



L.Bermudez@pcandf.com
Direct: 925-884-0860
Fax: 925-905-2746

November 1, 2010

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

RECEIVED
4:28 pm, Nov 01, 2010
Alameda County
Environmental Health

Subject: Quarterly Summary Report – Third 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
Fax: (925) 867-4687
lbermudez@pcandf.com

Sincerely,

PACIFIC CONVENIENCE & FUEL

LIZ BERMUDEZ
Senior Paralegal
Division, Unit, or Group

Attachment



Quarterly Summary Report – Third Quarter 2010

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

**Alameda County Health Care Services Agency
Fuel Leak Case No. R00000219
San Francisco Bay Regional Water Quality Control
Board (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:	76 Station No. 5191/5043
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 [Third Quarter 2010]:

1. Blaine Tech Services, Inc. (Blaine Tech) conducted the third quarter 2010 groundwater monitoring and sampling event on September 20, 2010.
2. Delta completed and submitted the second quarter 2010 summary report.
3. Delta conducted batch extraction events on monitoring wells MW-6, MW-11, MW-12 and MW-12a.

WORK PROPOSED FOR NEXT QUARTER [Fourth Quarter 2010]:

1. Delta will complete and submit the third quarter 2010 summary report, contained herein.
2. Blaine Tech will conduct the fourth quarter 2010 groundwater monitoring and sampling activities.
3. Delta will continue to perform batch extraction events using monitoring well MW-6 and monitoring/extraction well MW-12.

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**.

Site summary data has been tabled in the following:

- **Table 1** summarizes the current groundwater gauging and analytical data.
- **Table 1a** summarizes the additional 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 nd and 4 th 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 Attachment A

CURRENT QUARTER MONITORING DATA

Wells Monitored:	MW-3, 6, 7, 8, 9, 10, 11,12, 12a, and 13
Wells Sampled:	MW-6, 10, 11, 12, 12a, and 13
Monitoring and Sampling Date:	September 20, 2010
LNAPL Measured This Quarter:	No
Cumulative LNAPL Recovered to Date:	n/a
DTW Range (ft BTOC):	2.03 feet (MW-9) to 4.85 feet (MW-7)
Average Change in Groundwater Elevation Since Last Event (ft above mean sea level):	0.26 Decrease
Groundwater Flow Direction and Gradient (ft/ft):	East-Southeast at 0.007 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	4:6	<50 (MW-12A)	73,700 (MW-12)
Benzene	2:6	<0.5 (MW-10, 11, 12A, and 13)	6,020 (MW-12)
MTBE	5:6	<0.5 (MW-10)	894 (MW-12)
DRO	2:6	<50 (MW-10, 11, 12A, and 13)	18,800 (MW-6)

Explanations:

µg/L = Micrograms per liter

LRL = Laboratory reporting limit

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tertiary-butyl ether

DRO = Diesel range organics

GROUNDWATER MONITORING AND SAMPLING

Monitoring and Sampling procedures

Quarterly groundwater monitoring and sampling was conducted at Station No. 5191/5043 on September 20, 2010 by Blaine Tech. Water levels were gauged in all 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, MW-10, MW-11, MW-12, MW-12A, and MW-13 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 third quarter 2010 and reviewed and certified by a California Professional Geologist.

Groundwater Sample Analysis

Groundwater samples collected from monitoring wells MW-6, MW-10, MW-11, MW-12, MW-12A, and MW-13 were submitted to Pace Analytical Services (Pace) of Seattle, WA, a California state-certified laboratory (No.01153CA). Samples were analyzed for the presence of 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-NO₂ B, nitrogen, nitrate, and nitrogen NO₂ plus NO₃ 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 67 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**.

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 and two off-site wells are monitored on a quarterly basis. Monitoring wells MW-3, MW-7, MW-8, and MW-9 are sampled during the 2nd and 4th quarters while monitoring wells MW-6, MW-10, MW-11, MW-12, MW-12a, and MW-13 are sampled quarterly. The third quarter 2010 groundwater monitoring and sampling event was performed by Blaine Tech on September 20, 2010. The average groundwater elevation decreased 0.26 feet from the June 2010 event. Depth to groundwater in the site monitoring wells ranged from 2.03 feet (MW-9) to 4.85 feet (MW-7) BTOC during the current event. The groundwater flow direction and gradient were interpreted to be to the east-southeast at 0.007 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-6 (64,500 µg/L), MW-11 (76.4 µg/L), MW-12 (73,700 µg/L), and MW-13 (250 µg/L) during the current event. However, the laboratory report indicates that the results reported in the groundwater samples collected from wells MW-11 and MW-13 are within the method-specific range that do not match the pattern of laboratory standard. These concentrations are likely due to MTBE.

DRO: DRO was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-6 (18,800 µg/L) and MW-12 (5,220 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 wells MW-6 (2,300 µg/L) and MW-12 (6,020 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-6 (19.3 µg/L), MW-11 (82.7 µg/L), MW-12 (894 µg/L), MW-12a (8.5 µg/L), and MW-13 (272 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 wells MW-6 (170 µg/L) and MW-12 (6,390 µg/L); ethylbenzene was above the laboratory's indicated reporting limit in the groundwater sample collected and submitted for analysis from monitoring wells MW-6 (2,770 µg/L) and MW-12 (2,970 µg/L); and total xylenes were above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-6 (6,260 µg/L) and MW-12 (18,300 µg/L) during the current event.

The third quarter 2010 groundwater elevation contour map is presented as **Figure 3**. Dissolved phase iso-concentration maps are presented on **Figure 4** through **Figure 7**. Historical groundwater flow directions are shown on a rose diagram is presented as **Figure 8**.

RECOMMENDATIONS

Characterization Status

During the third quarter 2010, monitoring well MW-6 groundwater analytical results indicated that MTBE increased in concentration while TPHg and DRO concentrations decreased. Analytical results from the groundwater sample collected from monitoring well MW-10 indicated a decrease in DRO. TPHg, benzene, and MTBE concentrations in monitoring well MW-10 remained below the laboratory's indicated reporting limits, as shown in **Table 2**. Analytical results from the groundwater samples collected from monitoring wells MW-11 and MW-12A indicated a decrease in TPHg, DRO, benzene, and MTBE. Analytical results from the groundwater samples collected from monitoring wells MW-12 and MW-13 indicated an increase in TPHg. MW-12 samples also indicated an increase in benzene and DRO and MW-13 samples indicated an increase in MTBE.

Remediation Activities

Batch extraction using monitoring/extraction wells MW-11 and MW-12 and monitoring wells MW-12A and MW-6 were conducted on July 7 and 8, 2010, August 18 and 19, 2010, and September 28 and 29, 2010. On average 3,700 gallons of groundwater were purged from the on-site wells during each extraction event and transported off-site for disposal at the Demenno Kerdoon disposal facility located in Compton, California.

Recent Correspondence

No correspondence was received from or sent to the Alameda County Health Care Services Agency during the third quarter 2010.

REMARKS

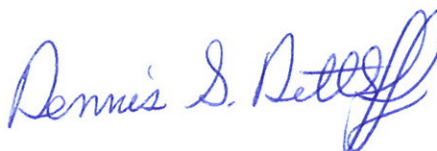
The descriptions, conclusions, and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, 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.

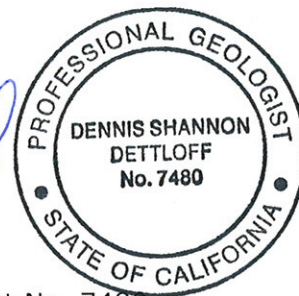
Sincerely,
DELTA CONSULTANTS



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



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



Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Map
- Figure 3 – Groundwater Elevation Contour Map – September 20, 2010
- Figure 4 – Dissolved Phase TPHg Isoconcentration Map – September 20, 2010
- Figure 5 – Dissolved Phase Benzene Isoconcentration Map – September 20, 2010
- Figure 6 – Dissolved Phase MTBE Isoconcentration Map – September 20, 2010
- Figure 7 – Dissolved Phase DRO Isoconcentration Map – September 20, 2010
- Figure 8 – Historical Groundwater Flow Directions

Tables

- Table 1 – Current Groundwater Gauging and Analytical Data
- Table 1a – Additional Current Groundwater Gauging and Analytical Data
- Table 2 – Historical Groundwater Gauging and Analytical Data
- Table 2a – Additional Historical Groundwater 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

Figures

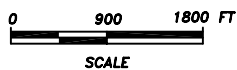
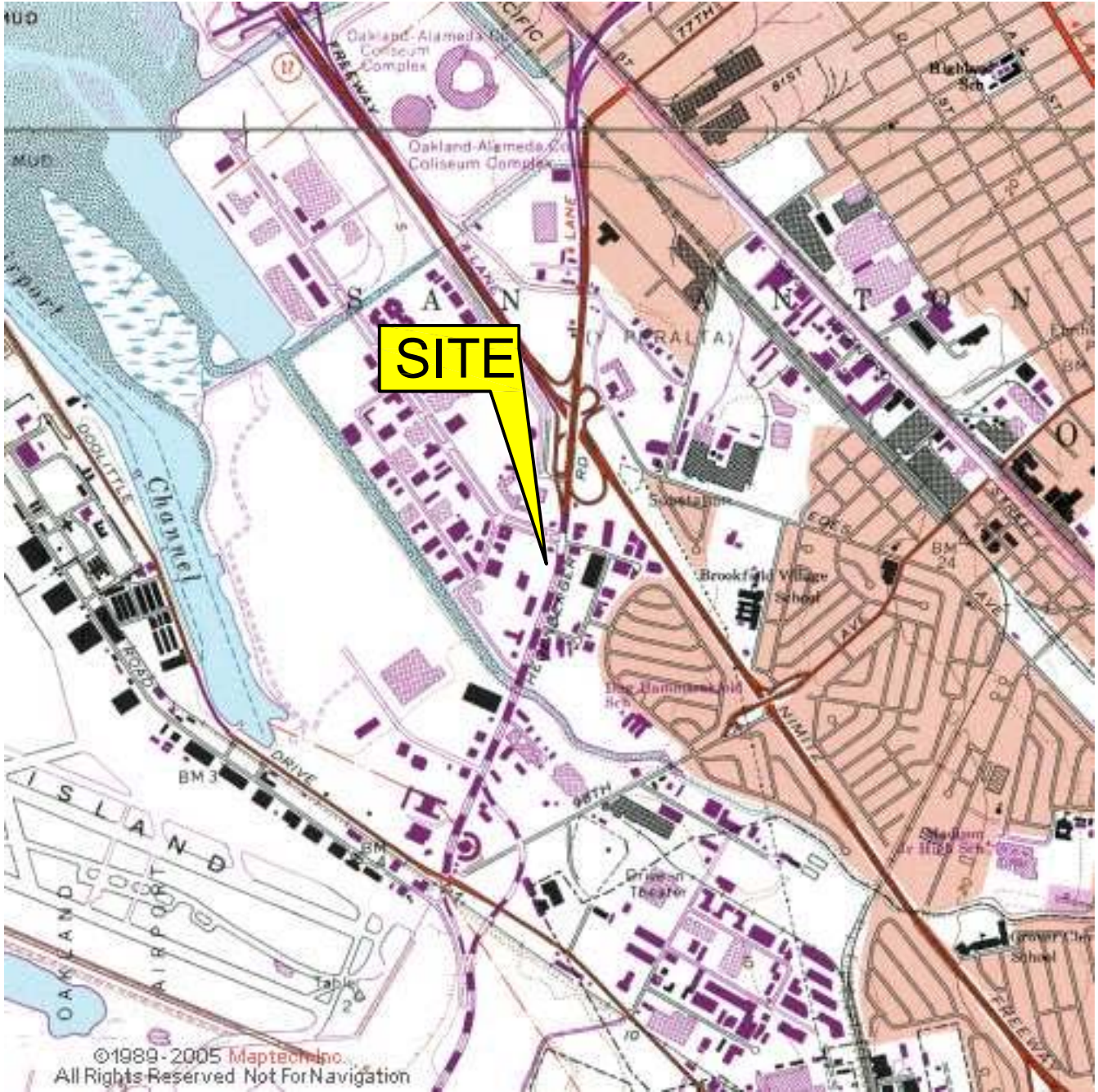


