaded into a commingled DELTA/COP tank at BLAINE facility.
- 4) Water will then be offloaded from the DELTA/COP tank and the BLAINE facility and transported to a disposal facility.

For Southern California sites water will be disposed at Crosby and Overton in Wilmington, CA.  
For Northern California water will be disposed at Seaport Environmental in Redwood City, CA.

Example Manifest:

**NON-HAZARDOUS WASTE MANIFEST**

Form designed by LabeMaster (see the VSI Terms Agreement)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Number No.		2. Page # of	
3. Generator's Name and Mailing Address							
4. Generator's Phone ( )							
5. Transporter 1 Company Name		6. US EPA ID Number		A. State Transporter ID			
7. Transporter 2 Company Name		8. US EPA ID Number		B. State Transporter ID			
9. Disposal Facility Name and Site Address				10. US EPA ID Number		C. State Facility ID	
						D. State Facility ID	
						E. State Facility ID	
						F. Facility's Phone	
11. WASTE DESCRIPTION		12. Containers	13. Vol	14. Qty	15. U.S. WT/LBS		
		No.	Type				
a.							
b.							
c.							
d.							
16. Additional Descriptions for Materials Listed Above				17. Handling Codes for Wastes Listed Above			
18. Special Handling Instructions and Additional Information							
19. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this document are true and accurately describe the site in all respects pertinent to this manifest. The manifest prepared on this manifest may be subject to federal hazardous waste regulations.							
Person's Typed Name				Signature		Date Month Day Year	
17. Transporter 1 Acknowledgment of Receipt of Manifest				Signature		Date Month Day Year	
18. Transporter 2 Acknowledgment of Receipt of Manifest				Signature		Date Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 15.				Signature		Date Month Day Year	
Person's Typed Name				Signature		Date Month Day Year	

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MANIFEST DEVELOPMENT SYSTEMS

Rev. 3/05

## **Attachment C**

*Groundwater Monitoring and Sampling Field Data  
Sheets*

## COP-ELT Well-Head Inspection & Well Gauging Form

Project No: 2705191

Site Address: 449 HEGENBERGER

Field Technician: J. PARKER

Date: 6/30/10

Weather: SUNNY

Sample Order	Well Condition								Gauging Information					Comments
	Field Point	Bolts	Seal	Lid Secure	Lock	Expanding Cap	Water in Well Box	Well Casing Dia.	Time	Depth to Water (Feet)	Depth to Bottom (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	
3	MW-3	P	P	P	G	G	Y	2	1025	2.91	13.88	-	-	1/2 TABS STRIPPED
5	MW-6	G	P	G	G	G	Y	2	1030	3.50	12.60	-	-	---
1	MW-7	G	G	G	G	G	N	2	1010	4.45	12.90	-	-	LOCK REPLACED.
2	MW-8	G	G	G	G	G	N	2	1015	2.60	14.67	-	-	LOCK REPLACED
4	MW-9	P	P	P	G	G	Y	2	1020	2.32	12.83	-	-	1/3 TABS BROKEN
6	MW-10	P	P	P	G	G	N	2	1035	3.90	12.61	-	-	2/3 TABS BROKEN

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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

## COMPLET Groundwater Sampling Form

Site Address:	449 LEGENBERGER		
Project No:	2705191	Field Technician:	J. PARKER
Field Point:	MW-3	Date:	6/30/10
Depth to Water (DTW) (ft bgs):	2.91	Well Diameter (in):	(2) 4 6 8
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	13.88	Water Column Height (ft):	10.97

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	<b>Purge Equipment:</b> <input checked="" type="checkbox"/> Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	<b>Sample Collection Method:</b> <input checked="" type="checkbox"/> Disposable Bailer <del>W/BED</del> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 10.97	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<sup>2</sup> \* 0.163

Purge:	Start Time: 1129	Stop Time: 1151						
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
<b>Pre-Purge</b>				-67		0.32		
1132	23.5	6.73	3488	—	49	—	1.9	
1135	22.8	6.69	3581	—	55	—	3.8	
1137	22.1	6.71	3572	—	145	—	5.7	
<b>Post-Purge</b>				-99		0.40		

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

**Other Comments:** 80% @ 5.10; DTW: 7.52

<b>Sample Info:</b>	
Sample ID: MW-3 10100630	Sample Date and Time: 6/30/10 @ 1415
Selected Analysis: SEE DOC	
Signature:	Date: 6/30/10



## COMPLET Groundwater Sampling Form

Site Address:	449 HEGENBERGER		
Project No:	2705191	Field Technician:	J. PARKER
Field Point:	MW-6	Date:	6/30/10
Depth to Water (DTW) (ft bgs):	3.50	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):	9.10

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	<b>Purge Equipment:</b> <input checked="" type="checkbox"/> Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	<b>Sample Collection Method:</b> <input checked="" type="checkbox"/> Disposable Bailer W/BED Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 9.10	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<sup>2</sup> \* 0.163

Purge:	Start Time: 1201	Stop Time: 1209						
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
<b>Pre-Purge</b>				7		0.21		
1204	22.0	6.83	2887	-	99	-	1.6	
1206	21.7	6.88	2697	-	101	-	3.2	
1209	20.9	6.95	2777	-	109	-	4.8	
<b>Post-Purge</b>				-99		0.91		

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

**Other Comments:** 80% @ 5.32; DTW: 6.72

<b>Sample Info:</b>	
Sample ID: MW-6 10100630	Sample Date and Time: 6/30/10 @ 1435
Selected Analysis: SEE DOC	
Signature:	Date: 6/30/10



## COP-ELT Groundwater Sampling Form

Site Address: <u>449 HEGENBERGER</u>	
Project No: <u>2705191</u>	Field Technician: <u>J. PARKER</u>
Field Point: <u>MW-7</u>	Date: <u>6/30/10</u>
Depth to Water (DTW) (ft bgs): <u>4.45</u>	Well Diameter (in): <u>(2)</u> 4 6 8 <u>   </u>
Depth to LNAPL (ft bgs): <u>—</u>	Thickness of LNAPL (ft): <u>—</u>
Total Depth of Well (ft bgs): <u>12.90</u>	Water Column Height (ft): <u>8.45</u>

