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**R. W. L. Investments, Inc.**  
**4919 Tidewater Ave. Unit B.**  
**Oakland, CA 94601**  
Ph# 510 434-0175

July 26, 2007

Mr. Barney Chan  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Ste.250  
Alameda, CA 94502

Subject: Letter of Transmittal for  
Semi-annual Groundwater Monitoring Report, Second Quarter 2007  
4919 Tidewater Avenue, Oakland, California

Case No. RO0000107

Dear Mr. Chan,

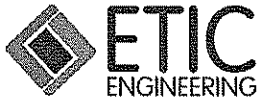
On behalf of R. W. L. Investments, Inc., ETIC Engineering, Inc. prepared the attached *Semi-annual Groundwater Monitoring Report, Second Quarter 2007* dated July 2007 for the above-referenced site.

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

If you have any questions or comments, please contact me at (510) 434-0175 or Maura Dougherty (extension 41) or Alan Anselmo (extension 19) of ETIC Engineering, Inc. at (925) 602-4710.

Sincerely,  
R. W. L. Investments, Inc.

  
Bob Lawlor  
President



**Semi-annual Groundwater Monitoring  
Report  
Second Quarter 2007**

**Heitz Trucking  
4919 Tidewater Avenue, Unit B  
Oakland, California 94601**

**Fuel Leak Case Number: RO0000107**

**July 2007**

*Prepared For:*

**R.W.L. Investments, Inc.  
4919 Tidewater Avenue, Unit B  
Oakland, California 94601**

*Prepared By:*

**ETIC Engineering, Inc.  
2285 Morello Avenue  
Pleasant Hill, California 94523**



# Semi-annual Groundwater Monitoring Report Second Quarter 2007

Heitz Trucking  
4919 Tidewater Avenue, Unit B  
Oakland, California 94601

Fuel Leak Case Number: RO0000107

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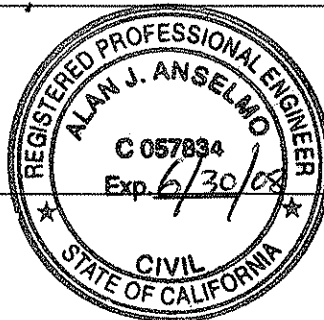
ETIC Engineering, Inc.  
2285 Morello Avenue  
Pleasant Hill, California 94523

Michael Garcia  
Project Geologist

7/26/07

Date

Alan Anselmo, P.E.  
Program Manager



7/26/07

Date

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## GENERAL INFORMATION

### Site Location

Heitz Trucking  
4919 Tidewater Avenue, Unit B  
Oakland, California 94601

Alameda County  
Township 2 South, Range 3 West, Section 17 of the Mount Diablo Baseline and Meridian

### Responsible Party

Bob Lawlor  
R.W.L. Investments, Inc.  
4919 Tidewater Avenue, Unit B  
Oakland, California 94601

### Environmental Consultant

ETIC Engineering, Inc.  
2285 Morello Avenue  
Pleasant Hill, California 94523

Maura Dougherty  
Project Manager  
(925) 602-4710 ext. 41  
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### Regulatory Agency

Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Suite 250  
Alameda, California 94502-6577

Barney M. Chan  
Hazardous Materials Specialist  
(510) 567-6765

## **1.0 INTRODUCTION**

On behalf of R.W.L. Investments, Inc., ETIC Engineering, Inc. (ETIC) has prepared this *Semi-annual Groundwater Monitoring Report, Second Quarter 2007* for the Heitz Trucking (formerly DiSalvo Trucking) facility located at 4919 Tidewater Avenue in Oakland, California (the Site). This report summarizes the groundwater monitoring activities performed on 27 June 2007.

## **2.0 SITE BACKGROUND**

### **2.1 DESCRIPTION OF SITE**

The Site is located east of the San Francisco Bay in southwest Oakland, approximately 500 feet southeast of the Tidewater Avenue and Lasser Street intersection, on the southwest side of Tidewater Avenue (Figure 1). The Site is located in Section 17 of Township 2, Range 3. The Site is currently owned by R.W.L. Investments, Inc. and leased to Heitz Trucking.