FIGURE 1

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

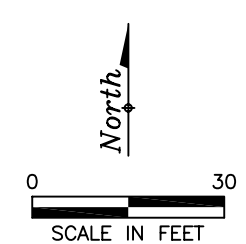
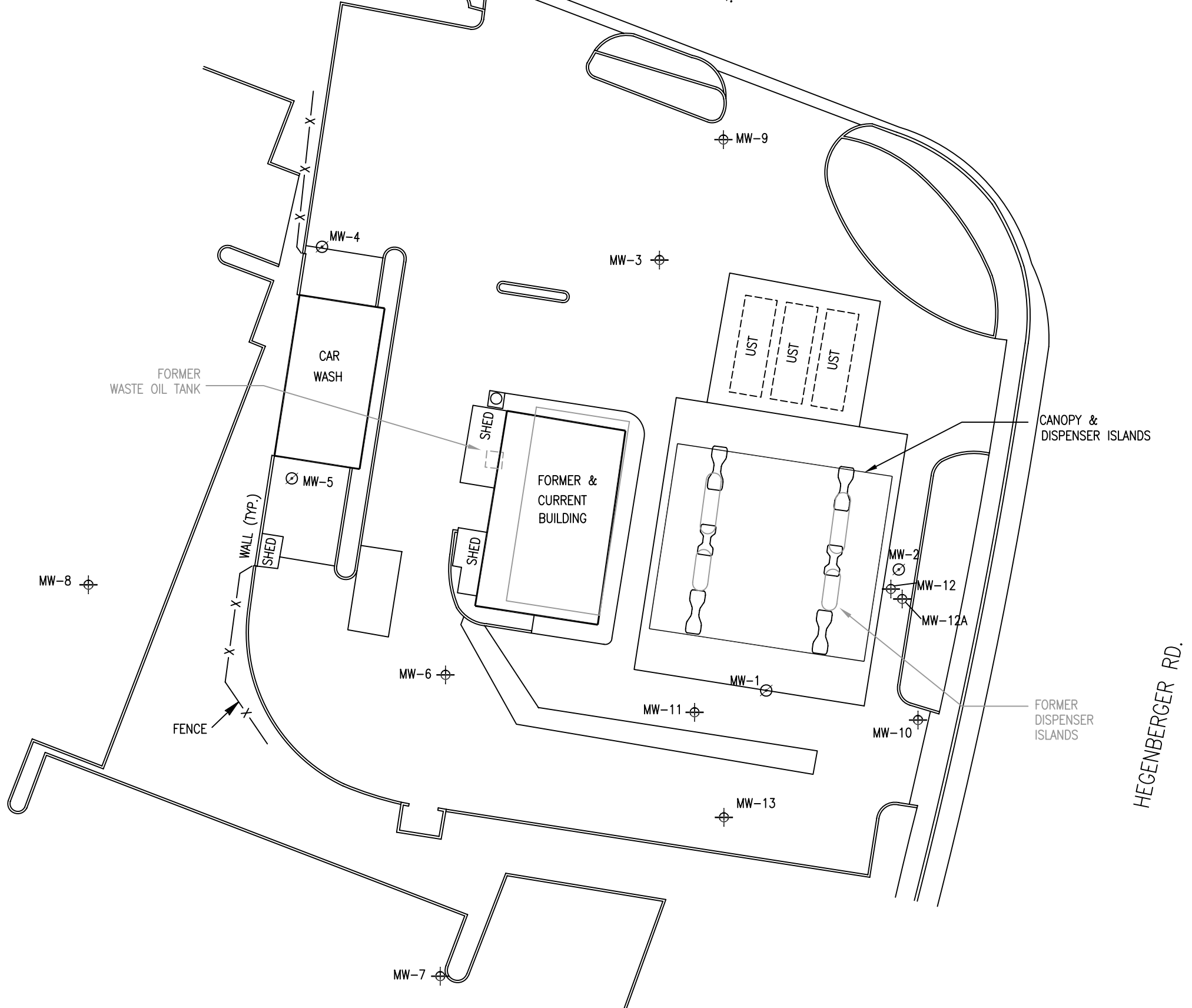


FIGURE 2
SITE MAP

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
- (8.91) GROUNDWATER ELEVATION IN FEET MEAN SEA LEVEL (ft/msl)
- 8.00' — GROUNDWATER CONTOUR LINE (ft/msl)
-DASHED WHERE INFERRED
(CONTOUR INTERVAL: 0.50 ft)
- ← 0.007 ft/ft ||| GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT

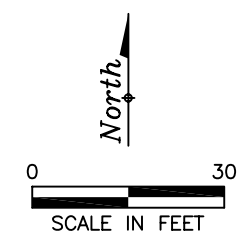
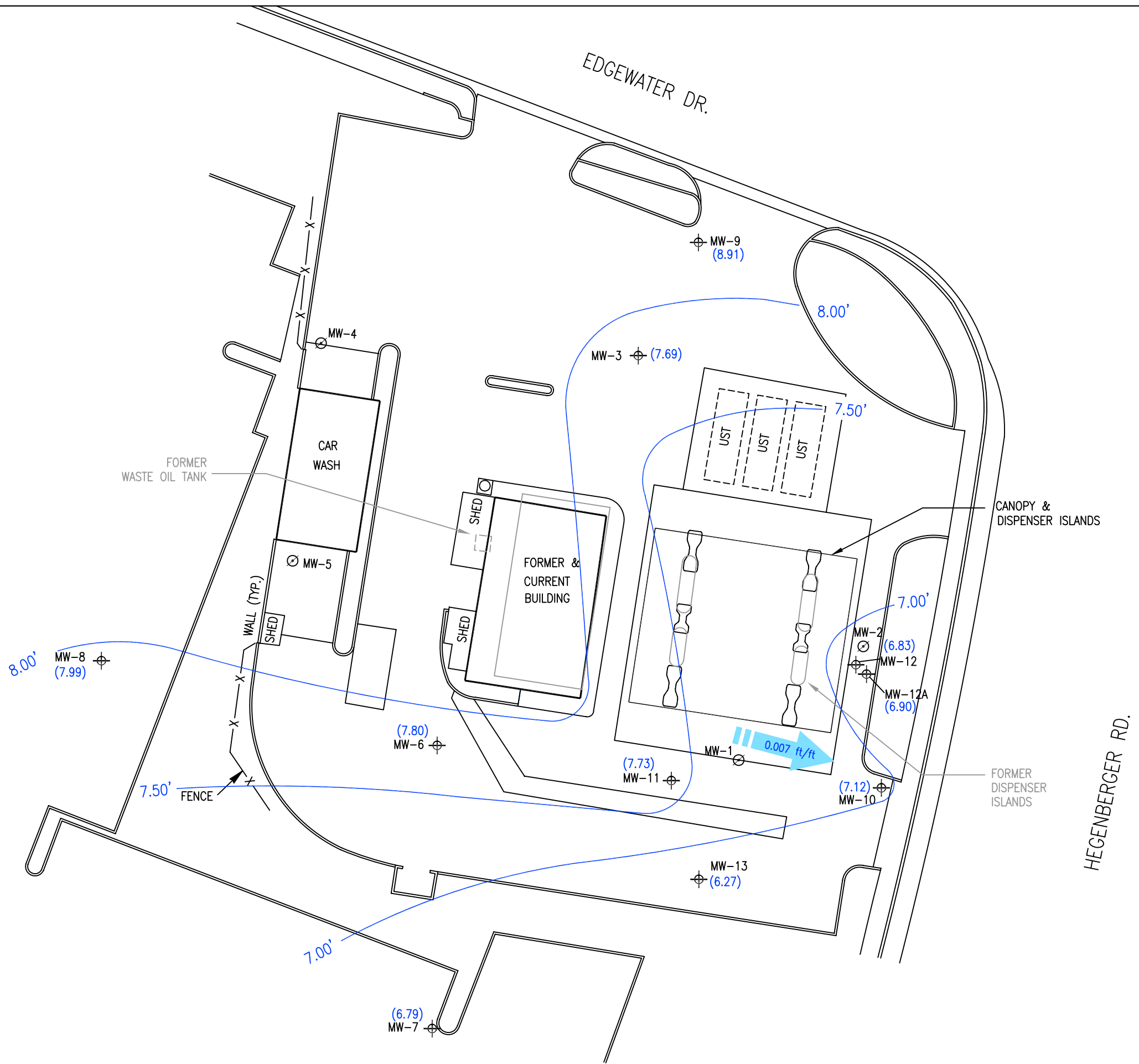


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
 SEPTEMBER 20, 2010
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY EW	DRAWN BY JH	
DATE 10/29/10	REVIEWED BY DD	FILE NAME 5191-SiteS	

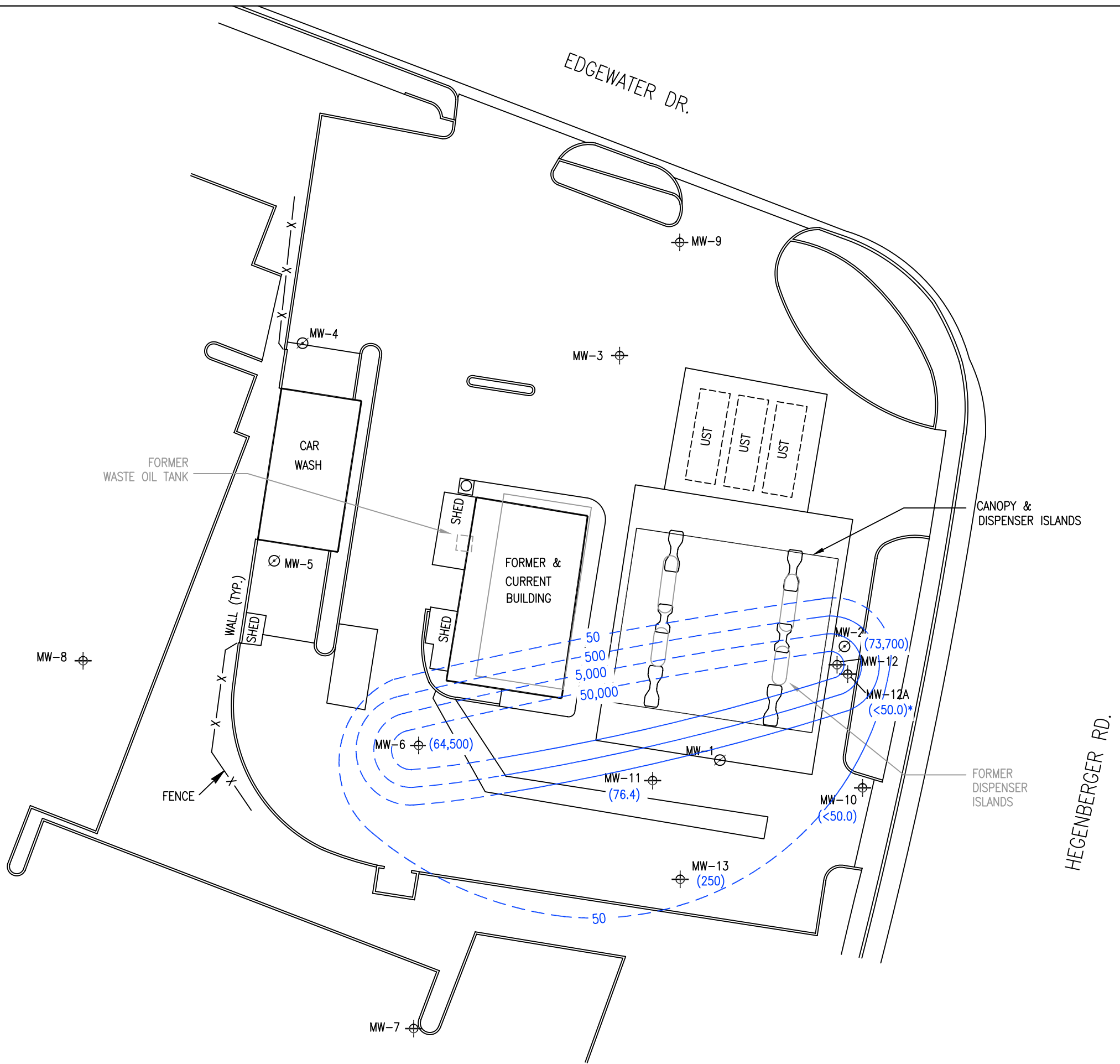
EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- (76.4) DISSOLVED PHASE TPHg ISOCONCENTRATION (µg/L)
- 50 — DISSOLVED PHASE TPHg ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 µg/L = MICROGRAMS PER LITER
 <50.0 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
 * = NOT USED IN CONTOUR INTERPRETATION



HEGENBERGER RD.

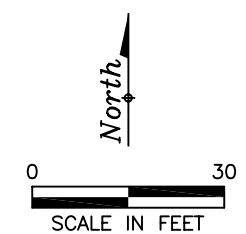


FIGURE 4
 DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
 SEPTEMBER 20, 2010
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY EW	DRAWN BY JH	
DATE 10/29/10	REVIEWED BY DD	FILE NAME 5191-SiteS	

EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- (2,300) DISSOLVED PHASE BENZENE ISOCONCENTRATION (µg/L)
- 50 — DISSOLVED PHASE BENZENE ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

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

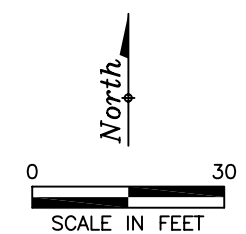
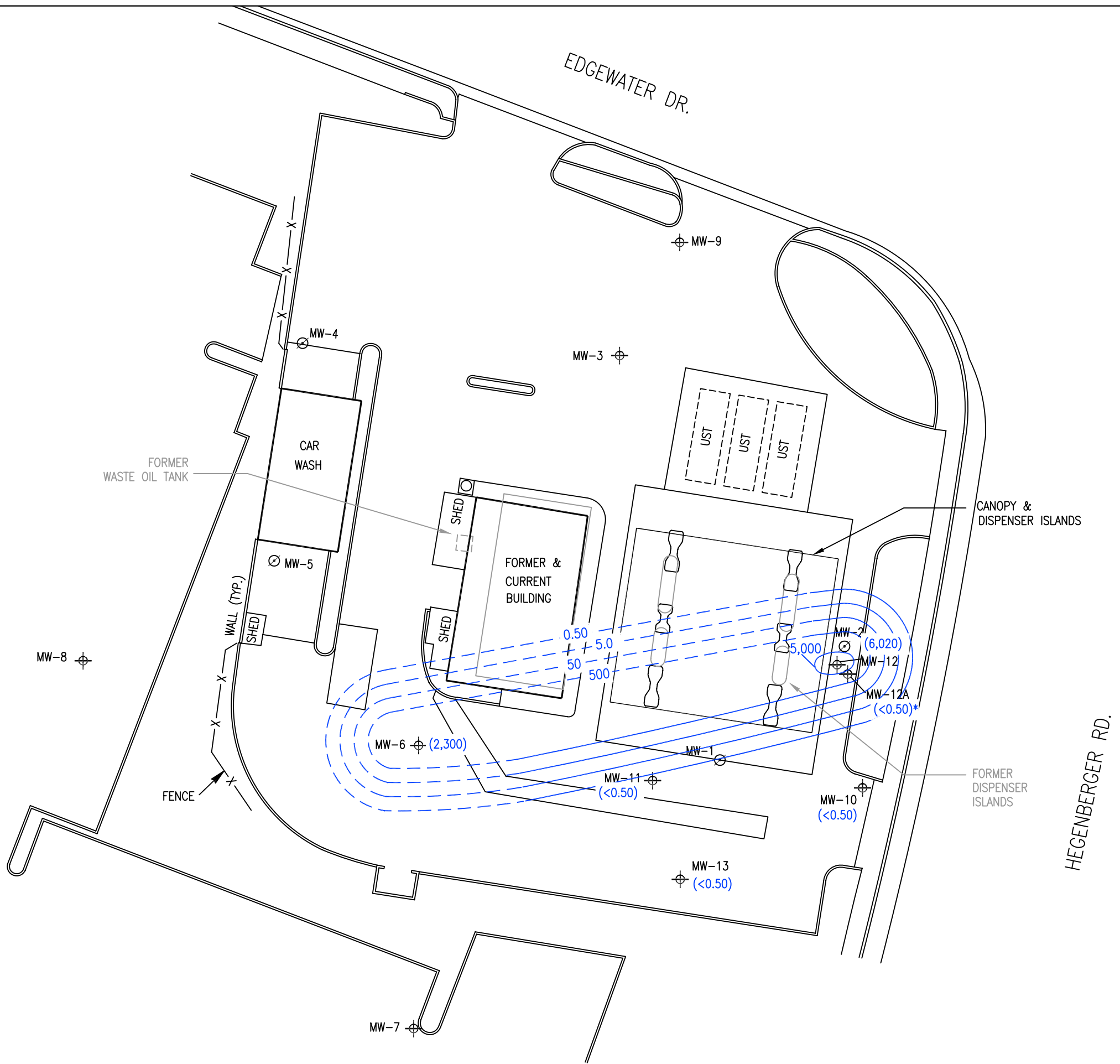