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	<b>Purge Equipment:</b> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Electric Submersible <input type="checkbox"/> Peristaltic Pump <input type="checkbox"/> Bladder Pump Other: _____	<b>Sample Collection Method:</b> <input checked="" type="checkbox"/> Disposable Bailer <u>WIRED</u> <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Disposable Tubing Other: _____
Water Column Height (ft): <u>8.45</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>1.4</u>
Casing Volume (gal): <u>1.4</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>4.2</u>
Conversion Factors (gal/ft): 2" = 0.17    4" = 0.66    6" = 1.5    8" = 2.6    Other = radius <sup>2</sup> * 0.163		

Purge:	Start Time: <u>1051</u>	Stop Time: <u>1101</u>						
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
<b>Pre-Purge</b>				<u>211</u>		<u>0.32</u>		
<u>1054</u>	<u>23.5</u>	<u>6.75</u>	<u>2379</u>	<u>—</u>	<u>62</u>	<u>—</u>	<u>1.4</u>	
<u>1058</u>	<u>22.9</u>	<u>6.76</u>	<u>2198</u>	<u>—</u>	<u>59</u>	<u>—</u>	<u>2.8</u>	
<u>1101</u>	<u>22.4</u>	<u>6.76</u>	<u>2209</u>	<u>—</u>	<u>226</u>	<u>—</u>	<u>4.2</u>	
<b>Post-Purge</b>				<u>-2</u>		<u>0.99</u>		
Did Well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total Purge volume (gal): <u>4.2</u>						

**Other Comments:** 80% @ 6.14 ; DTW: 4.61  
MS/MSD TAKEN

**Sample Info:**

Sample ID: <u>MW-7 10100630</u>	Sample Date and Time: <u>6/30/10 @ 1240</u>
Selected Analysis: <u>SEE CDC</u>	

Signature: \_\_\_\_\_ Date: 6/30/10





## COP-ALT Groundwater Sampling Form

Site Address:	449 HEGENBERGER		
Project No:	2705191	Field Technician:	J. PARKER
Field Point:	MW-8	Date:	6/30/10
Depth to Water (DTW) (ft bgs):	2.60	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	14.67	Water Column Height (ft):	12.07

### Purging Info and Calculations:

<b>Purge Method:</b> Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	<b>Purge Equipment:</b> <input checked="" type="checkbox"/> Disposable Bailer Electric Submersible Peristaltic Pump Bladder Pump Other: _____	<b>Sample Collection Method:</b> <input checked="" type="checkbox"/> Disposable Bailer w/BED Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>12.07</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>2.05</u> Casing Volume (gal): <u>2.1</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>6.3</u>		
Conversion Factors (gal/ft):    2" = 0.17    4" = 0.66    6" = 1.5    8" = 2.6    Other = radius <sup>2</sup> * 0.163		

<b>Purge:</b>	Start Time:	1110	Stop Time:	1119				
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				-79		0.29		
1113	22.9	6.48	11.75 µS	—	77	—	2.1	
1116	22.2	6.44	11.80 µS	—	64	—	4.2	
1119	21.4	6.48	12.04 µS	—	139	—	6.3	
Post-Purge				-77		0.31		
Did Well dewater?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Total Purge volume (gal): <u>6.3</u>				

**Other Comments:** 80% @ 5.01 ; DTW: 3.20

<b>Sample Info:</b>	
Sample ID: MW-8 10100630	Sample Date and Time: 6/30/10 @ 1315
Selected Analysis: SEE COC	

Signature: Date: 6/30/10











## **Attachment D**

*Groundwater Sampling Certified Laboratory Analytical  
Report and Chain-of-Custody Documentation*

July 16, 2010

Dennis Dettloff  
ELT\_Delta Consultants Sacramen  
11050 White Rock Rd. #110  
Rancho Cordova, CA 95670

RE: Project: 2705191 449 Hegenberger  
Pace Project No.: 254111

Dear Dennis Dettloff:

Enclosed are the analytical results for sample(s) received by the laboratory on July 01, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Regina SteMarie

regina.stemarie@pacelabs.com  
Project Manager

Enclosures

cc: Tara Bosch, ELT\_Delta Consultants Sacramento  
Jonathon Fillingame, ELT\_Delta Consultants Sacramento  
Lia Holden, ELT-Delta Consultants  
Josh Mahoney, ELT\_Delta Consultants San Jose  
Tony Perini, ELT\_Delta Consultants San Jose  
Nicole Persaud, ELT-Delta Consultants  
Don Pinkerton, ELT\_Delta Consultants Sacramento  
David Sowle, Delta Consultants  
Doug Umland, ELT\_Delta Consultants San Jose  
Ed Weyrens, ELT\_Delta Consultants San Jose

**REPORT OF LABORATORY ANALYSIS**

Page 1 of 24

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## CERTIFICATIONS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

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### Washington Certification IDs

940 South Harney Street, Seattle, WA 98108

Alaska CS Certification #: UST-025

Alaska Drinking Water VOC Certification #: WA01230

Alaska Drinking Water Micro Certification #: WA01230

California Certification #: 01153CA

Florida/NELAP Certification #: E87617

Oregon Certification #: WA200007

Washington Certification #: C1229

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## REPORT OF LABORATORY ANALYSIS

Page 2 of 24

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### SAMPLE ANALYTE COUNT

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
254111001	MW-10_20100630	EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	BPR	1	PASI-S
254111002	MW-3_20100630	EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	BPR	1	PASI-S
254111003	MW-6_20100630	EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH, LPM	10	PASI-S
		CA LUFT	LPM	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	BPR	1	PASI-S
254111004	MW-7_20100630	EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	BPR	1	PASI-S
254111005	MW-8_20100630	EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
254111006	MW-9_20100630	EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	BPR	1	PASI-S
		EPA 8015B	DMT	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
254111007	TB1_20100630	SM 4500-NO2 B	BPR	1	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		CA LUFT	LNH	2	PASI-S