The 3.61 acre property contains an approximately 11,800 square-foot concrete warehouse and loading dock terminal along the north side of the Site, an office trailer, and an approximately 2,770 square-foot truck repair shop and maintenance building along the southern side of the Site (ART, 2007). An above-ground fuel storage tank is located north of the maintenance building and outside yard areas are located along the northwest side of the building and between the buildings.

The Site is listed as a fuel leak case and is overseen by the Alameda County Health Care Services Agency (ACHCSA).

### **2.2 LOCAL GEOLOGY AND HYDROGEOLOGY**

Soil borings from previous on-site investigations indicate that the area beneath the Site was likely filled to create land and lift the surface roughly 5 feet above the high tide line (ART, 2007). The soil beneath the Site consists mostly of gravel and sand fill with concrete and asphalt debris, as well as silt and clay (ART, 2007). The fill is underlain by organic clay with thin interbeds of peat material. The thickness of the fill material generally increases to the northeast, varying from about 1.5 feet thick near the southern corner and 4 to 5 feet along the northern property to greater than 9 feet thick along Tidewater Avenue (ART, 2007).

The regional groundwater flow follows the topography, moving from regions of higher elevations to regions of lower elevations (ERAS, 2006). Groundwater flow direction in the

area of the Site is toward the San Francisco Bay. Historically, depths to groundwater measured in monitoring wells at the Site have ranged from 1.14 to 3.88 feet below ground surface (bgs). Groundwater appears to be unconfined and gradient has historically ranged from 0.003 to 0.04 foot-per-foot. However, there may not be a dominant gradient or flow direction due to the influence of tidal fluctuations from the nearby tidal canal (ERAS, 2006).

### **2.3 TOPOGRAPHY AND SURFACE WATER**

The land surface slopes down to the west toward San Francisco Bay. However, the property is very flat with little topographic change. The elevation of the Site is approximately 5 feet above mean sea level (msl).

Lake Merritt is a tidal lagoon located 5.7 miles northwest of the Site. The salt/freshwater lake covers an area of approximately 155 acres and the primary uses are recreation and aesthetics.

### **2.4 UST HISTORY**

The Site operated one 10,000 gallon and one 5,000 gallon diesel tank, one 280 gallon waste oil tank, and one 550 gallon underground storage tank (UST) system until their removal in March 1989 (ART, 2007). A 10-inch-diameter fuel pipeline was breached during tank removal activities and approximately 3,000 gallons of product leaked into the excavation pit. The free-phase hydrocarbons and contaminated groundwater was pumped from the excavation pit for disposal. Soil samples were collected from the floor of the UST excavation and from the excavated soil. Additionally, a recovery well and recovery trench were installed from which an estimated 2,400 gallons of diesel fuel and 20,000 gallons of contaminated groundwater were recovered.

Once soil samples were collected, approximately 3,000 cubic yards of excavated soil was stockpiled on-site for treatment by enhanced biodegradation (ART, 2007). Petroleum hydrocarbons were detected at concentrations up to 240 milligrams-per-kilogram (mg/kg) in soil samples collected from the UST excavation and up to 46,000 mg/kg in post-excavation soil borings.

#### **Subsurface Investigations (1989 through 2006)**

Subsurface investigations were performed at the Site from 1989 to 2006. These investigations confirmed the presence of diesel- and gasoline-impacted soil and groundwater beneath the Site and identified free-phase product in monitoring wells MW-2 and MW-3. Total petroleum hydrocarbons in the diesel range (TPH-d), total petroleum hydrocarbons in the gasoline range



(TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX), and fuel oxygenate methyl tertiary butyl ether (MTBE) have been detected in groundwater samples collected at the Site. In May 1989, Geo-Environmental Technology (GET) performed a shallow soil investigation at the Site in which 12 samples were collected from 22 shallow soil borings. Soil sampling confirmed the presence of diesel hydrocarbon impacted soil in the area of the former UST excavation and along a product line from the former USTs to the northeast (ART, 2007). The maximum TPH-d concentration (46,000 mg/kg) was detected in the soil sample collected at 5 feet bgs from boring BH-11, located approximately 10 feet west of the former UST excavation (ART, 2007). Oil and grease was detected in this same sample at a concentration of 27,000 mg/kg.