FIGURE 5
 DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
 SEPTEMBER 20, 2010
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY EW	DRAWN BY JH
DATE 10/29/10	REVIEWED BY DD	FILE NAME 5191-SiteS



EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- (82.7) DISSOLVED PHASE MTBE ISOCONCENTRATION (µg/L)
- 50 — DISSOLVED PHASE MTBE ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

MTBE= METHYL TERTIARY BUTYL ETHER
 µg/L = MICROGRAMS PER LITER
 <0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
 * = NOT USED IN CONTOUR INTERPRETATION

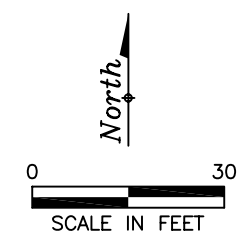
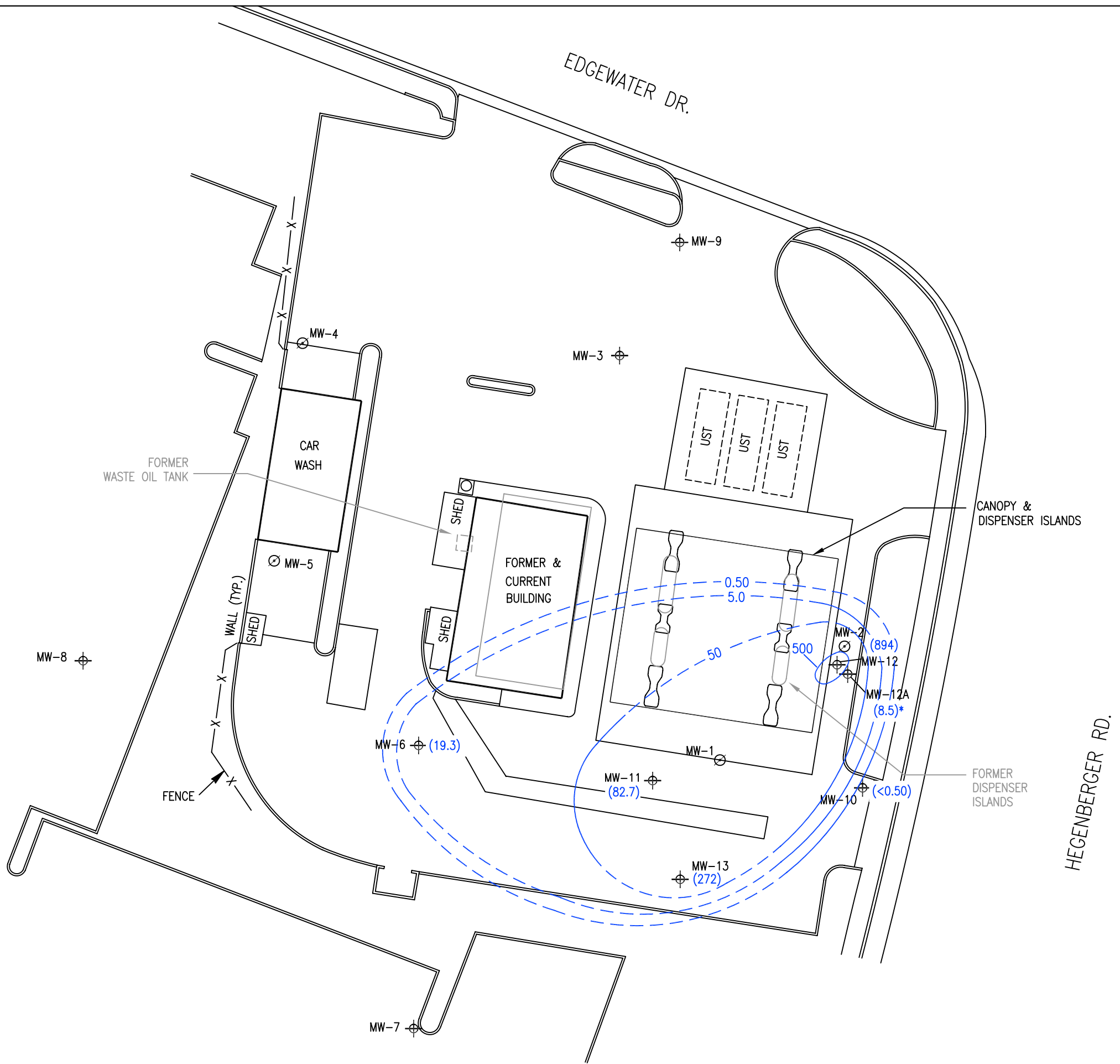


FIGURE 6
 DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
 SEPTEMBER 20, 2010
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY EW	DRAWN BY JH
DATE 10/29/10	REVIEWED BY DD	FILE NAME 5191-SiteS



EDGEWATER DR.

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- (5,220) DISSOLVED PHASE DRO ISOCONCENTRATION (µg/L)
- 5,000 — DISSOLVED PHASE DRO ISOCONTOUR (µg/L)
-DASHED WHERE INFERRED

NOTES:

- DRO = DIESEL RANGE ORGANICS
- µg/L = MICROGRAMS PER LITER
- <50.0 = LESS THAN LABORATORY INDICATED REPORTING LIMIT
- * = NOT USED IN CONTOUR INTERPRETATION

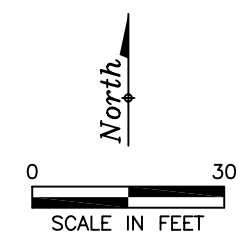
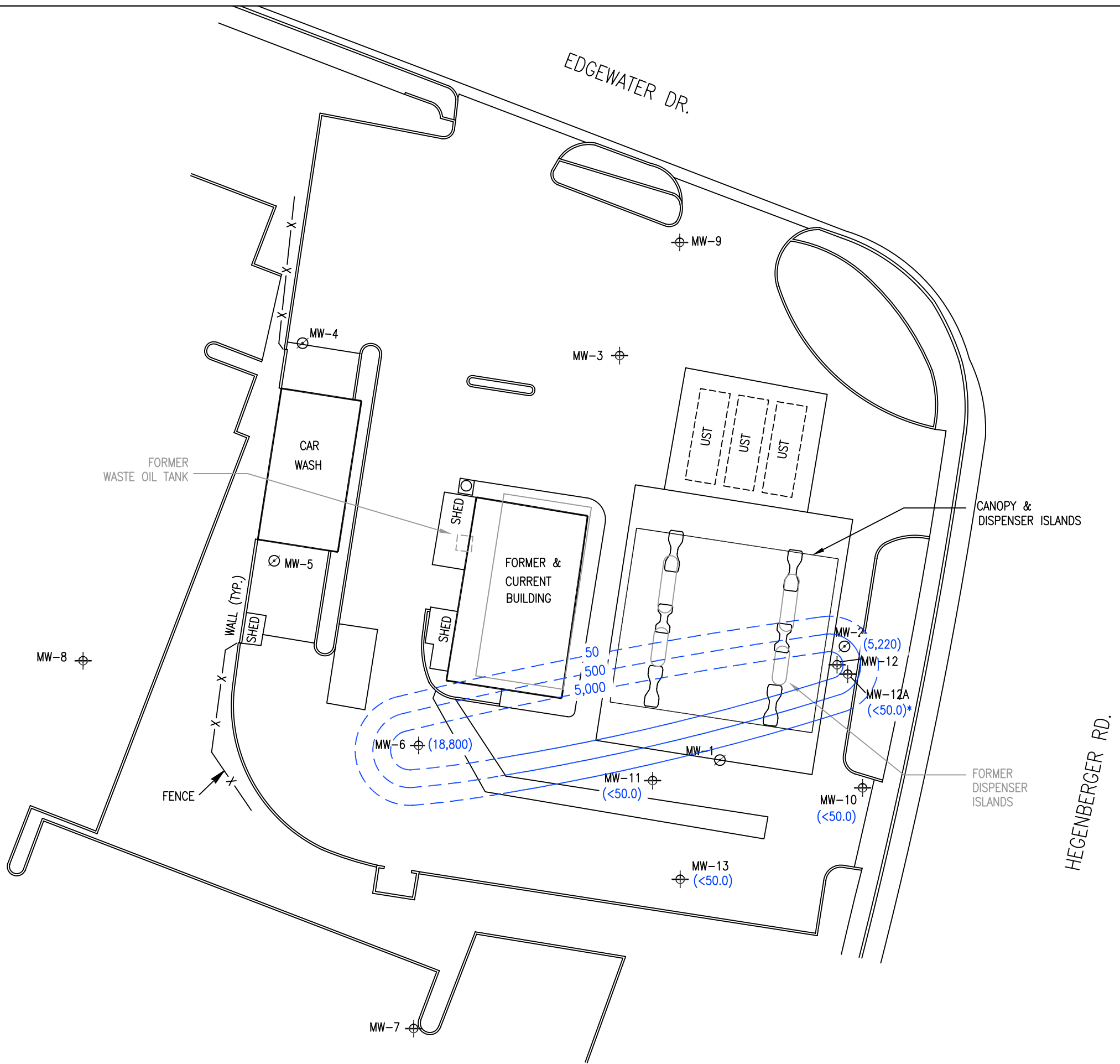
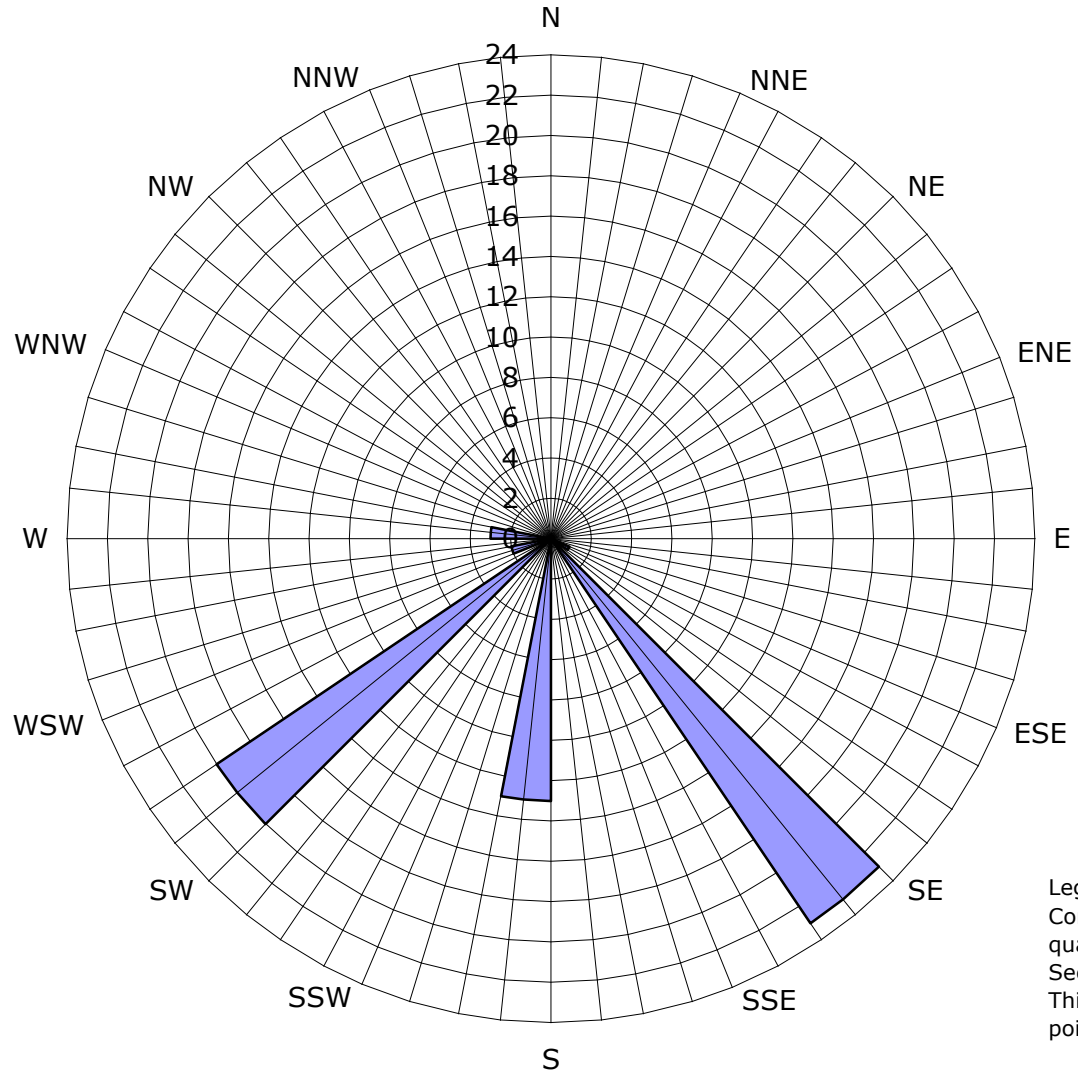