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample: MW-10_20100630	Lab ID: 254111001	Collected: 06/30/10 14:55	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b>								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	53.4 ug/L		50.0	1	07/07/10 13:30	07/08/10 20:42		
o-Terphenyl (S) SG	81 %		51-147	1	07/07/10 13:30	07/08/10 20:42	84-15-1	
n-Octacosane (S) SG	96 %		50-150	1	07/07/10 13:30	07/08/10 20:42	630-02-4	
<b>6010 MET ICP</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	1860 ug/L		100	1	07/08/10 08:45	07/12/10 12:03	7439-89-6	
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	216 ug/L		100	1	07/08/10 08:45	07/12/10 13:10	7439-89-6	
<b>8260 MSV</b>								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		07/02/10 14:34	71-43-2	
Ethanol	ND ug/L		250	1		07/02/10 14:34	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		07/02/10 14:34	100-41-4	
Methyl-tert-butyl ether	ND ug/L		0.50	1		07/02/10 14:34	1634-04-4	
Toluene	ND ug/L		0.50	1		07/02/10 14:34	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		07/02/10 14:34	1330-20-7	
4-Bromofluorobenzene (S)	91 %		80-120	1		07/02/10 14:34	460-00-4	
Dibromofluoromethane (S)	95 %		80-122	1		07/02/10 14:34	1868-53-7	
1,2-Dichloroethane-d4 (S)	82 %		80-124	1		07/02/10 14:34	17060-07-0	
Toluene-d8 (S)	102 %		80-123	1		07/02/10 14:34	2037-26-5	
<b>CA LUFT MSV GRO</b>								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		07/02/10 14:34		
4-Bromofluorobenzene (S)	91 %		82-116	1		07/02/10 14:34	460-00-4	
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	70800 ug/L		5000	5		07/13/10 16:09	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2120 ug/L		50.0	1		07/13/10 14:51		
Nitrogen, NO2 plus NO3	2190 ug/L		50.0	1		07/13/10 14:51		
<b>SM4500NO2-B, Nitrite, unpres</b>								
Analytical Method: SM 4500-NO2 B								
Nitrite as N	68.1 ug/L		10.0	1		07/01/10 21:06	14797-65-0	

Sample: MW-3_20100630	Lab ID: 254111002	Collected: 06/30/10 14:15	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b>								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	89.7 ug/L		50.0	1	07/07/10 13:30	07/08/10 20:59		
o-Terphenyl (S) SG	80 %		51-147	1	07/07/10 13:30	07/08/10 20:59	84-15-1	
n-Octacosane (S) SG	96 %		50-150	1	07/07/10 13:30	07/08/10 20:59	630-02-4	

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### ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample: MW-3_20100630	Lab ID: 254111002	Collected: 06/30/10 14:15	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	10700	ug/L	100	1	07/08/10 08:45	07/12/10 12:05	7439-89-6	
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	5550	ug/L	100	1	07/08/10 08:45	07/12/10 13:13	7439-89-6	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	0.50	1		07/02/10 14:57	71-43-2	
Ethanol	ND	ug/L	250	1		07/02/10 14:57	64-17-5	
Ethylbenzene	ND	ug/L	0.50	1		07/02/10 14:57	100-41-4	
Methyl-tert-butyl ether	89.0	ug/L	0.50	1		07/02/10 14:57	1634-04-4	
Toluene	ND	ug/L	0.50	1		07/02/10 14:57	108-88-3	
Xylene (Total)	ND	ug/L	1.5	1		07/02/10 14:57	1330-20-7	
4-Bromofluorobenzene (S)	91	%	80-120	1		07/02/10 14:57	460-00-4	
Dibromofluoromethane (S)	100	%	80-122	1		07/02/10 14:57	1868-53-7	
1,2-Dichloroethane-d4 (S)	88	%	80-124	1		07/02/10 14:57	17060-07-0	
Toluene-d8 (S)	104	%	80-123	1		07/02/10 14:57	2037-26-5	
<b>CA LUFT MSV GRO</b> Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	261	ug/L	50.0	1		07/02/10 14:57		
4-Bromofluorobenzene (S)	91	%	82-116	1		07/02/10 14:57	460-00-4	
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	ND	ug/L	5000	5		07/13/10 16:09	14808-79-8	D3
<b>353.2 Nitrogen, NO2/NO3 pres.</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	ug/L	50.0	1		07/13/10 14:52		
Nitrogen, NO2 plus NO3	75.7	ug/L	50.0	1		07/13/10 14:52		
<b>SM4500NO2-B, Nitrite, unpres</b> Analytical Method: SM 4500-NO2 B								
Nitrite as N	95.0	ug/L	10.0	1		07/01/10 21:06	14797-65-0	

Sample: MW-6_20100630	Lab ID: 254111003	Collected: 06/30/10 14:35	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b> Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	170000	ug/L	1000	20	07/07/10 13:30	07/11/10 01:08		
o-Terphenyl (S) SG	59	%	51-147	1	07/07/10 13:30	07/08/10 21:16	84-15-1	
n-Octacosane (S) SG	131	%	50-150	1	07/07/10 13:30	07/08/10 21:16	630-02-4	
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	2310	ug/L	100	1	07/08/10 08:45	07/12/10 12:08	7439-89-6	

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### ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample: MW-6_20100630	Lab ID: 254111003	Collected: 06/30/10 14:35	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	946 ug/L		100	1	07/08/10 08:45	07/12/10 13:16	7439-89-6	
<b>8260 MSV</b>								
Analytical Method: EPA 5030B/8260								
Benzene	2130 ug/L		50.0	100		07/08/10 06:49	71-43-2	
Ethanol	ND ug/L		250	1		07/02/10 17:34	64-17-5	
Ethylbenzene	2860 ug/L		50.0	100		07/08/10 06:49	100-41-4	
Methyl-tert-butyl ether	5.8 ug/L		0.50	1		07/02/10 17:34	1634-04-4	
Toluene	281 ug/L		0.50	1		07/02/10 17:34	108-88-3	
Xylene (Total)	8400 ug/L		150	100		07/08/10 06:49	1330-20-7	
4-Bromofluorobenzene (S)	90 %		80-120	1		07/02/10 17:34	460-00-4	
Dibromofluoromethane (S)	83 %		80-122	1		07/02/10 17:34	1868-53-7	
1,2-Dichloroethane-d4 (S)	116 %		80-124	1		07/02/10 17:34	17060-07-0	
Toluene-d8 (S)	104 %		80-123	1		07/02/10 17:34	2037-26-5	
<b>CA LUFT MSV GRO</b>								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	78700 ug/L		5000	100		07/08/10 06:49		
4-Bromofluorobenzene (S)	104 %		82-116	100		07/08/10 06:49	460-00-4	
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	ND ug/L		5000	5		07/13/10 16:43	14808-79-8	D3
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND ug/L		50.0	1		07/13/10 14:30		
Nitrogen, NO2 plus NO3	69.3 ug/L		50.0	1		07/13/10 14:30		
<b>SM4500NO2-B, Nitrite, unpres</b>								
Analytical Method: SM 4500-NO2 B								
Nitrite as N	57.9 ug/L		10.0	1		07/01/10 21:06	14797-65-0	