In an April 1994 soil and groundwater investigation, Gentech Environmental (Gentech) drilled 14 soil borings (EB-1 through EB-11 and MW-1 through MW-3), collected soil samples, and installed three groundwater monitoring wells (MW-1 through MW-3) (ART, 2007). Soil analytical results indicated the highest diesel hydrocarbon concentrations (29,000 mg/kg) and oil and grease concentrations (36,000 mg/kg) in samples from MW-2. Groundwater sampling indicated floating product in monitoring well MW-2 and elevated concentrations of TPH-d and TPH-g (7,700 µg/L and 250 µg/L, respectively) in well MW-3.

In July 1995, Environmental Restoration Services (Enrest) drilled two soil borings and installed monitoring well MW-4 in one of the borings (ART, 2007). The borings and MW-4 were drilled along a former product line extending northwest from the former UST area. TPH-g (250 µg/L) and low concentrations of BTEX were detected in the August 1995 groundwater sample from MW-4.

PIERS Environmental (PIERS) drilled 16 soil borings (SB-1 through SB-16) in a December 2000 soil and groundwater investigation. Conclusions reached by PIERS were: concentrations of diesel in groundwater do not appear to have been reduced from natural attenuation since the April 1994 subsurface investigation performed by Gentech, and that the groundwater contamination plume extends off-site to the northwest.

In February 2006, ERAS Environmental (ERAS) further delineated vertical and lateral extents of diesel impacts in soil and groundwater at the Site (ART, 2007). ERAS collected soil and groundwater samples from soil borings B-1 through B-9, then from borings B-10 through B-15 in April 2006, installed an 8-inch dewatering well, and drilled four observation wells (OB-3 through OB-6). TPH-d was detected at 5,400 mg/kg in the soil sample from B-9 collected at 4.5 feet bgs at the southwest corner of the former UST area. The groundwater grab sample from boring B-12, located in between the former UST area and the building, contained TPH-d at a concentration of 2,500,000 µg/L.

Murray Engineering, Inc. (MEI) performed a geotechnical investigation at the Site in February 2006 (ART, 2007). The results were used as evaluation criteria for future shoring and backfilling activities.

In February 2006, Applied Remedial Technologies (ART) performed a constant-rate aquifer test on well EW-1 to develop a numerical groundwater flow model, which was then used to evaluate proposed remediation alternatives for the Site (ART, 2007).

### **Groundwater Monitoring (1994 through 2007)**

Groundwater monitoring has been conducted at the site intermittently since April 1994. Two monitoring wells, MW-2 and MW-3, historically have been observed to contain floating product, which has been removed by bailing of the well. Groundwater flow direction has been difficult to determine due to tidal influence, but it has generally flowed to the southwest with a shallow gradient. The second quarter groundwater sampling event took place in June 2007. Groundwater analytical results for this monitoring event are consistent with historical sample results.

## **3.0 GROUNDWATER MONITORING**

On behalf of R.W.L. Investments, Inc., ETIC performed the semi-annual groundwater monitoring event on 27 June 2007. Summary tables for monitoring well construction details, groundwater elevations, and analytical data are included in Tables 1 through 3. Site maps with well locations, groundwater elevations, and analytical data are included as Figures 1 through 3. Field data forms are included in Appendix A. Laboratory analytical reports and chain-of-custody documentation are included in Appendix B.

### **3.1 GROUNDWATER MONITORING PROCEDURES**

Groundwater monitoring was performed at four monitoring wells (MW-1 through MW-4). Prior to sample collection, the depth to water, the depth to the bottom of the well, and product thickness (if present) were measured to the nearest 0.01 foot in each monitoring well, using an electronic water-level indicator or oil/water interface probe. Each monitoring well was purged a minimum of 3 casing volumes of groundwater with a dedicated Waterra sampling system, with the exception of MW-1 which dewatered after 1 casing volume. Water quality parameters (temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential) were measured, utilizing calibrated field instruments. The purged water from each monitoring well was stored in a temporary and portable poly-tank and then deposited into a properly labeled, 55-gallon drum. The waste drum was left on-site for subsequent profiling and off-site

disposal. All reusable sampling equipment was thoroughly washed with a Liquinox solution and then rinsed with distilled water.