FIGURE 7
DISSOLVED PHASE DRO ISOCONCENTRATION MAP
SEPTEMBER 20, 2010
76 STATION NO. 5191/5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY EW	DRAWN BY JH
DATE 10/29/10	REVIEWED BY DD	FILE NAME 5191-SiteS

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



Legend
Concentric circles represent
quarterly monitoring events
Second Quarter 1992 through
Third Quarter 2010 62 data
points shown

■ Groundwater Flow Direction

Tables

TABLE 1
CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (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)	DRO (ug/L)
MW-3	7/6/2010	10.81	2.66	NP	8.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	10.81	3.12	NP	7.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	7/6/2010	11.55	3.49	NP	8.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	11.55	3.75	NP	7.80	64500	2300	170	2770	6260	19.3	--	<250	--	--	--	--	--	18800
MW-7	7/6/2010	11.64	4.63	NP	7.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	11.64	4.85	NP	6.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	7/6/2010	11.32	3.03	NP	8.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	11.32	3.33	NP	7.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	7/6/2010	10.94	2.02	NP	8.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	10.94	2.03	NP	8.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	7/6/2010	10.97	3.73	NP	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	10.97	3.85	NP	7.12	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	<250	--	--	--	--	--	<50.0
MW-11	7/6/2010	10.53	2.44	NP	8.09	99.2	<0.50	<0.50	<0.50	<1.5	165	174	<250	<0.50	<0.50	<0.50	<1.0	<1.0	226
	9/20/2010	10.53	2.80	NP	7.73	76.4	<0.50	<0.50	<0.50	<1.5	82.7	--	<250	--	--	--	--	--	<50.0
MW-12	7/6/2010	11.01	4.00	NP	7.01	20300	1030	955	311	2450	1650	1430	<250	<0.50	<0.50	1.0	<1.0	<1.0	990
	9/20/2010	11.01	4.18	NP	6.83	73700	6020	6390	2970	18300	894	--	<250	--	--	--	--	--	5220
MW-12A	7/6/2010	11.29	4.22	NP	7.07	664	18.3M0	0.78	2.3	50.2M0	14.3M0	11.9M0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	89.3
	9/20/2010	11.29	4.39	NP	6.90	<50.0	<0.50	<0.50	<0.50	<1.5	8.5	--	<250	--	--	--	--	--	<50.0
MW-13	7/6/2010	11.08	4.26	NP	6.82	122	<0.50	<0.50	<0.50	<1.5	217	199	<250	<0.50	<0.50	<0.50	<1.0	<1.0	469
	9/20/2010	11.08	4.81	NP	6.27	250	<0.50	<0.50	<0.50	<1.5	272	--	<250	--	--	--	--	--	<50.0

Gauging Notes:

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

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit
 ug/L - micrograms/liter
 MTBE- Methyl tertiary-butyl ether
 TBA- Tertiary-butyl alcohol
 DIPE- Di-isopropyl ether
 ETBE- Ethyl tertiary-butyl ether
 TAME- Tertiary-amyl methyl ether
 DRO- Diesel range organics
 TPHg- Total petroleum hydrocarbons as gasoline



TABLE 1a
ADDITIONAL CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER ANALYTICAL DATA				
		Iron SW6010 (ug/L)	Nitrate as N (ug/L)	Nitrite as N SM4500 (ug/L)	Nitrogen, NO2 plus NO3 (ug/L)	Sulfate (ug/L)
MW-3	7/6/2010	--	--	--	--	--
	9/20/2010	--	--	--	--	--
MW-6	7/6/2010	--	--	--	--	--
	9/20/2010	2600	<50.0	<10.0	52.1	<1000
MW-7	7/6/2010	--	--	--	--	--
	9/20/2010	--	--	--	--	--
MW-8	7/6/2010	--	--	--	--	--
	9/20/2010	--	--	--	--	--
MW-9	7/6/2010	--	--	--	--	--
	9/20/2010	--	--	--	--	--
MW-10	7/6/2010	--	--	--	--	--
	9/20/2010	3080	2690	68.2	2750	82000
MW-11	7/6/2010	3510	<50.0	31.0	66.9	82100
	9/20/2010	1690	167	<10.0	172	58300
MW-12	7/6/2010	30200	<50.0	60.5	<50.0	3030000
	9/20/2010	3890	72.3	<10.0	75.2	1970000
MW-12A	7/6/2010	716	3680	164	3840	100000
	9/20/2010	523	4680	10.2	4690	82500
MW-13	7/6/2010	92600	<50.0	64.9	70.4	450000
	9/20/2010	59500	<50.0	<10.0	<50.0	241000

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit

ug/L - micrograms/liter

TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION No. 5191/5043
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)	TPHg (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)	DRO (ug/L)
MW-10	5/18/1995	8.62	4.92	NP	3.70	810	520	ND	18	23	--	--	--	--	--	--	--	--	--	75
	8/17/1995	8.62	4.05	NP	4.57	67	25	ND	2.4	ND	--	--	--	--	--	--	--	--	--	ND
	7/26/1996	8.62	4.08	NP	4.54	ND	3.7	ND	ND	ND	ND	--	--	--	--	--	--	--	--	ND
	10/28/1996	8.62	4.09	NP	4.53	ND	1.1	ND	ND	ND	ND	--	--	--	--	--	--	--	--	ND
	1/29/1997	8.62	2.94	NP	5.68	210	41	0.67	7.2	4.8	11	--	--	--	--	--	--	--	--	ND
	4/15/1997	8.62	4.07	NP	4.55	110	12	ND	0.77	ND	9.7	--	--	--	--	--	--	--	--	ND
	5/27/1997	8.62	4.40	NP	4.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/15/1997	8.62	4.19	NP	4.43	ND	2.1	ND	0.67	0.73	ND	--	--	--	--	--	--	--	--	ND
	10/9/1997	8.62	4.75	NP	3.87	190	38	0.92	6.6	7.6	ND	--	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	--	62
	7/15/1998	8.62	4.21	NP	4.41	290	98	45	21	38	21	--	--	--	--	--	--	--	--	78
	10/16/1998	8.62	4.11	NP	4.51	160	44	0.96	2.5	10	17	--	--	--	--	--	--	--	--	ND
	1/25/1999	8.62	3.26	NP	5.36	140	27	ND	2.8	6.8	23	--	--	--	--	--	--	--	--	ND
	4/15/1999	8.62	3.63	NP	4.99	120	18	ND	1.8	5.1	14	--	--	--	--	--	--	--	--	ND
	7/14/1999	8.62	3.89	NP	4.73	280	55	3.2	11	31	6.1	--	--	--	--	--	--	--	--	180
	10/21/1999	8.62	4.09	NP	4.53	140	22	0.59	1.7	7.7	5.3	--	--	--	--	--	--	--	--	96
	1/20/2000	8.62	3.92	NP	4.70	ND	0.73	0.86	ND	ND	5.2	--	--	--	--	--	--	--	--	252
	4/13/2000	8.62	3.85	NP	4.77	67	54	ND	2.6	ND	3.8	--	--	--	--	--	--	--	--	69
	7/14/2000	8.62	4.18	NP	4.44	ND	0.547	ND	ND	ND	ND	--	--	--	--	--	--	--	--	149
	10/26/2000	8.62	3.96	NP	4.66	ND	3.3	ND	0.83	1.5	ND	--	--	--	--	--	--	--	--	83
	1/3/2001	8.62	4.14	NP	4.48	52.7	5.15	ND	0.823	1.57	ND	--	--	--	--	--	--	--	--	126
	4/4/2001	8.62	3.88	NP	4.74	129	28.1	1.67	4.97	10.1	ND	--	--	--	--	--	--	--	--	75
	7/17/2001	8.62	4.08	NP	4.54	ND	4.1	ND	1.0	1.8	ND	--	--	--	--	--	--	--	--	ND
	10/1/2001	8.62	4.22	NP	4.40	140	30	0.51	4.0	12	<5.0	--	--	--	--	--	--	--	--	100
	1/31/2002	8.62	3.68	NP	4.94	110	16	<0.50	2.3	5.6	<2.5	--	--	--	--	--	--	--	--	170
	4/18/2002	8.62	4.01	NP	4.61	<50	11	<0.50	1.4	4.5	<2.5	--	--	--	--	--	--	--	--	130
	7/28/2002	8.62	4.11	NP	4.51	67	15	<0.50	0.94	7.3	--	<2.0	--	--	--	--	--	--	--	58
	10/9/2002	8.62	3.97	NP	4.65	<50	0.67	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--	<94
	1/2/2003	8.62	3.03	NP	5.59	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--	64
	4/1/2003	8.62	3.83	NP	4.79	<50	11	<0.50	<0.50	<1.0	--	<2.0	--	--	--	--	--	--	--	76
	7/1/2003	8.62	4.13	NP	4.49	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--	<500	--	--	--	--	--	87
	10/2/2003	8.62	4.05	NP	4.57	77	9.9	0.78	2.3	4.9	--	<2.0	--	<500	--	--	--	--	--	160
	1/9/2004	8.62	3.40	NP	5.22	53	1.2	<0.50	0.70	1.6	--	<2.0	--	<500	--	--	--	--	--	74
	4/26/2004	8.62	3.89	NP	4.73	<50	2.8	1.3	1.0	2.9	--	<0.50	--	<50	--	--	--	--	--	<50
	7/22/2004	8.62	3.73	NP	4.89	<50	<0.5	<0.5	<0.5	<1	--	<0.5	--	<1000	--	--	--	--	--	<200
10/29/2004	8.62	3.41	NP	5.21	100	2.0	1.2	1.1	3.6	--	<0.50	--	<50	--	--	--	--	--	<50	
1/10/2005	8.62	2.68	NP	5.94	84	7.8	2.7	2.2	8.9	--	<0.50	--	<50	--	--	--	--	--	94	
6/15/2005	8.62	4.63	NP	3.99	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<50	--	--	--	--	--	62	
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	--	--	<200	
12/13/2005	8.62	3.75	NP	4.87	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	<200	
3/23/2006	8.62	3.13	NP	5.49	50	13	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	<200	
6/23/2006	8.62	3.90	NP	4.72	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	<200	
9/26/2006	8.62	3.66	NP	4.96	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--	<50	
12/22/2006	8.62	3.56	NP	5.06	<50	<0.50	<0.50	<0.50	1.8	--	<0.50	--	<250	--	--	--	--	--	81	
3/30/2007	8.62	3.93	NP	4.69	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--	82	
6/28/2007	8.62	4.03	NP	4.59	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--	57	
9/25/2007	8.62	3.91	NP	4.71	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--	<250	--	--	--	--	--	82	
12/28/2007	8.62	3.64	NP	4.98	<50	2.1	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	62	
3/22/2008	8.62	4.00	NP	4.62	64	13	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	<50	

**TABLE 2
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION No. 5191/5043
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)	TPHg (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)	DRO (ug/L)
MW-10	6/23/2008	8.62	3.90	NP	4.72	94	30	0.53	3.4	3.5	--	<0.50	--	<250	--	--	--	--	--	<50
	9/19/2008	8.62	3.85	NP	4.77	130	15	1.7	5.7	11	--	<0.50	--	<250	--	--	--	--	--	<50
	12/31/2008	8.62	3.69	NP	4.93	82	11	<0.50	0.81	1.7	--	<0.50	--	<250	--	--	--	--	--	<50
	3/27/2009	8.62	3.75	NP	4.87	210	28	1.4	1.2	3.9	--	<0.50	--	<250	--	--	--	--	--	730
	5/28/2009	8.62	3.66	NP	4.96	<50	0.91	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	<50
	9/17/2009	8.62	3.85	NP	4.77	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	--	<250	--	--	--	--	--	65
	12/17/2009	8.62	3.00	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	--	--	--	--	--	82.2
	6/30/2010	8.62	3.90	NP	4.72	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	53.4
7/6/2010	10.97	3.73	NP	7.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/20/2010	10.97	3.85	NP	7.12	<50.0	<0.50	<0.50	<0.50	<1.5	--	<0.50	--	<250	--	--	--	--	--	<50.0	
MW-11	7/6/2010	10.53	2.44	NP	8.09	99.2	<0.50	<0.50	<0.50	<1.5	--	165	174	<250	<0.50	<0.50	<0.50	<1.0	<1.0	226
	9/20/2010	10.53	2.80	NP	7.73	76.4	<0.50	<0.50	<0.50	<1.5	--	82.7	--	<250	--	--	--	--	--	<50.0
MW-12	7/6/2010	11.01	4.00	NP	7.01	20300	1030	955	311	2450	--	1650	1430	<250	<0.50	<0.50	1.0	<1.0	<1.0	990
	9/20/2010	11.01	4.18	NP	6.83	73700	6020	6390	2970	18300	--	894	--	<250	--	--	--	--	--	5220
MW-12A	7/6/2010	11.29	4.22	NP	7.07	664	18.3M0	0.78	2.3	50.2M0	--	14.3M0	11.9M0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	89.3
	9/20/2010	11.29	4.39	NP	6.90	<50.0	<0.50	<0.50	<0.50	<1.5	--	8.5	--	<250	--	--	--	--	--	<50.0
MW-13	7/6/2010	11.08	4.26	NP	6.82	122	<0.50	<0.50	<0.50	<1.5	--	217	199	<250	<0.50	<0.50	<0.50	<1.0	<1.0	469
	9/20/2010	11.08	4.81	NP	6.27	250	<0.50	<0.50	<0.50	<1.5	--	272	--	<250	--	--	--	--	--	<50.0