Sample: MW-7_20100630	Lab ID: 254111004	Collected: 06/30/10 12:40	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b>								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	66.0 ug/L		50.0	1	07/07/10 13:30	07/08/10 21:32		
o-Terphenyl (S) SG	75 %		51-147	1	07/07/10 13:30	07/08/10 21:32	84-15-1	
n-Octacosane (S) SG	86 %		50-150	1	07/07/10 13:30	07/08/10 21:32	630-02-4	
<b>6010 MET ICP</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	7550 ug/L		100	1	07/08/10 08:45	07/12/10 12:11	7439-89-6	
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	836 ug/L		100	1	07/08/10 08:45	07/12/10 13:19	7439-89-6	

## ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample:	Lab ID:	Collected:	Received:	Matrix:				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MW-7_20100630</b>	<b>Lab ID: 254111004</b>	06/30/10 12:40	07/01/10 09:00	Water				
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		07/09/10 18:00	71-43-2	M0
Ethanol	ND ug/L		250	1		07/09/10 18:00	64-17-5	L3,M0
Ethylbenzene	ND ug/L		0.50	1		07/09/10 18:00	100-41-4	
Methyl-tert-butyl ether	ND ug/L		0.50	1		07/09/10 18:00	1634-04-4	M0,R1
Toluene	ND ug/L		0.50	1		07/09/10 18:00	108-88-3	M0
Xylene (Total)	ND ug/L		1.5	1		07/09/10 18:00	1330-20-7	
4-Bromofluorobenzene (S)	101 %		80-120	1		07/09/10 18:00	460-00-4	
Dibromofluoromethane (S)	110 %		80-122	1		07/09/10 18:00	1868-53-7	
1,2-Dichloroethane-d4 (S)	113 %		80-124	1		07/09/10 18:00	17060-07-0	
Toluene-d8 (S)	103 %		80-123	1		07/09/10 18:00	2037-26-5	
<b>CA LUFT MSV GRO</b> Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		07/09/10 18:00		
4-Bromofluorobenzene (S)	101 %		82-116	1		07/09/10 18:00	460-00-4	
<b>300.0 IC Anions 28 Days</b> Analytical Method: EPA 300.0								
Sulfate	<b>191000</b> ug/L		50000	50		07/09/10 04:18	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 pres.</b> Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND ug/L		50.0	1		07/13/10 14:34		
Nitrogen, NO2 plus NO3	<b>73.6</b> ug/L		50.0	1		07/13/10 14:34		
<b>SM4500NO2-B, Nitrite, unpres</b> Analytical Method: SM 4500-NO2 B								
Nitrite as N	<b>73.9</b> ug/L		10.0	1		07/01/10 21:06	14797-65-0	
<hr/>								
<b>Sample: MW-8_20100630</b>	<b>Lab ID: 254111005</b>	06/30/10 13:15	07/01/10 09:00	Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b> Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	<b>182</b> ug/L		50.0	1	07/07/10 13:30	07/08/10 22:22		
o-Terphenyl (S) SG	84 %		51-147	1	07/07/10 13:30	07/08/10 22:22	84-15-1	
n-Octacosane (S) SG	95 %		50-150	1	07/07/10 13:30	07/08/10 22:22	630-02-4	
<b>6010 MET ICP</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	<b>8000</b> ug/L		100	1	07/08/10 08:45	07/12/10 12:14	7439-89-6	
<b>6010 MET ICP, Dissolved</b> Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	<b>4710</b> ug/L		100	1	07/08/10 08:45	07/12/10 13:22	7439-89-6	
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		07/09/10 18:22	71-43-2	
Ethanol	ND ug/L		250	1		07/09/10 18:22	64-17-5	L3
Ethylbenzene	ND ug/L		0.50	1		07/09/10 18:22	100-41-4	

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## ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample: MW-8_20100630	Lab ID: 254111005	Collected: 06/30/10 13:15	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>								
Analytical Method: EPA 5030B/8260								
Methyl-tert-butyl ether	ND ug/L		0.50	1		07/09/10 18:22	1634-04-4	
Toluene	ND ug/L		0.50	1		07/09/10 18:22	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		07/09/10 18:22	1330-20-7	
4-Bromofluorobenzene (S)	100 %		80-120	1		07/09/10 18:22	460-00-4	
Dibromofluoromethane (S)	112 %		80-122	1		07/09/10 18:22	1868-53-7	
1,2-Dichloroethane-d4 (S)	111 %		80-124	1		07/09/10 18:22	17060-07-0	
Toluene-d8 (S)	96 %		80-123	1		07/09/10 18:22	2037-26-5	
<b>CA LUFT MSV GRO</b>								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		07/09/10 18:22		
4-Bromofluorobenzene (S)	100 %		82-116	1		07/09/10 18:22	460-00-4	
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Sulfate	<b>2360000</b> ug/L		500000	500		07/14/10 12:18	14808-79-8	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND ug/L		50.0	1		07/13/10 14:36		
Nitrogen, NO2 plus NO3	<b>59.7</b> ug/L		50.0	1		07/13/10 14:36		
<b>SM4500NO2-B, Nitrite, unpres</b>								
Analytical Method: SM 4500-NO2 B								
Nitrite as N	<b>68.2</b> ug/L		10.0	1		07/01/10 21:06	14797-65-0	

Sample: MW-9_20100630	Lab ID: 254111006	Collected: 06/30/10 13:55	Received: 07/01/10 09:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B CA TPH DRO SG</b>								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	<b>95.0</b> ug/L		50.0	1	07/07/10 13:30	07/08/10 23:12		
o-Terphenyl (S) SG	82 %		51-147	1	07/07/10 13:30	07/08/10 23:12	84-15-1	
n-Octacosane (S) SG	96 %		50-150	1	07/07/10 13:30	07/08/10 23:12	630-02-4	
<b>6010 MET ICP</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	<b>8820</b> ug/L		100	1	07/08/10 08:45	07/12/10 12:17	7439-89-6	
<b>6010 MET ICP, Dissolved</b>								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	<b>3210</b> ug/L		100	1	07/08/10 08:45	07/12/10 13:25	7439-89-6	
<b>8260 MSV</b>								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		07/02/10 15:20	71-43-2	
Ethanol	ND ug/L		250	1		07/02/10 15:20	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		07/02/10 15:20	100-41-4	
Methyl-tert-butyl ether	<b>0.85</b> ug/L		0.50	1		07/02/10 15:20	1634-04-4	
Toluene	ND ug/L		0.50	1		07/02/10 15:20	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		07/02/10 15:20	1330-20-7	

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### ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Sample: MW-9_20100630		Lab ID: 254111006		Collected: 06/30/10 13:55		Received: 07/01/10 09:00		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260							
4-Bromofluorobenzene (S)	93 %		80-120	1		07/02/10 15:20	460-00-4		
Dibromofluoromethane (S)	104 %		80-122	1		07/02/10 15:20	1868-53-7		
1,2-Dichloroethane-d4 (S)	88 %		80-124	1		07/02/10 15:20	17060-07-0		
Toluene-d8 (S)	99 %		80-123	1		07/02/10 15:20	2037-26-5		
<b>CA LUFT MSV GRO</b>		Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		07/02/10 15:20			
4-Bromofluorobenzene (S)	93 %		82-116	1		07/02/10 15:20	460-00-4		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0							
Sulfate	<b>19000</b> ug/L		1000	1		07/13/10 17:18	14808-79-8		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND ug/L		50.0	1		07/13/10 14:37			
Nitrogen, NO2 plus NO3	ND ug/L		50.0	1		07/13/10 14:37			
<b>SM4500NO2-B, Nitrite, unpres</b>		Analytical Method: SM 4500-NO2 B							
Nitrite as N	<b>14.9</b> ug/L		10.0	1		07/01/10 21:06	14797-65-0		

Sample: TB1_20100630		Lab ID: 254111007		Collected: 06/30/10 08:00		Received: 07/01/10 09:00		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260							
Benzene	ND ug/L		0.50	1		07/02/10 13:51	71-43-2		
Ethanol	ND ug/L		250	1		07/02/10 13:51	64-17-5		
Ethylbenzene	ND ug/L		0.50	1		07/02/10 13:51	100-41-4		
Methyl-tert-butyl ether	ND ug/L		0.50	1		07/02/10 13:51	1634-04-4		
Toluene	<b>0.54</b> ug/L		0.50	1		07/02/10 13:51	108-88-3		
Xylene (Total)	ND ug/L		1.5	1		07/02/10 13:51	1330-20-7		
4-Bromofluorobenzene (S)	91 %		80-120	1		07/02/10 13:51	460-00-4		
Dibromofluoromethane (S)	100 %		80-122	1		07/02/10 13:51	1868-53-7		
1,2-Dichloroethane-d4 (S)	82 %		80-124	1		07/02/10 13:51	17060-07-0		
Toluene-d8 (S)	90 %		80-123	1		07/02/10 13:51	2037-26-5		
<b>CA LUFT MSV GRO</b>		Analytical Method: CA LUFT							
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		07/02/10 13:51			
4-Bromofluorobenzene (S)	91 %		82-116	1		07/02/10 13:51	460-00-4		



### QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: OEXT/2350

Analysis Method: EPA 8015B

QC Batch Method: EPA 3510 Modified

Analysis Description: 8015B CA DRO Silica Gel

Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 32614

Matrix: Water

Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	ND	50.0	07/08/10 20:09	
n-Octacosane (S) SG	%	100	50-150	07/08/10 20:09	
o-Terphenyl (S) SG	%	69	51-147	07/08/10 20:09	

LABORATORY CONTROL SAMPLE: 32615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	3120	1960	63	51-147	
n-Octacosane (S) SG	%			93	50-150	
o-Terphenyl (S) SG	%			96	51-147	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32616 32617

Parameter	Units	254111004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-DRO (C10-C24) SG	ug/L	66.0	3120	3120	2010	1980	62	61	51-147	2	
n-Octacosane (S) SG	%						90	93	50-150		
o-Terphenyl (S) SG	%						94	96	51-147		

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MPRP/1635 Analysis Method: EPA 6010  
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 32772 Matrix: Water  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	100	07/12/10 11:28	

LABORATORY CONTROL SAMPLE: 32773

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9390	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32774 32775

Parameter	Units	254107001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iron	ug/L	1260	10000	10000	10200	10200	89	90	75-125	.4	

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MPRP/1636 Analysis Method: EPA 6010  
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 32776 Matrix: Water  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	100	07/12/10 12:36	

LABORATORY CONTROL SAMPLE: 32777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9000	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32778 32779

Parameter	Units	254107001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iron, Dissolved	ug/L	3810	10000	10000	12800	12600	90	88	75-125	2	

### QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger  
Pace Project No.: 254111

QC Batch: MSV/2587 Analysis Method: EPA 5030B/8260  
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
Associated Lab Samples: 254111001, 254111002, 254111003, 254111006, 254111007

METHOD BLANK: 32157 Matrix: Water  
Associated Lab Samples: 254111001, 254111002, 254111003, 254111006, 254111007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	07/02/10 12:22	
Ethanol	ug/L	ND	250	07/02/10 12:22	
Ethylbenzene	ug/L	ND	0.50	07/02/10 12:22	
Methyl-tert-butyl ether	ug/L	ND	0.50	07/02/10 12:22	
Toluene	ug/L	ND	0.50	07/02/10 12:22	
Xylene (Total)	ug/L	ND	1.5	07/02/10 12:22	
1,2-Dichloroethane-d4 (S)	%	84	80-124	07/02/10 12:22	
4-Bromofluorobenzene (S)	%	88	80-120	07/02/10 12:22	
Dibromofluoromethane (S)	%	105	80-122	07/02/10 12:22	
Toluene-d8 (S)	%	90	80-123	07/02/10 12:22	