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
-- - No information available
NGV - No guidance value

Analytical Notes:

-- - No information available
< - Not detected at or above indicated laboratory reporting limit
LPH - Liquid Phase Hydrocarbons
ND - Not detected, and detection limit is not known
NS - Well not sampled.
ug/L - micrograms/liter
WD - Well Destroyed
WI - Well Inaccessible
WO - Well Obstruction

MTBE - Methyl tertiary-butyl ether
TBA - Tertiary-butyl alcohol
DIPE - Di-isopropyl ether
ETBE - Ethyl tertiary-butyl ether
TAME - Tertiary-amyl methyl ether
DRO - Diesel range organics
TPHg - Total petroleum hydrocarbons as gasoline

TABLE 2a
ADDITIONAL HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 STATION No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA



Well I.D.	Date	GROUNDWATER ANALYTICAL DATA						
		Iron SW6010 (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 (ug/L)
MW-3	12/17/2009	12300	<50.0	<50.0	--	<50.0	--	--
	3/29/2010	--	--	--	--	--	--	--
	6/30/2010	10700	<50.0	--	95.0	75.7	--	<5000
	7/6/2010	--	--	--	--	--	--	--
MW-3	9/20/2010	--	--	--	--	--	--	--
MW-6	9/17/2009	1500	<0.44	--	--	--	--	<1.0
	12/17/2009	2460	<50.0	<50.0	--	<50.0	--	--
	3/29/2010	1510	<50.0	--	41.3	54.9	--	<1000
	6/30/2010	2310	<50.0	--	57.9	69.3	--	<5000
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	2600	<50.0	--	<10.0	52.1	--	<1000
MW-7	6/30/2010	7550	<50.0	--	73.9	73.6	--	191000
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
MW-8	6/30/2010	8000	<50.0	--	68.2	59.7	--	2360000
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
MW-9	12/17/2009	2270	<50.0	<50.0	--	<50.0	--	--
	3/29/2010	--	--	--	--	--	--	--
	6/30/2010	8820	<50.0	--	14.9	<50.0	--	19000
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	--	--	--	--	--	--	--
MW-10	9/17/2009	9800	12	--	--	--	--	84
	12/17/2009	3410	1970	60.3	--	2030	--	--
	3/29/2010	2410	1960	--	18.7	1970	--	73600
	6/30/2010	1860	2120	--	68.1	2190	--	70800
	7/6/2010	--	--	--	--	--	--	--
	9/20/2010	3080	2690	--	68.2	2750	--	82000
MW-11	7/6/2010	3510	<50.0	--	31.0	66.9	--	82100
	9/20/2010	1690	167	--	<10.0	172	--	58300
MW-12	7/6/2010	30200	<50.0	--	60.5	<50.0	--	3030000
	9/20/2010	3890	72.3	--	<10.0	75.2	--	1970000
MW-12A	7/6/2010	57300	3680	--	164	3840	--	100000
	9/20/2010	523	4680	--	10.2	4690	--	82500
MW-13	7/6/2010	116	<50.0	--	64.9	70.4	--	450000
	9/20/2010	59500	<50.0	--	<10.0	<50.0	--	241000

Analytical Notes:

- - No information available
- < - Not detected at or above indicated laboratory reporting limit
- LPH - Liquid Phase Hydrocarbons
- ND - Not detected, and detection limit is not known
- NS - Well not sampled.
- ug/L - micrograms/liter
- WD - Well Destroyed
- WI - Well Inaccessible
- WO - Well Obstruction

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	0	1	0	0	0
	11/30/92	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	02/07/94		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	11/14/94	0.03	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	02/21/95	0.08	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	05/18/95	0.07	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	07/26/96	0.02	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10/28/96	0.02	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	01/29/97	0.01	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	04/15/97	0.01	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	07/15/97	0.10	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10/09/97	0.10	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	01/14/98	0.02	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	04/01/98	0.05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	07/15/98	0.04	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	09/30/98	0.05	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	01/25/99	0.05	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	04/15/99	0.04	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	10/21/99	0.03	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	07/14/99	0.04	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	04/13/00	0.050	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	07/14/00	0.033	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10/26/00	0.060	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	01/03/01	0.070	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	07/17/01	0.040	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	10/01/01	0.030	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	01/31/02	0.010	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	07/28/02	0.020	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10/09/02	0.016	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	01/02/03	0.010	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	04/01/03	0.008	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	07/29/09	0.010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	10/02/03	0.010	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	01/09/04	0.010	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	04/26/04	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	07/22/04	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	10/29/04	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	01/10/05	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	06/15/05	0.020	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	09/27/05	0.010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	12/13/05	0.005	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	03/23/06	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	06/23/06	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	09/26/06	0.010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	12/22/06	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	03/30/07	0.010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	09/25/07	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	12/28/07	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	06/28/07	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	03/22/08	0.020	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	06/23/08	0.010	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	09/19/08	0.006	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	12/31/08	0.005	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	03/27/09	0.006	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	05/28/09	0.008	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	09/17/09	0.010	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
	12/17/09	0.008	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	03/29/10	0.010	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	06/30/10	0.009	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	09/20/10	0.007	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		0.046 Average	0	0	0	0	0	0	1	23	0	13	0	20	2	3	0	0	0	0

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)		
Monitoring Wells							
MW-1	02/05/91	13.5	2	2.0	13.0	11.0	Abandoned
MW-2	02/05/91	15.0	2	3.0	15.0	12.0	Abandoned
MW-3	02/05/91	14.0	2	2.0	14.0	12.0	
MW-4	08/21/92	13.5	2	2.5	13.5	11.0	Abandoned
MW-5	08/21/92	13.5	2	2.5	13.5	11.0	Abandoned
MW-6	08/21/92	13.5	2	2.5	13.5	11.0	
MW-7	04/21/97	13.0	2	3.0	13.0	10.0	
MW-8	04/21/97	15.0	2	3.0	15.0	12.0	
MW-9	01/25/95	13.0	2	3.0	13.0	10.0	
MW-10	01/25/95	13.0	2	3.0	13.0	10.0	
MW-11	06/22/10	20.0	4	5.0	20.0	15.0	
MW-12	06/22/10	20.0	4	5.0	20.0	15.0	
MW-12A	06/23/10	34.0	2	30.0	34.0	4.0	
MW-13	06/22/10	15.0	2	5.0	15.0	10.0	
Explanation							
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 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.

Attachment A: Previous Investigations and Site History Summary

76 Station No.5191/5043

449 Hegenberger Road

Oakland, CA

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.

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. PARVEZ

Date: 9/20/10

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)	
4	MW-3	P	P	P	G	G	Y	2	0956	3.12	13.92	-	-	1/2 TABS NEEDS HELI-COIL
10	NW-6	P	P	P	G	G	N	2	1030	3.75	12.65	-	-	1/2 TABS BROKEN
2	MW-7	G	G	G	G	G	N	2	0942	4.85	12.99	-	-	-
1	MW-8	G	G	G	G	G	N	2	0935	3.33	14.71	-	-	-
3	NW-9	P	P	P	G	G	N	2	0950	2.03	12.60	-	-	1/3 TABS BROKEN
5	MW-10	P	P	P	G	G	N	2	1003	3.85	12.65	-	-	2/3 TABS BROKEN
6	MW-11	G	G	G	G	G	N	4	1010	2.80	19.57	-	-	-
9	MW-12	G	G	G	G	G	N	4	1025	4.18	19.44	-	-	-
8	MW-12A	G	G	G	G	G	N	2	1020	4.39	32.78	-	-	-
7	MW-13	G	G	G	G	G	N	2	1015	4.81	14.61	-	-	-

Notes: _____



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

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-6</u>	Date: <u>9/20/10</u>
Depth to Water (DTW) (ft bgs): <u>3.75</u>	Well Diameter (in): <u>(2) 4 6 8</u>
Depth to LNAPL (ft bgs): <u>-</u>	Thickness of LNAPL (ft): <u>-</u>
Total Depth of Well (ft bgs): <u>12.65</u>	Water Column Height (ft): <u>8.90</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer <u>W/BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>8.90</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>1.5</u>
Casing Volume (gal): <u>1.5</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>4.5</u>
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: Start Time: 1342 Stop Time: 1345

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				-9		0.30		
<u>1345</u>	<u>25.0</u>	<u>7.07</u>	<u>3124</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1.5</u>	
<u>1545</u>	<u>24.4</u>	<u>8.01</u>	<u>3111</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Post-Purge				-17		0.66		

Did Well dewater? Yes No Total Purge volume (gal): 1.5

Other Comments: 20% @ 5:53 ; DTW: 6.03

Sample Info:

Sample ID: <u>MW-6 -1000930</u>	Sample Date and Time: <u>9/20/10 @ 1545</u>
Selected Analysis: <u>SEE COC</u>	

Signature: _____ Date: 9/20/10



COMBILT Groundwater Sampling Form

Site Address: <u>449 WEGENBERGER</u>	
Project No: <u>2705191</u>	Field Technician: <u>J. PARKER</u>
Field Point: <u>MW-10</u>	Date: <u>9/20/10</u>
Depth to Water (DTW) (ft bgs): <u>3.85</u>	Well Diameter (in): <u>8 4 6 8</u>
Depth to LNAPL (ft bgs): <u>-</u>	Thickness of LNAPL (ft): <u>-</u>
Total Depth of Well (ft bgs): <u>12.65</u>	Water Column Height (ft): <u>8.80</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer <u>w/ BED</u> Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>8.80</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.5</u> Casing Volume (gal): <u>1.5</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>4.5</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: _____ Start Time: 10:54 Stop Time: 11:27

Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				<u>212</u>		<u>0.25</u>		
<u>1055</u>	<u>23.4</u>	<u>7.07</u>	<u>2549</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1.5</u>	
<u>1056</u>	<u>22.6</u>	<u>7.09</u>	<u>2314</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3.0</u>	
<u>1057</u>	<u>22.8</u>	<u>7.05</u>	<u>2291</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4.5</u>	
Post-Purge				<u>50</u>		<u>0.39</u>		

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

Other Comments: 80% @ 5.61 ; DTW: 3.89

Sample Info:

Sample ID: <u>MW-10 1000930</u>	Sample Date and Time: <u>9/20/10 @ 1105</u>
Selected Analysis: <u>SEE COC</u>	

Signature: _____ Date: 9/20/10



COMBILT Groundwater Sampling Form

Site Address: <u>449 HEGENBERGER</u>	
Project No: <u>2705191</u>	Field Technician: <u>J. PARZER</u>
Field Point: <u>MW-11</u>	Date: <u>9/20/10</u>
Depth to Water (DTW) (ft bgs): <u>2.80</u>	Well Diameter (in): <u>2</u> (4) 6 8
Depth to LNAPL (ft bgs): <u>—</u>	Thickness of LNAPL (ft): <u>—</u>
Total Depth of Well (ft bgs): <u>19.57</u>	Water Column Height (ft): <u>16.77</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: <input type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump <input type="checkbox"/> Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer w/ BED <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Disposable Tubing Other: _____
Water Column Height (ft): <u>16.77</u> X Conversion Factor (gal/ft): <u>0.66</u> = Casing Volume (gal): <u>11.1</u> Casing Volume (gal): <u>11.1</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>33.3</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge: _____		Start Time: <u>1133</u>		Stop Time: <u>1136</u>				
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				<u>111</u>		<u>0.24</u>		
<u>1134</u>	<u>24.9</u>	<u>7.80</u>	<u>1205</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>11.1</u>	
<u>1135</u>	<u>24.3</u>	<u>7.61</u>	<u>1194</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>22.2</u>	
<u>1136</u>	<u>24.3</u>	<u>7.53</u>	<u>1194</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>33.3</u>	
Post-Purge				<u>104</u>		<u>0.41</u>		
Did Well dewater? Yes <input checked="" type="checkbox"/> No		Total Purge volume (gal): <u>33.3</u>						

Other Comments: 80% @ 6.15 ; DTW: 5.04

Sample Info:	
Sample ID: <u>MW-11 - 10100930</u>	Sample Date and Time: <u>9/20/10 @ 1145</u>
Selected Analysis: <u>SEE COC</u>	

Signature: _____ Date: 9/20/10



COMBILT Groundwater Sampling Form

Site Address:	449 HEGENBERGER		
Project No:	2705191	Field Technician:	J. PARKER
Field Point:	MW-12A	Date:	9/20/10
Depth to Water (DTW) (ft bgs):	4.39	Well Diameter (in):	② 4 6 8
Depth to LNAPL (ft bgs):	—	Thickness of LNAPL (ft):	—
Total Depth of Well (ft bgs):	32.78	Water Column Height (ft):	28.39

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer w/BED Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): 28.39	X Conversion Factor (gal/ft): 0.17	= Casing Volume (gal): 4.8
Casing Volume (gal): 4.8	X Specified Volumes: 3	= Calculated Purge (gal): 14.4
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge:	Start Time: 1256	Stop Time: 1259						
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				76		0.21		
1257	21.2	7.85	3011	—	—	—	4.8	
1258	20.1	7.38	3189	—	—	—	9.6	
1259	20.0	7.85	3221	—	—	—	14.4	
Post-Purge				128		0.39		
Did Well dewater?	Yes	<input checked="" type="checkbox"/> No	Total Purge volume (gal): 14.4					

Other Comments: 80% @ 10.07 ; DTW: 4.37
MMS/MSD TAKEN

Sample Info:	
Sample ID: MW-12A_1000930	Sample Date and Time: 9/20/10 @ 1305
Selected Analysis: SEE COC	
Signature:	Date: 9/20/10



COMBILT Groundwater Sampling Form

Site Address: <u>AAA HEGENBERGER</u>	
Project No: <u>2705191</u>	Field Technician: <u>J. PARLER</u> / <u>B. PANELL</u>
Field Point: <u>MW-12</u>	Date: <u>9/20/10</u>
Depth to Water (DTW) (ft bgs): <u>4.18</u>	Well Diameter (in): <u>2</u> 4 6 8
Depth to LNAPL (ft bgs): <u>—</u>	Thickness of LNAPL (ft): <u>—</u>
Total Depth of Well (ft bgs): <u>19.44</u>	Water Column Height (ft): <u>15.26</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer w/BED Extraction Port Dedicated Tubing Disposable Tubing Other: _____
Water Column Height (ft): <u>15.26</u>	X Conversion Factor (gal/ft): <u>0.17</u>	= Casing Volume (gal): <u>2.6</u>
Casing Volume (gal): <u>2.6</u>	X Specified Volumes: <u>3</u>	= Calculated Purge (gal): <u>7.8</u>

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

Purge: _____		Start Time: <u>1419</u>		Stop Time: <u>1435</u>				
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				<u>70.500</u>		<u>0.24</u>		
<u>1420</u>	<u>19.81</u>	<u>6.29</u>	<u>32452</u>	<u>23.6</u>	<u>—</u>	<u>—</u>	<u>1.3</u>	
<u>1421</u>	<u>19.55</u>	<u>6.28</u>	<u>32314</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>2.6</u>	
<u>1422</u>	<u>19.64</u>	<u>6.28</u>	<u>31937</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>3.9</u>	
<u>1423</u>	<u>19.72</u>	<u>6.29</u>	<u>31480</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>5.2</u>	
<u>1424</u>	<u>19.81</u>	<u>6.31</u>	<u>31017</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>6.5</u>	
<u>1425</u>	<u>19.87</u>	<u>6.31</u>	<u>30597</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>7.8</u>	
Post-Purge				<u>-68.2</u>		<u>0.27</u>		

Did Well dewater? Yes No Total Purge volume (gal): 7.8

Other Comments: EC₁₀ @ 1.75, DTW: 7.15 FD-120100930 @ 1440
7.23 - Well purged by 2nd Tech
light sheen on water appeared after purging 2 gallons

Sample Info:	
Sample ID: <u>MW-12-1000930</u>	Sample Date and Time: <u>9/20/10 @ 1435</u>
Selected Analysis: <u>SEE COC</u>	
Signature: _____	Date: <u>9/20/10</u>



COMBILT Groundwater Sampling Form

Site Address: <u>449 HEGENBERGER</u>	
Project No: <u>2705191</u>	Field Technician: <u>J. PARKER</u>
Field Point: <u>MW-13</u>	Date: <u>9/20/10</u>
Depth to Water (DTW) (ft bgs): <u>4.81</u>	Well Diameter (in): <u>2</u> 4 6 8
Depth to LNAPL (ft bgs): <u>-</u>	Thickness of LNAPL (ft): <u>-</u>
Total Depth of Well (ft bgs): <u>14.61</u>	Water Column Height (ft): <u>9.80</u>

Purging Info and Calculations:

Purge Method: Low-Flow <input checked="" type="checkbox"/> 3 casing volumes Other: _____	Purge Equipment: <input type="checkbox"/> Disposable Bailer <input checked="" type="checkbox"/> Electric Submersible Peristaltic Pump <input type="checkbox"/> Bladder Pump Other: _____	Sample Collection Method: <input checked="" type="checkbox"/> Disposable Bailer w/BED <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Disposable Tubing Other: _____
Water Column Height (ft): <u>9.80</u> X Conversion Factor (gal/ft): <u>0.17</u> = Casing Volume (gal): <u>1.7</u> Casing Volume (gal): <u>1.7</u> X Specified Volumes: <u>3</u> = Calculated Purge (gal): <u>5.1</u>		
Conversion Factors (gal/ft): 2" = 0.17 4" = 0.66 6" = 1.5 8" = 2.6 Other = radius ² * 0.163		

Purge:	Start Time: <u>1211</u>	Stop Time: <u>1214</u>						
Time	Temp (°C)	pH	Conductivity (µS/cm)	ORP (mV)	Turbidity (NTU)	D.O. (mg/L)	Volume Purged (gal)	Water Level (for Low-Flow only)
Pre-Purge				<u>56</u>		<u>0.19</u>		
<u>1212</u>	<u>25.4</u>	<u>7.59</u>	<u>4781</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1.7</u>	
<u>1213</u>	<u>24.1</u>	<u>7.49</u>	<u>5543</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3.4</u>	
<u>1214</u>	<u>23.5</u>	<u>7.47</u>	<u>5770</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5.1</u>	
Post-Purge				<u>54</u>		<u>0.29</u>		
Did Well dewater? Yes <input checked="" type="checkbox"/> No			Total Purge volume (gal): <u>5.1</u>					

Other Comments: 80% @ 6.77 ; DTW: 6.74

Sample Info:	
Sample ID: <u>MW-13 1000930</u>	Sample Date and Time: <u>9/20/10 @ 1230</u>
Selected Analysis: <u>SEE COC</u>	
Signature:	Date: <u>9/20/10</u>





COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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

Required Lab Information:		Required Project Information:		Required Invoice Information:	
Lab Name: Pace-Seattle	Site ID #: 2705191	Task: WG_Q_201009	Send Invoice to: David Sowle	Address: 11050 White Rock Road, Suite 110	
Address: 940 S. Harney Street Seattle WA 98108	Delta project #	Site Address: 449 Hegenberger	City/State: Rancho Cordova CA 95670	Phone #: 1-800-477-7411	Turn around time (days): 10
Lab PM: Regina Ste. Marie	City: Oakland	State: CA 94621	Reimbursement project? <input type="checkbox"/>	Non-reimbursement project? <input checked="" type="checkbox"/>	Mark one
Phone/Fax: P: 206-957-2433 F: 206-767-5063	Delta PM Name: Dennis Dettloff	Send EDD to: copeltdata@intelligentehs.com	CC Hardcopy report to	QC level Required: Standard	Special <input type="checkbox"/> Mark <input type="checkbox"/>
Lab PM email: Regina.SteMarie@pacelabs.com	Phone/Fax: P: 1-800-477-7411 F: 916-638-8385	CC Hardcopy report to	Lab Project ID (lab use)	NJ Reduced Deliverable Package? <input type="checkbox"/>	MA MCP Cert? <input type="checkbox"/> CT RCP Cert? <input type="checkbox"/> Mark <input type="checkbox"/>
Applicable Lab Quote #:	Delta PM Email: ddetloff@deltaenv.com	CC Hardcopy report to	3Q10 GW Evr		

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / . -) Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX DRINKING WATER WP GROUND WATER WG WASTE WATER WW FREE PRODUCT LF SOIL SO OIL OI WIPE SW AMBIENT AIR AA EVE AIR AE SOIL GAS GS	MATRIX CODE	SAMPLE DATE	SAMPLE TIME	# OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives										Requested Analyses	Comments/Lat Sample I.D.							
								Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	832-Zn/As/ant	8303-Sulfate			8010/Non Total/Dissolve	80151/PPID/Diesel	8280 GC/MS GRO	8280/MS/MS	8280/MS/MS	8280/MS/MS	
1	MW-10_20100930		WG	9/20	1105	13	Y	4	1	2	6							X	X	X	X	X	X	X		
2	MW-11_20100930		WG		1145	13	Y	4	1	2	6							X	X	X	X	X	X	X		
3	MW-12_20100930		WG		1435	13	Y	4	1	2	6							X	X	X	X	X	X	X		
4	MW-12A_20100930		WG		1305	28	Y	8	1	2	10							X	X	X	X	X	X	X		* Samples for DR 8015M silica gel treated *
5	MW-13_20100930		WG		1230	13	Y	4	1	2	6							X	X	X	X	X	X	X		
6	MW-3_20100930		WG															X	X	X	X	X	X	X		
7	MW-6_20100930		WG		1545	13	Y	4	1	2	6							X	X	X	X	X	X	X		Dissolved Iron 6010 field filtered
8	MW-7_20100930		WG															X	X	X	X	X	X	X		
9	MW-8_20100930		WG															X	X	X	X	X	X	X		
10	MW-9_20100930		WG															X	X	X	X	X	X	X		
11	FD1_20100930		WG		1440	13	Y	4	1	2	6							X	X	X	X	X	X	X		
12																										

Additional Comments/Special Instructions: GLOBAL ID: T0600101476	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions						
							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. PARKER									
US MAIL				SIGNATURE of SAMPLER: [Signature]									



Attachment D

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

October 05, 2010

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

RE: Project: 2705191 449 Hegenberger
Pace Project No.: 255040

Dear Dennis Dettloff:

Enclosed are the analytical results for sample(s) received by the laboratory on September 21, 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 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

CERTIFICATIONS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

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

REPORT OF LABORATORY ANALYSIS

Page 2 of 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



SAMPLE ANALYTE COUNT

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
255040001	MW-10_20100930	EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	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	CMS	1	PASI-S
255040002	MW-11_20100930	EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	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	CMS	1	PASI-S
255040003	MW-12_20100930	EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	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	CMS	1	PASI-S
255040004	MW-12A_20100930	EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	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	CMS	1	PASI-S
255040005	MW-13_20100930	EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LPM	10	PASI-S
		CA LUFT	LPM	2	PASI-S

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



SAMPLE ANALYTE COUNT

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
255040006	MW-6_20100930	EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
		SM 4500-NO2 B	CMS	1	PASI-S
		EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	LPM	10	PASI-S
		CA LUFT	LPM	2	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	2	PASI-S
255040007	FD1_20100931	SM 4500-NO2 B	CMS	1	PASI-S
		EPA 8015B	ERB	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 5030B/8260	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	CMS	1	PASI-S

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-10_20100930	Lab ID: 255040001	Collected: 09/20/10 11:05	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	09/25/10 10:00	10/02/10 13:22		
o-Terphenyl (S) SG	93 %		51-147	1	09/25/10 10:00	10/02/10 13:22	84-15-1	
n-Octacosane (S) SG	114 %		50-150	1	09/25/10 10:00	10/02/10 13:22	630-02-4	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	3080 ug/L		100	1	09/24/10 07:47	09/24/10 14:38	7439-89-6	
6010 MET ICP, Dissolved								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	280 ug/L		100	1	09/24/10 07:47	09/24/10 15:54	7439-89-6	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		09/30/10 15:38	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 15:38	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/30/10 15:38	100-41-4	
Methyl-tert-butyl ether	ND ug/L		0.50	1		09/30/10 15:38	1634-04-4	
Toluene	ND ug/L		0.50	1		09/30/10 15:38	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		09/30/10 15:38	1330-20-7	
4-Bromofluorobenzene (S)	98 %		80-120	1		09/30/10 15:38	460-00-4	
Dibromofluoromethane (S)	97 %		80-122	1		09/30/10 15:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	89 %		80-124	1		09/30/10 15:38	17060-07-0	
Toluene-d8 (S)	96 %		80-123	1		09/30/10 15:38	2037-26-5	
CA LUFT MSV GRO								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		09/30/10 15:38		
4-Bromofluorobenzene (S)	98 %		82-116	1		09/30/10 15:38	460-00-4	
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Sulfate	82000 ug/L		10000	10		09/28/10 16:16	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2690 ug/L		100	2		09/27/10 14:52		
Nitrogen, NO2 plus NO3	2750 ug/L		100	2		09/27/10 14:52		
SM4500NO2-B, Nitrite, unpres								
Analytical Method: SM 4500-NO2 B								
Nitrite as N	68.2 ug/L		10.0	1		09/22/10 10:36	14797-65-0	

Sample: MW-11_20100930	Lab ID: 255040002	Collected: 09/20/10 11:45	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	09/25/10 10:00	10/02/10 13:43		
o-Terphenyl (S) SG	104 %		51-147	1	09/25/10 10:00	10/02/10 13:43	84-15-1	
n-Octacosane (S) SG	131 %		50-150	1	09/25/10 10:00	10/02/10 13:43	630-02-4	

Date: 10/05/2010 05:40 PM

REPORT OF LABORATORY ANALYSIS

Page 5 of 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-11_20100930	Lab ID: 255040002	Collected: 09/20/10 11:45	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	1690 ug/L		100	1	09/24/10 07:47	09/24/10 14:41	7439-89-6	
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	ND ug/L		100	1	09/24/10 07:47	09/24/10 15:58	7439-89-6	
8260 MSV Analytical Method: EPA 5030B/8260								
Benzene	ND ug/L		0.50	1		09/30/10 16:19	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 16:19	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/30/10 16:19	100-41-4	
Methyl-tert-butyl ether	82.7 ug/L		0.50	1		09/30/10 16:19	1634-04-4	
Toluene	ND ug/L		0.50	1		09/30/10 16:19	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		09/30/10 16:19	1330-20-7	
4-Bromofluorobenzene (S)	102 %		80-120	1		09/30/10 16:19	460-00-4	
Dibromofluoromethane (S)	99 %		80-122	1		09/30/10 16:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	92 %		80-124	1		09/30/10 16:19	17060-07-0	
Toluene-d8 (S)	98 %		80-123	1		09/30/10 16:19	2037-26-5	
CA LUFT MSV GRO Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	76.4 ug/L		50.0	1		09/30/10 16:19		T4
4-Bromofluorobenzene (S)	102 %		82-116	1		09/30/10 16:19	460-00-4	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0								
Sulfate	58300 ug/L		5000	5		09/28/10 17:08	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres. Analytical Method: EPA 353.2								
Nitrogen, Nitrate	167 ug/L		50.0	1		09/27/10 14:18		
Nitrogen, NO2 plus NO3	172 ug/L		50.0	1		09/27/10 14:18		
SM4500NO2-B, Nitrite, unpres Analytical Method: SM 4500-NO2 B								
Nitrite as N	ND ug/L		10.0	1		09/22/10 10:36	14797-65-0	