LABORATORY CONTROL SAMPLE: 32158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.2	91	75-124	
Ethanol	ug/L	400	353	88	36-177	
Ethylbenzene	ug/L	20	16.3	81	76-124	
Methyl-tert-butyl ether	ug/L	20	16.8	84	72-130	
Toluene	ug/L	20	17.2	86	75-124	
Xylene (Total)	ug/L	60	53.3	89	76-123	
1,2-Dichloroethane-d4 (S)	%			86	80-124	
4-Bromofluorobenzene (S)	%			96	80-120	
Dibromofluoromethane (S)	%			104	80-122	
Toluene-d8 (S)	%			94	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32532 32533

Parameter	Units	254089002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Benzene	ug/L	ND	20	20	6.1	14.1	30	70	75-124	79	M0,R1
Ethanol	ug/L	ND	400	400	142J	269	35	67	36-177		M0
Ethylbenzene	ug/L	ND	20	20	5.0	13.4	25	67	76-124	91	M0,R1
Methyl-tert-butyl ether	ug/L	ND	20	20	5.0	13.6	25	67	72-130	92	M0,R1
Toluene	ug/L	ND	20	20	5.5	13.3	28	67	75-124	83	M0,R1
Xylene (Total)	ug/L	ND	60	60	16.7	44.0	28	73	76-123	90	M0,R1
1,2-Dichloroethane-d4 (S)	%						93	80	80-124		
4-Bromofluorobenzene (S)	%						91	94	80-120		
Dibromofluoromethane (S)	%						109	98	80-122		
Toluene-d8 (S)	%						94	92	80-123		

### QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MSV/2640 Analysis Method: EPA 5030B/8260  
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
 Associated Lab Samples: 254111004, 254111005

METHOD BLANK: 32925 Matrix: Water

Associated Lab Samples: 254111004, 254111005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	07/09/10 13:52	
Ethanol	ug/L	ND	250	07/09/10 13:52	
Ethylbenzene	ug/L	ND	0.50	07/09/10 13:52	
Methyl-tert-butyl ether	ug/L	ND	0.50	07/09/10 13:52	
Toluene	ug/L	ND	0.50	07/09/10 13:52	
Xylene (Total)	ug/L	ND	1.5	07/09/10 13:52	
1,2-Dichloroethane-d4 (S)	%	115	80-124	07/09/10 13:52	
4-Bromofluorobenzene (S)	%	104	80-120	07/09/10 13:52	
Dibromofluoromethane (S)	%	110	80-122	07/09/10 13:52	
Toluene-d8 (S)	%	99	80-123	07/09/10 13:52	

LABORATORY CONTROL SAMPLE: 32926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	40	35.4	88	75-124	
Ethanol	ug/L	400	1000	251	36-177	L3
Ethylbenzene	ug/L	40	40.3	101	76-124	
Methyl-tert-butyl ether	ug/L	20	20.9	104	72-130	
Toluene	ug/L	40	37.5	94	75-124	
Xylene (Total)	ug/L	120	114	95	76-123	
1,2-Dichloroethane-d4 (S)	%			108	80-124	
4-Bromofluorobenzene (S)	%			106	80-120	
Dibromofluoromethane (S)	%			107	80-122	
Toluene-d8 (S)	%			103	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32927 32928

Parameter	Units	254111004 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Spike Conc.					
Benzene	ug/L	ND	20	20	13.1	11.5	66	58	75-124	13	M0
Ethanol	ug/L	ND	400	400	ND	ND	0	0	36-177		M0
Ethylbenzene	ug/L	ND	20	20	17.0	16.8	85	84	76-124	2	
Methyl-tert-butyl ether	ug/L	ND	20	20	28.1	13.1	141	65	72-130	73	M0,R1
Toluene	ug/L	ND	20	20	5.7	6.9	29	35	75-124	19	M0
Xylene (Total)	ug/L	ND	60	60	59.3	53.7	99	89	76-123	10	
1,2-Dichloroethane-d4 (S)	%						109	37	80-124		S0
4-Bromofluorobenzene (S)	%						94	97	80-120		IS
Dibromofluoromethane (S)	%						67	52	80-122		S0
Toluene-d8 (S)	%						45	59	80-123		S0

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MSV/2593 Analysis Method: CA LUFT  
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO  
 Associated Lab Samples: 254111001, 254111002, 254111006, 254111007

METHOD BLANK: 32277 Matrix: Water

Associated Lab Samples: 254111001, 254111002, 254111006, 254111007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	07/02/10 12:22	
4-Bromofluorobenzene (S)	%	88	82-116	07/02/10 12:22	

LABORATORY CONTROL SAMPLE & LCSD: 32278

32279

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	629	565	126	113	60-140	11	30	
4-Bromofluorobenzene (S)	%				91	92	82-116			

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MSV/2624 Analysis Method: CA LUFT  
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO  
 Associated Lab Samples: 254111003

METHOD BLANK: 32683 Matrix: Water

Associated Lab Samples: 254111003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	07/08/10 01:05	
4-Bromofluorobenzene (S)	%	107	82-116	07/08/10 01:05	

LABORATORY CONTROL SAMPLE: 32684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	608	122	60-140	
4-Bromofluorobenzene (S)	%			114	82-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32790 32791

Parameter	Units	254167002		32791		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
TPH-Gasoline (C05-C12)	ug/L	897	500	500	1660	1280	152	76	60-140	26	M0	
4-Bromofluorobenzene (S)	%						119	117	82-116		S2	

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: MSV/2638 Analysis Method: CA LUFT  
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO  
 Associated Lab Samples: 254111004, 254111005

METHOD BLANK: 32921 Matrix: Water

Associated Lab Samples: 254111004, 254111005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	07/09/10 13:52	
4-Bromofluorobenzene (S)	%	104	82-116	07/09/10 13:52	

LABORATORY CONTROL SAMPLE: 32922

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	665	133	60-140	
4-Bromofluorobenzene (S)	%			104	82-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33347 33348