Sample: MW-12_20100930	Lab ID: 255040003	Collected: 09/20/10 14:35	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	5220 ug/L		50.0	1	09/25/10 10:00	10/02/10 14:04		
o-Terphenyl (S) SG	91 %		51-147	1	09/25/10 10:00	10/02/10 14:04	84-15-1	
n-Octacosane (S) SG	117 %		50-150	1	09/25/10 10:00	10/02/10 14:04	630-02-4	
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	3890 ug/L		100	1	09/24/10 07:47	09/24/10 14:45	7439-89-6	

ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-12_20100930	Lab ID: 255040003	Collected: 09/20/10 14:35	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	552 ug/L		100	1	09/24/10 07:47	09/24/10 16:01	7439-89-6	
8260 MSV								
Analytical Method: EPA 5030B/8260								
Benzene	6020 ug/L		25.0	50		10/04/10 08:47	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 16:58	64-17-5	
Ethylbenzene	2970 ug/L		25.0	50		10/04/10 08:47	100-41-4	
Methyl-tert-butyl ether	894 ug/L		25.0	50		10/04/10 08:47	1634-04-4	
Toluene	6390 ug/L		25.0	50		10/04/10 08:47	108-88-3	
Xylene (Total)	18300 ug/L		75.0	50		10/04/10 08:47	1330-20-7	
4-Bromofluorobenzene (S)	110 %		80-120	1		09/30/10 16:58	460-00-4	
Dibromofluoromethane (S)	91 %		80-122	1		09/30/10 16:58	1868-53-7	
1,2-Dichloroethane-d4 (S)	90 %		80-124	1		09/30/10 16:58	17060-07-0	
Toluene-d8 (S)	99 %		80-123	1		09/30/10 16:58	2037-26-5	
CA LUFT MSV GRO								
Analytical Method: CA LUFT								
TPH-Gasoline (C05-C12)	73700 ug/L		2500	50		10/04/10 08:47		
4-Bromofluorobenzene (S)	102 %		82-116	50		10/04/10 08:47	460-00-4	
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0								
Sulfate	1970000 ug/L		200000	200		09/28/10 17:25	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.								
Analytical Method: EPA 353.2								
Nitrogen, Nitrate	72.3 ug/L		50.0	1		09/27/10 14:19		
Nitrogen, NO2 plus NO3	75.2 ug/L		50.0	1		09/27/10 14:19		
SM4500NO2-B, Nitrite, unpres								
Analytical Method: SM 4500-NO2 B								
Nitrite as N	ND ug/L		10.0	1		09/22/10 10:36	14797-65-0	

Sample: MW-12A_20100930	Lab ID: 255040004	Collected: 09/20/10 13:05	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG								
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified								
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	09/25/10 10:00	10/02/10 14:26		
o-Terphenyl (S) SG	97 %		51-147	1	09/25/10 10:00	10/02/10 14:26	84-15-1	
n-Octacosane (S) SG	128 %		50-150	1	09/25/10 10:00	10/02/10 14:26	630-02-4	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	523 ug/L		100	1	09/24/10 07:47	09/24/10 14:48	7439-89-6	
6010 MET ICP, Dissolved								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron, Dissolved	ND ug/L		100	1	09/24/10 07:47	09/24/10 16:04	7439-89-6	

ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-12A_20100930		Lab ID: 255040004	Collected: 09/20/10 13:05	Received: 09/21/10 09:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		09/30/10 15:59	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 15:59	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/30/10 15:59	100-41-4	
Methyl-tert-butyl ether	8.5 ug/L		0.50	1		09/30/10 15:59	1634-04-4	
Toluene	ND ug/L		0.50	1		09/30/10 15:59	108-88-3	
Xylene (Total)	ND ug/L		1.5	1		09/30/10 15:59	1330-20-7	
4-Bromofluorobenzene (S)	100 %		80-120	1		09/30/10 15:59	460-00-4	
Dibromofluoromethane (S)	98 %		80-122	1		09/30/10 15:59	1868-53-7	
1,2-Dichloroethane-d4 (S)	92 %		80-124	1		09/30/10 15:59	17060-07-0	
Toluene-d8 (S)	96 %		80-123	1		09/30/10 15:59	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	ND ug/L		50.0	1		09/30/10 15:59		
4-Bromofluorobenzene (S)	100 %		82-116	1		09/30/10 15:59	460-00-4	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Sulfate	82500 ug/L		10000	10		09/28/10 17:43	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	4680 ug/L		250	5		09/27/10 14:54		
Nitrogen, NO2 plus NO3	4690 ug/L		250	5		09/27/10 14:54		
SM4500NO2-B, Nitrite, unpres		Analytical Method: SM 4500-NO2 B						
Nitrite as N	10.2 ug/L		10.0	1		09/22/10 10:36	14797-65-0	

Sample: MW-13_20100930		Lab ID: 255040005	Collected: 09/20/10 12:30	Received: 09/21/10 09:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	ND ug/L		50.0	1	09/25/10 10:00	10/02/10 15:30		
o-Terphenyl (S) SG	92 %		51-147	1	09/25/10 10:00	10/02/10 15:30	84-15-1	
n-Octacosane (S) SG	115 %		50-150	1	09/25/10 10:00	10/02/10 15:30	630-02-4	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	59500 ug/L		100	1	09/24/10 07:47	09/24/10 14:51	7439-89-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron, Dissolved	279 ug/L		100	1	09/24/10 07:47	09/24/10 16:07	7439-89-6	
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	ND ug/L		0.50	1		09/30/10 16:38	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 16:38	64-17-5	
Ethylbenzene	ND ug/L		0.50	1		09/30/10 16:38	100-41-4	

Date: 10/05/2010 05:40 PM

REPORT OF LABORATORY ANALYSIS

Page 8 of 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-13_20100930		Lab ID: 255040005		Collected: 09/20/10 12:30		Received: 09/21/10 09:10		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV									
Analytical Method: EPA 5030B/8260									
Methyl-tert-butyl ether	272	ug/L	2.5	5		10/04/10 10:06	1634-04-4		
Toluene	ND	ug/L	0.50	1		09/30/10 16:38	108-88-3		
Xylene (Total)	ND	ug/L	1.5	1		09/30/10 16:38	1330-20-7		
4-Bromofluorobenzene (S)	100	%	80-120	1		09/30/10 16:38	460-00-4		
Dibromofluoromethane (S)	98	%	80-122	1		09/30/10 16:38	1868-53-7		
1,2-Dichloroethane-d4 (S)	92	%	80-124	1		09/30/10 16:38	17060-07-0		
Toluene-d8 (S)	97	%	80-123	1		09/30/10 16:38	2037-26-5		
CA LUFT MSV GRO									
Analytical Method: CA LUFT									
TPH-Gasoline (C05-C12)	250	ug/L	50.0	1		09/30/10 16:38		T4	
4-Bromofluorobenzene (S)	100	%	82-116	1		09/30/10 16:38	460-00-4		
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Sulfate	241000	ug/L	50000	50		09/28/10 18:00	14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2									
Nitrogen, Nitrate	ND	ug/L	50.0	1		09/27/10 14:27			
Nitrogen, NO2 plus NO3	ND	ug/L	50.0	1		09/27/10 14:27			
SM4500NO2-B, Nitrite, unpres									
Analytical Method: SM 4500-NO2 B									
Nitrite as N	ND	ug/L	10.0	1		09/22/10 10:36	14797-65-0		

Sample: MW-6_20100930		Lab ID: 255040006		Collected: 09/20/10 15:45		Received: 09/21/10 09:10		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8015B CA TPH DRO SG									
Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified									
TPH-DRO (C10-C24) SG	18800	ug/L	50.0	1	09/25/10 10:00	10/02/10 15:51			
o-Terphenyl (S) SG	78	%	51-147	1	09/25/10 10:00	10/02/10 15:51	84-15-1		
n-Octacosane (S) SG	116	%	50-150	1	09/25/10 10:00	10/02/10 15:51	630-02-4		
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron	2600	ug/L	100	1	09/24/10 07:47	09/24/10 14:54	7439-89-6		
6010 MET ICP, Dissolved									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Iron, Dissolved	2730	ug/L	100	1	09/24/10 07:47	09/24/10 16:11	7439-89-6		
8260 MSV									
Analytical Method: EPA 5030B/8260									
Benzene	2300	ug/L	25.0	50		10/04/10 09:07	71-43-2		
Ethanol	ND	ug/L	250	1		09/30/10 18:38	64-17-5		
Ethylbenzene	2770	ug/L	25.0	50		10/04/10 09:07	100-41-4		
Methyl-tert-butyl ether	19.3	ug/L	0.50	1		09/30/10 18:38	1634-04-4		
Toluene	170	ug/L	0.50	1		09/30/10 18:38	108-88-3		
Xylene (Total)	6260	ug/L	75.0	50		10/04/10 09:07	1330-20-7		

Date: 10/05/2010 05:40 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: MW-6_20100930	Lab ID: 255040006	Collected: 09/20/10 15:45	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
4-Bromofluorobenzene (S)	115 %		80-120	1		09/30/10 18:38	460-00-4	
Dibromofluoromethane (S)	91 %		80-122	1		09/30/10 18:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	92 %		80-124	1		09/30/10 18:38	17060-07-0	
Toluene-d8 (S)	99 %		80-123	1		09/30/10 18:38	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	64500 ug/L		2500	50		10/04/10 09:07		
4-Bromofluorobenzene (S)	101 %		82-116	50		10/04/10 09:07	460-00-4	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Sulfate	ND ug/L		1000	1		09/28/10 18:17	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	ND ug/L		50.0	1		09/28/10 12:58		
Nitrogen, NO2 plus NO3	52.1 ug/L		50.0	1		09/28/10 12:58		
SM4500NO2-B, Nitrite, unpres		Analytical Method: SM 4500-NO2 B						
Nitrite as N	ND ug/L		10.0	1		09/22/10 10:36	14797-65-0	

Sample: FD1_20100931	Lab ID: 255040007	Collected: 09/20/10 14:40	Received: 09/21/10 09:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B CA TPH DRO SG		Analytical Method: EPA 8015B Preparation Method: EPA 3510 Modified						
TPH-DRO (C10-C24) SG	6450 ug/L		50.0	1	09/25/10 10:00	10/02/10 16:12		
o-Terphenyl (S) SG	106 %		51-147	1	09/25/10 10:00	10/02/10 16:12	84-15-1	
n-Octacosane (S) SG	128 %		50-150	1	09/25/10 10:00	10/02/10 16:12	630-02-4	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron	4550 ug/L		100	1	09/24/10 07:47	09/24/10 14:57	7439-89-6	
6010 MET ICP, Dissolved		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Iron, Dissolved	462 ug/L		100	1	09/24/10 07:47	09/24/10 16:14	7439-89-6	
8260 MSV		Analytical Method: EPA 5030B/8260						
Benzene	6120 ug/L		25.0	50		10/04/10 09:27	71-43-2	
Ethanol	ND ug/L		250	1		09/30/10 17:18	64-17-5	
Ethylbenzene	3080 ug/L		25.0	50		10/04/10 09:27	100-41-4	
Methyl-tert-butyl ether	923 ug/L		25.0	50		10/04/10 09:27	1634-04-4	
Toluene	6500 ug/L		25.0	50		10/04/10 09:27	108-88-3	
Xylene (Total)	18900 ug/L		75.0	50		10/04/10 09:27	1330-20-7	
4-Bromofluorobenzene (S)	113 %		80-120	1		09/30/10 17:18	460-00-4	
Dibromofluoromethane (S)	91 %		80-122	1		09/30/10 17:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	95 %		80-124	1		09/30/10 17:18	17060-07-0	

Date: 10/05/2010 05:40 PM

REPORT OF LABORATORY ANALYSIS

Page 10 of 23

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Sample: FD1_20100931		Lab ID: 255040007	Collected: 09/20/10 14:40	Received: 09/21/10 09:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
Toluene-d8 (S)	99 %		80-123	1		09/30/10 17:18	2037-26-5	
CA LUFT MSV GRO		Analytical Method: CA LUFT						
TPH-Gasoline (C05-C12)	77000 ug/L		2500	50		10/04/10 09:27		
4-Bromofluorobenzene (S)	101 %		82-116	50		10/04/10 09:27	460-00-4	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0						
Sulfate	2160000 ug/L		200000	200		09/28/10 18:34	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	ND ug/L		50.0	1		09/27/10 14:30		
Nitrogen, NO2 plus NO3	ND ug/L		50.0	1		09/27/10 14:30		
SM4500NO2-B, Nitrite, unpres		Analytical Method: SM 4500-NO2 B						
Nitrite as N	ND ug/L		10.0	1		09/22/10 10:36	14797-65-0	

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: OEXT/2723 Analysis Method: EPA 8015B
 QC Batch Method: EPA 3510 Modified Analysis Description: 8015B CA DRO Silica Gel
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 42072 Matrix: Water
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	ND	50.0	10/02/10 09:06	
n-Octacosane (S) SG	%	106	50-150	10/02/10 09:06	
o-Terphenyl (S) SG	%	79	51-147	10/02/10 09:06	

LABORATORY CONTROL SAMPLE: 42073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C24) SG	ug/L	3120	2640	84	51-147	
n-Octacosane (S) SG	%			116	50-150	
o-Terphenyl (S) SG	%			104	51-147	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42074 42075

Parameter	Units	255032006 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	ND	3120	3120	2710	2730	86	87	51-147	.6	
n-Octacosane (S) SG	%						119	111	50-150		
o-Terphenyl (S) SG	%						107	100	51-147		

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: MPRP/1787 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 41770 Matrix: Water
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	100	09/24/10 14:32	

LABORATORY CONTROL SAMPLE: 41771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9840	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 41772 41773

Parameter	Units	255043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iron	ug/L	ND	10000	10000	10400	10300	103	103	75-125	.3	

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger
Pace Project No.: 255040

QC Batch: MPRP/1789 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 41781 Matrix: Water
Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	100	09/24/10 15:48	

LABORATORY CONTROL SAMPLE: 41782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9490	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 41783 41784

Parameter	Units	255043006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iron, Dissolved	ug/L	ND	10000	10000	9570	9130	96	91	75-125	5	

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: MSV/3197 Analysis Method: EPA 5030B/8260
 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 42685 Matrix: Water

Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	0.50	09/30/10 11:16	
Ethanol	ug/L	ND	250	09/30/10 11:16	
Ethylbenzene	ug/L	ND	0.50	09/30/10 11:16	
Methyl-tert-butyl ether	ug/L	ND	0.50	09/30/10 11:16	
Toluene	ug/L	ND	0.50	09/30/10 11:16	
Xylene (Total)	ug/L	ND	1.5	09/30/10 11:16	
1,2-Dichloroethane-d4 (S)	%	91	80-124	09/30/10 11:16	
4-Bromofluorobenzene (S)	%	101	80-120	09/30/10 11:16	
Dibromofluoromethane (S)	%	95	80-122	09/30/10 11:16	
Toluene-d8 (S)	%	97	80-123	09/30/10 11:16	

LABORATORY CONTROL SAMPLE: 42686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	76-127	
Ethanol	ug/L	400	416	104	31-182	
Ethylbenzene	ug/L	20	18.9	94	72-125	
Methyl-tert-butyl ether	ug/L	20	22.5	112	58-145	
Toluene	ug/L	20	17.4	87	69-125	
Xylene (Total)	ug/L	60	48.1	80	74-124	
1,2-Dichloroethane-d4 (S)	%			91	80-124	
4-Bromofluorobenzene (S)	%			107	80-120	
Dibromofluoromethane (S)	%			97	80-122	
Toluene-d8 (S)	%			97	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42620 42621

Parameter	Units	255032006 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	Spike Conc.							
Benzene	ug/L	ND	20	20	20.9	22.7	104	113	75-124	8	
Ethanol	ug/L	ND	400	400	444	454	111	113	36-177	2	
Ethylbenzene	ug/L	ND	20	20	20.8	23.3	104	116	76-124	11	
Methyl-tert-butyl ether	ug/L	ND	20	20	22.9	25.2	114	126	72-130	10	
Toluene	ug/L	ND	20	20	19.1	21.4	95	107	75-124	12	
Xylene (Total)	ug/L	ND	60	60	52.7	58.8	88	98	76-123	11	
1,2-Dichloroethane-d4 (S)	%						91	90	80-124		
4-Bromofluorobenzene (S)	%						108	107	80-120		
Dibromofluoromethane (S)	%						99	97	80-122		
Toluene-d8 (S)	%						97	96	80-123		

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: MSV/3204 Analysis Method: CA LUFT
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
 Associated Lab Samples: 255040001, 255040002, 255040004, 255040005

METHOD BLANK: 43043 Matrix: Water

Associated Lab Samples: 255040001, 255040002, 255040004, 255040005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	09/30/10 11:16	
4-Bromofluorobenzene (S)	%	101	82-116	09/30/10 11:16	

LABORATORY CONTROL SAMPLE: 43044

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	509	102	60-140	
4-Bromofluorobenzene (S)	%			103	82-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 43045 43046

Parameter	Units	255032006 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	428	435	81	82	60-140	2	
4-Bromofluorobenzene (S)	%						103	104	82-116		

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: MSV/3212 Analysis Method: CA LUFT
 QC Batch Method: CA LUFT Analysis Description: CA LUFT MSV GRO
 Associated Lab Samples: 255040003, 255040006, 255040007

METHOD BLANK: 43264 Matrix: Water

Associated Lab Samples: 255040003, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	ND	50.0	10/04/10 02:27	
4-Bromofluorobenzene (S)	%	97	82-116	10/04/10 02:27	

LABORATORY CONTROL SAMPLE: 43265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-Gasoline (C05-C12)	ug/L	500	418	84	60-140	
4-Bromofluorobenzene (S)	%			100	82-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 43379 43380

Parameter	Units	255070001 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	564	566	111	111	60-140	.3	
4-Bromofluorobenzene (S)	%						101	101	82-116		

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: WETA/1705 Analysis Method: EPA 300.0
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 41871 Matrix: Water
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	ug/L	ND	1000	09/28/10 15:26	

LABORATORY CONTROL SAMPLE: 41872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	ug/L	15000	15300	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 41873 41874

Parameter	Units	255040001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Sulfate	ug/L	82000	150000	150000	230000	229000	99	98	90-110	.6	E

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: WETA/1707 Analysis Method: EPA 353.2
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 42076 Matrix: Water
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	ug/L	ND	50.0	09/27/10 14:07	

LABORATORY CONTROL SAMPLE: 42077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	ug/L	1000	912	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42078 42079

Parameter	Units	255008001 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	0.82 mg/L	1000	1000	1900	1920	108	111	90-110	1	M1

QUALITY CONTROL DATA

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

QC Batch: WETA/1704 Analysis Method: SM 4500-NO2 B
 QC Batch Method: SM 4500-NO2 B Analysis Description: SM4500NO2-B, Nitrite, unpres
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

METHOD BLANK: 41785 Matrix: Water
 Associated Lab Samples: 255040001, 255040002, 255040003, 255040004, 255040005, 255040006, 255040007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	ug/L	ND	10.0	09/22/10 10:36	

LABORATORY CONTROL SAMPLE: 41786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	ug/L	50	49.1	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 41787 41788

Parameter	Units	255040001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Nitrite as N	ug/L	68.2	50	50	124	125	112	114	71-109	.8	M1

QUALIFIERS

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191 449 Hegenberger
Pace Project No.: 255040

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
255040001	MW-10_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040002	MW-11_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040003	MW-12_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040004	MW-12A_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040005	MW-13_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040006	MW-6_20100930	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040007	FD1_20100931	EPA 3510 Modified	OEXT/2723	EPA 8015B	GCSV/1928
255040001	MW-10_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040002	MW-11_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040003	MW-12_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040004	MW-12A_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040005	MW-13_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040006	MW-6_20100930	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040007	FD1_20100931	EPA 3010	MPRP/1787	EPA 6010	ICP/1702
255040001	MW-10_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040002	MW-11_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040003	MW-12_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040004	MW-12A_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040005	MW-13_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040006	MW-6_20100930	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040007	FD1_20100931	EPA 3010	MPRP/1789	EPA 6010	ICP/1703
255040001	MW-10_20100930	EPA 5030B/8260	MSV/3197		
255040002	MW-11_20100930	EPA 5030B/8260	MSV/3197		
255040003	MW-12_20100930	EPA 5030B/8260	MSV/3197		
255040004	MW-12A_20100930	EPA 5030B/8260	MSV/3197		
255040005	MW-13_20100930	EPA 5030B/8260	MSV/3197		
255040006	MW-6_20100930	EPA 5030B/8260	MSV/3197		
255040007	FD1_20100931	EPA 5030B/8260	MSV/3197		
255040001	MW-10_20100930	CA LUFT	MSV/3204		
255040002	MW-11_20100930	CA LUFT	MSV/3204		
255040003	MW-12_20100930	CA LUFT	MSV/3212		
255040004	MW-12A_20100930	CA LUFT	MSV/3204		
255040005	MW-13_20100930	CA LUFT	MSV/3204		
255040006	MW-6_20100930	CA LUFT	MSV/3212		
255040007	FD1_20100931	CA LUFT	MSV/3212		
255040001	MW-10_20100930	EPA 300.0	WETA/1705		
255040002	MW-11_20100930	EPA 300.0	WETA/1705		
255040003	MW-12_20100930	EPA 300.0	WETA/1705		
255040004	MW-12A_20100930	EPA 300.0	WETA/1705		
255040005	MW-13_20100930	EPA 300.0	WETA/1705		
255040006	MW-6_20100930	EPA 300.0	WETA/1705		
255040007	FD1_20100931	EPA 300.0	WETA/1705		
255040001	MW-10_20100930	EPA 353.2	WETA/1707		
255040002	MW-11_20100930	EPA 353.2	WETA/1707		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 2705191 449 Hegenberger

Pace Project No.: 255040

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
255040003	MW-12_20100930	EPA 353.2	WETA/1707		
255040004	MW-12A_20100930	EPA 353.2	WETA/1707		
255040005	MW-13_20100930	EPA 353.2	WETA/1707		
255040006	MW-6_20100930	EPA 353.2	WETA/1707		
255040007	FD1_20100931	EPA 353.2	WETA/1707		
255040001	MW-10_20100930	SM 4500-NO2 B	WETA/1704		
255040002	MW-11_20100930	SM 4500-NO2 B	WETA/1704		
255040003	MW-12_20100930	SM 4500-NO2 B	WETA/1704		
255040004	MW-12A_20100930	SM 4500-NO2 B	WETA/1704		
255040005	MW-13_20100930	SM 4500-NO2 B	WETA/1704		
255040006	MW-6_20100930	SM 4500-NO2 B	WETA/1704		
255040007	FD1_20100931	SM 4500-NO2 B	WETA/1704		

COP ELT CHAIN-OF-CUSTODY / Analytical Request Document

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



Required Lab Information:		Required Project Information:		Required Invoice Information:	
Lab Name: Pace-Seattle	Site ID #: 2705191	Task: WG_Q_201009	Send Invoice to: David Soble	21789/142	
Address: 940 S. Harney Street Seattle WA 98108	Delta project #	Address: 11050 White Rock Road, Suite 110	Turn around time (days): 10	3Q10 GW Event	
Lab PM: Regina Ste. Marie	City: Oakland	State: CA 94621	Reimbursement project? <input type="checkbox"/>	Non-reimbursement project? <input checked="" type="checkbox"/>	Mark one
Phone/Fax: P: 206-957-2433 F: 206-767-5063	Delta PM Name: Dennis Dettloff	Send EDD to: copeldata@intelligentehs.com	MA MCP Cert? <input type="checkbox"/>	CT RCP Cert? <input type="checkbox"/>	Mark One
Lab PM email: Regina.SteMarie@pacelabs.com	Phone/Fax: P: 1-800-477-7411 F: 916-638-8385	CC Hardcopy report to	Lab Project ID (lab use)		
Applicable Lab Quote #:	Delta PM Email: ddetloff@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 DRINKING WATER WP WATER W GROUND WATER WG SURFACE WATER WS WASTE WATER WW WATER QC WQ FREE PRODUCT LF SLUDGE SL SOIL SO RINSEWATE WH OIL OIL OTHER OT WIPE SW ANIMAL TISSUE TA AMBIENT AIR AA SVE AIR AE SOIL GAS GS	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.					
									Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	353 2N/100ml	3005 Silica			6010 (m) Total Dissolve	8015 P/100ml	8260 GC/MS DRO	8260 GC/MS DRO	8260 GC/MS DRO
1	MW-10_20100930		WG	G	9/20	1105	13	Y	4	1	2	6						X	X	X	X	X	X		
2	MW-11_20100930		WG			1145	13	Y	4	1	2	6						X	X	X	X	X	X		* Samples for DRO 8015M silica gel treated *
3	MW-12_20100930		WG			1435	13	Y	4	1	2	6						X	X	X	X	X	X		
4	MW-12A_20100930		WG			1305	21	Y	8	1	2	10						X	X	X	X	X	X		
5	MW-13_20100930		WG			1230	13	Y	4	1	2	6						X	X	X	X	X	X		
6	MW-3_20100930		WG															X	X	X	X	X	X		
7	MW-6_20100930		WG			1545	13	Y	4	1	2	6						X	X	X	X	X	X		Dissolved Iron 6010 is field filtered
8	MW-7_20100930		WG															X	X	X	X	X	X		
9	MW-8_20100930		WG															X	X	X	X	X	X		
10	MW-9_20100930		WG															X	X	X	X	X	X		
11	FD1_20100930		WG			1440	13	Y	4	1	2	6						X	X	X	X	X	X		
12																									

Additional Comments/Special Instructions: GLOBAL ID: T0600101476	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Sample Receipt Conditions				
				CAROL WOODRUFF / PACE	09/21/10	0910	0.3	<input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> N	Y/N	Y/N
							1.4	Y/N	Y/N	Y/N	Y/N
							1.5	Y/N	Y/N	Y/N	Y/N
	SHIPPING METHOD: (mark as appropriate)		SAMPLER NAME AND SIGNATURE								
	UPS COURIER FEDEX	PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed	Time	Temp in °C	Samples on ice?	Sample intact?	Trip Blank?
	US MAIL	J. PARKER		J. PARKER		9/21/10	1715				



Sample Container Count

CLIENT: Delta - CA



COC PAGE 1 of 1

COC ID# _____

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	AG2U	BP3N	Comments
1	6					1	1		1			2	2	
2	6					1	1		1			2	2	
3	6					1	1		1			2	2	
4	10					1	1		1			6	2	
5	6					1	1		1			2	2	
6														
7	6					1	1		1			2	2	
8														
9														
10														
11	6					1	1		1			2	2	
12														Trip Blank?

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	WGFU	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		

871505612846
 871505612721
 870494778032
 871505612732
 871505612743

Sample Condition Upon Receipt



Client Name: Delta - GA

Project # 255040

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: please see above

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

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

Thermometer Used 132013 60101731962 or 226099 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.32, 1.40, 1.40, 1.50, 2.40 Biological Tissue is Frozen: Yes No
 Temp should be above freezing ≤ 6°C

Date and Initials of person examining contents: 09/22/10 CW

		Comments:
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
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: VOA, coliform, TOC, O&G		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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blanks Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: RSM Date: 09/22/10

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)