Parameter	Units	254142001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
TPH-Gasoline (C05-C12)	ug/L	ND	500	500	799	329	156	62	60-140	83	M0,R1
4-Bromofluorobenzene (S)	%						97	104	82-116		



**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: WETA/1606 Analysis Method: EPA 300.0  
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 32707 Matrix: Water  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	ug/L	ND	1000	07/09/10 01:26	

LABORATORY CONTROL SAMPLE: 32708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	ug/L	15000	15900	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32709 32710

Parameter	Units	254107004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Sulfate	ug/L	7.9 mg/L	15000	15000	23800	22400	106	97	90-110	6	E

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: WETA/1610 Analysis Method: EPA 353.2  
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 33138 Matrix: Water  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	ug/L	ND	50.0	07/13/10 14:25	

LABORATORY CONTROL SAMPLE: 33139

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	ug/L	1000	1020	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33140 33141

Parameter	Units	254111003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Nitrogen, NO2 plus NO3	ug/L	69.3	1000	1000	1060	1020	99	95	90-110	4	

**QUALITY CONTROL DATA**

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

QC Batch: WETA/1600 Analysis Method: SM 4500-NO2 B  
 QC Batch Method: SM 4500-NO2 B Analysis Description: SM4500NO2-B, Nitrite, unpres  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

METHOD BLANK: 32125 Matrix: Water  
 Associated Lab Samples: 254111001, 254111002, 254111003, 254111004, 254111005, 254111006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	ug/L	ND	10.0	07/01/10 21:06	

LABORATORY CONTROL SAMPLE: 32126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	ug/L	50	49.8	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32127 32128

Parameter	Units	254105001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Nitrite as N	ug/L	ND	50	50	48.5	48.3	81	80	71-109	.4	

## QUALIFIERS

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

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### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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

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

### LABORATORIES

PASI-S Pace Analytical Services - Seattle

### ANALYTE QUALIFIERS

- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- IS The internal standard response is below criteria. Results may be biased high.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- R1 RPD value was outside control limits.
- S0 Surrogate recovery outside laboratory control limits.
- S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
254111001	MW-10_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111002	MW-3_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111003	MW-6_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111004	MW-7_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111005	MW-8_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111006	MW-9_20100630	EPA 3510 Modified	OEXT/2350	EPA 8015B	GCSV/1710
254111001	MW-10_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111002	MW-3_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111003	MW-6_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111004	MW-7_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111005	MW-8_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111006	MW-9_20100630	EPA 3010	MPRP/1635	EPA 6010	ICP/1557
254111001	MW-10_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111002	MW-3_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111003	MW-6_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111004	MW-7_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111005	MW-8_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111006	MW-9_20100630	EPA 3010	MPRP/1636	EPA 6010	ICP/1558
254111001	MW-10_20100630	EPA 5030B/8260	MSV/2587		
254111002	MW-3_20100630	EPA 5030B/8260	MSV/2587		
254111003	MW-6_20100630	EPA 5030B/8260	MSV/2587		
254111004	MW-7_20100630	EPA 5030B/8260	MSV/2640		
254111005	MW-8_20100630	EPA 5030B/8260	MSV/2640		
254111006	MW-9_20100630	EPA 5030B/8260	MSV/2587		
254111007	TB1_20100630	EPA 5030B/8260	MSV/2587		
254111001	MW-10_20100630	CA LUFT	MSV/2593		
254111002	MW-3_20100630	CA LUFT	MSV/2593		
254111003	MW-6_20100630	CA LUFT	MSV/2624		
254111004	MW-7_20100630	CA LUFT	MSV/2638		
254111005	MW-8_20100630	CA LUFT	MSV/2638		
254111006	MW-9_20100630	CA LUFT	MSV/2593		
254111007	TB1_20100630	CA LUFT	MSV/2593		
254111001	MW-10_20100630	EPA 300.0	WETA/1606		
254111002	MW-3_20100630	EPA 300.0	WETA/1606		
254111003	MW-6_20100630	EPA 300.0	WETA/1606		
254111004	MW-7_20100630	EPA 300.0	WETA/1606		
254111005	MW-8_20100630	EPA 300.0	WETA/1606		
254111006	MW-9_20100630	EPA 300.0	WETA/1606		
254111001	MW-10_20100630	EPA 353.2	WETA/1610		
254111002	MW-3_20100630	EPA 353.2	WETA/1610		
254111003	MW-6_20100630	EPA 353.2	WETA/1610		
254111004	MW-7_20100630	EPA 353.2	WETA/1610		
254111005	MW-8_20100630	EPA 353.2	WETA/1610		

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191 449 Hegenberger

Pace Project No.: 254111

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
254111006	MW-9_20100630	EPA 353.2	WETA/1610		
254111001	MW-10_20100630	SM 4500-NO2 B	WETA/1600		
254111002	MW-3_20100630	SM 4500-NO2 B	WETA/1600		
254111003	MW-6_20100630	SM 4500-NO2 B	WETA/1600		
254111004	MW-7_20100630	SM 4500-NO2 B	WETA/1600		
254111005	MW-8_20100630	SM 4500-NO2 B	WETA/1600		
254111006	MW-9_20100630	SM 4500-NO2 B	WETA/1600		



**COP ELT CHAIN-OF-CUSTODY / Analytical Request Document**

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

25411

21789/11#12

<b>Required Lab Information:</b>		<b>Required Project Information:</b>			<b>Required Invoice Information:</b>		
Lab Name: Pace-Seattle	Site ID #: 2705191	Task: WG_S_201006	Send Invoice to: David Sowie	Address: 11050 White Rock Road, Suite 110		Turn around time (days) 10	
Address: 940 S. Hamey Street Seattle WA 98108	Delta project #	City/State: Oakland CA 94621	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411	QC level Required: Standard		
Lab PM: Regina Ste. Marie	Delta PM Name: Dennis Dettloff	Reimbursement project?	Non-reimbursement project?	Mark one	NJ Reduced Deliverable Package?		
Phone/Fax: P: 206-957-2433 F: 206-767-5063	Delta PM Email: ddettloff@deltaenv.com	Send EDD to: copeltdata@intelligentehts.com	CC Hardcopy report to		MA MCP Cert? CT RCP Cert? Mark One		
Lab PM email: Regina.SteMarie@pacelabs.com	Delta PM Email: ddettloff@deltaenv.com	CC Hardcopy report to		Lab Project ID (lab use)			
Applicable Lab Quote #:	Delta PM Email: ddettloff@deltaenv.com		CC Hardcopy report to		Requested Analyses		

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes		MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives								Requested Analyses	Comments/Lab Sample I.D.								
		MATRIX	MATRIX							Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Methanol	Other			353.2/Niltrate/b	3005/Nilrate	8010/Nilrate	8015/TF/DF/Asel	8260/GCOMS/BRO	8260/Bleach/Nilrate	8260/Ethanol	8010/Other/Dissolved
1	MW-10_20100630	WG	G			6/30/10	1455	13	Y	4	1	2	6					X	X	X	X	X	X	X			
2	MW-3_20100630	WG					1415	13	Y	4	1	2	6					X	X	X	X	X	X	X	X		*Field Filtered for Dissolved Iron samples only*
3	MW-6_20100630	WG					1435	13	N	4	1	2	6					X	X	X	X	X	X	X	X		
4	MW-7_20100630	WG					1240	21	Y	8	1	2	10					X	X	X	X	X	X	X	X		
5	MW-8_20100630	WG					1315	13	Y	4	1	2	6					X	X	X	X	X	X	X	X		
6	MW-9_20100630	WG					1355	13	Y	4	1	2	6					X	X	X	X	X	X	X	X		
7	TB1_20100630	W					0800	4	N				4														Silica Gel Cleanup for DRO by 8015 samples

Additional Comments/Special Instructions:  GLOBAL ID: T0600101476	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions			
	Feed Ex			Regina Ste Marie	07/01/10	09:00	See for	Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
								Y/N	Y/N	Y/N
SHIPPING METHOD: (mark as appropriate)				SAMPLER NAME AND SIGNATURE			Temp in °C	Samples on ice?	Sample intact?	Trip Blank?
UPS COURIER FEDEX		PRINT Name of SAMPLER:		J. PRYOR						
US MAIL		SIGNATURE of SAMPLER:		DATE Signed: 6/30/10 Time: 1645						

4.2, 2.4, 2.7, 5.2, 2.2, 6.0

**Sample Condition Upon Receipt**



Client Name: Delta BT

Project # 254111

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_

Tracking #: 8715 0606 5482/5588/5579

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used Horiba 132013 Type of Ice: Wei Blue None  Samples on ice, cooling process has begun

Cooler Temperature 4.2/2.4/2.7/5.2/ Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C 2.7/6.0

Optional:  
Proj. Due Date  
Proj. Name  
Date and Initials of person examining contents: RSM 07/01/10

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO2 ?</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: <u>VOA, coliform, TOC, O&amp;G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. <u>1 of 4 TB vials &gt;6mm / 1 of 6 mw-t vials &gt;6mm</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: Dennis D. Date/Time: 07/01/10

Comments/ Resolution:

Run NO2 per history.

Project Manager Review:

RSM

Date: 07/01/10

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



# Sample Container Count

CLIENT: Delta



COC PAGE 1 of 1

COC ID# \_\_\_\_\_

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	Comments
1	6		2			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
2	6		2			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
3	6		2			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
4	10		4			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
5	6		2			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
6	6		2			1	1	2 <sup>u</sup>	1 <sup>u</sup>			
7	4											TB
8												
9												
10												
11												
12												Trip Blank? <u>yes</u>




AG1H	1 liter HCL amber glass		BP2S	500mL H2SO4 plastic	JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass		BP2U	500mL unpreserved plastic	R	terra core kit
AG2S	500mL H2SO4 amber glass		BP2Z	500mL NaOH, Zn Ac	U	Summa Can
AG2U	500mL unpreserved amber glass		BP3C	250mL NaOH plastic	VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass		BP3N	250mL HNO3 plastic	VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass		BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass		BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic		DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic		DG9H	40mL HCL amber vial	WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic		DG9M	40mL MeOH clear vial	WGFY	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac		DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic		DG9U	40mL unpreserved amber vial		
BP2O	500mL NaOH plastic			Wipe/Swab		

## **Attachment E**

*Waste Disposal Manifest*

# NON-HAZARDOUS WASTE MANIFEST

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

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <span style="font-size: 1.5em;">Na</span>	Manifest Document No. <span style="font-size: 1.2em;">2705791-0610</span>	2. Page 1 of 1
3. Generator's Name and Mailing Address		Attn: Duane Blain PC&F Acquisition Co. 2603 Camino Ramon, Suite 350 San Ramon 94583		Site # 2705791
4. Generator's Phone <span style="font-size: 1.2em;">(925) 884-0840</span>		6. US EPA ID Number	449 Hegenberger Rd, Oakland, CA 94621	
5. Transporter 1 Company Name <span style="font-size: 1.2em;">Blaine Tech Services</span>		8. US EPA ID Number	A. State Transporter's ID	B. Transporter 1 Phone <span style="font-size: 1.2em;">310-885-4455</span>
7. Transporter 2 Company Name		10. US EPA ID Number	C. State Transporter's ID	D. Transporter 2 Phone
9. Designated Facility Name and Site Address		10. US EPA ID Number <span style="font-size: 1.5em;">000013572</span>		E. State Facility's ID
Seaport Environmental 700 Seaport Blvd. Redwood City, CA 94063				F. Facility's Phone <span style="font-size: 1.2em;">650-364-1024</span>
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity
		No.	Type	14. Unit Wt./Vol.
a. <span style="font-size: 1.2em;">Non hazardous Groundwater</span>		1	TT	33 G
b. <span style="font-size: 1.2em;">Non hazardous Groundwater</span>		1	TT	87 G
c.				
d.				
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above	
15. Special Handling Instructions and Additional Information				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name <span style="font-size: 1.2em;">Tara L Bosch on behalf of PC&amp;F</span>		Signature 	Date <span style="font-size: 1.2em;">5/24/10</span>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature 	Date <span style="font-size: 1.2em;">6/30/10</span>	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature	Date	
19. Discrepancy Indication Space				
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name <span style="font-size: 1.2em;">Jaquim D. Camara</span>		Signature 	Date <span style="font-size: 1.2em;">07/12/10</span>	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