Groundwater samples were collected and stored in pre-cleaned, laboratory-supplied containers. The containers were sealed, labeled, stored on ice in a thermally-insulated cooler, and transported under chain-of-custody protocol to Kiff Analytical, LLC (Kiff), a state-certified analytical laboratory. A travel blank accompanied the groundwater samples to Kiff.

Kiff analyzed the four groundwater samples for TPH-d by EPA Method 8015M. The four groundwater samples and the travel blank were analyzed for TPH-g, BTEX, and MTBE by EPA Method 8260B.

### **3.2 GROUNDWATER ELEVATIONS AND HYDRAULIC GRADIENT**

Free product was not observed in the monitoring wells based on the measurements obtained utilizing the oil/water interface probe.

A groundwater elevation contour map for the June 2007 monitoring event is presented on Figure 2, and current and historical groundwater elevations are presented in Table 2. The depth to groundwater ranged from approximately 2 to 3 feet. The groundwater elevations ranged from 0.61 feet above msl in MW-4 to 1.04 feet above msl in MW-2. The direction of groundwater flow was generally to the southwest with a hydraulic gradient of approximately 0.001 foot-per-foot.

### **3.3 ANALYTICAL DATA FOR TPH-d, TPH-g, AND BTEX**

Laboratory analytical data for groundwater samples collected in June 2007 are presented on Figure 3. Historical and current analytical data for groundwater samples is presented in Table 3.

TPH-d was detected in groundwater samples collected from three of the four monitoring wells, at concentrations ranging from 320  $\mu\text{g/L}$  in MW-4 to 10,000  $\mu\text{g/L}$  in MW-2. TPH-d was not detected in the groundwater sample collected from MW-1. The samples from MW-2 and MW-3 exceeded the San Francisco Bay Regional Water Quality Control Board Environmental Screening Level (ESL) for TPH-d in non-drinking water sources of 640  $\mu\text{g/L}$  (SFBRWQCB, 2005).

TPH-g was detected in groundwater samples collected from two monitoring wells, at concentrations of 140  $\mu\text{g/L}$  in MW-3 and 200  $\mu\text{g/L}$  in MW-2. TPH-g was not detected in the

groundwater samples collected from MW-1 and MW-4. All groundwater samples were below the ESL for TPH-g in non-drinking water sources of 500 µg/L (SFBRWQCB, 2005).

BTEX was not detected in any of the groundwater samples collected on 27 June 2007.

### **3.4 ANALYTICAL DATA FOR MTBE**

MTBE was detected in groundwater samples collected from three monitoring wells, at concentrations ranging from 1.8 µg/L in MW-2 to 25 µg/L in MW-3. The sample from MW-2 exceeded the Title 22 California Code of Regulations (CCR) Maximum Contaminant Level (MCL) for MTBE in drinking water of 13 µg/L; however, the concentration is below the ESL for MTBE in non-drinking water sources of 1,800 µg/L (SFBRWQCB, 2005).

## **4.0 SUMMARY AND CONCLUSION**

Groundwater monitoring was first performed at the Site in April 1994. A summary of current Site conditions is presented below:

- During the 27 June 2007 sampling event, monitoring wells MW-1, MW-2, MW-3, and MW-4 were gauged and sampled;
- During the June 2007 event, groundwater elevations ranged from 0.61 to 1.04 feet above msl. The direction of groundwater flow was to the southwest with a hydraulic gradient of approximately 0.001 foot-per-foot;
- TPH-d was detected in the groundwater samples collected from MW-2, MW-3, and MW-4, and concentrations exceeded the ESL for non-drinking water sources in samples from MW-2 and MW-3. TPH-g was detected in the samples from MW-2 and MW-3, however, the sample concentrations were below the ESL for non-drinking water sources. BTEX was not detected in any of the samples;
- MTBE was detected in groundwater samples from three monitoring wells, MW-1, MW-2, and MW-3. The sample concentration from well MW-3 exceeded the MCL for drinking water; however, the concentration is below the ESL for non-drinking water sources; and
- The analytical data from June 2007 indicate that the concentrations of TPH-d in groundwater decrease by approximately two or more orders of magnitude from MW-2 (located between the recovery trench and the building) to MW-1 (approximately 210 feet downgradient of MW-2).

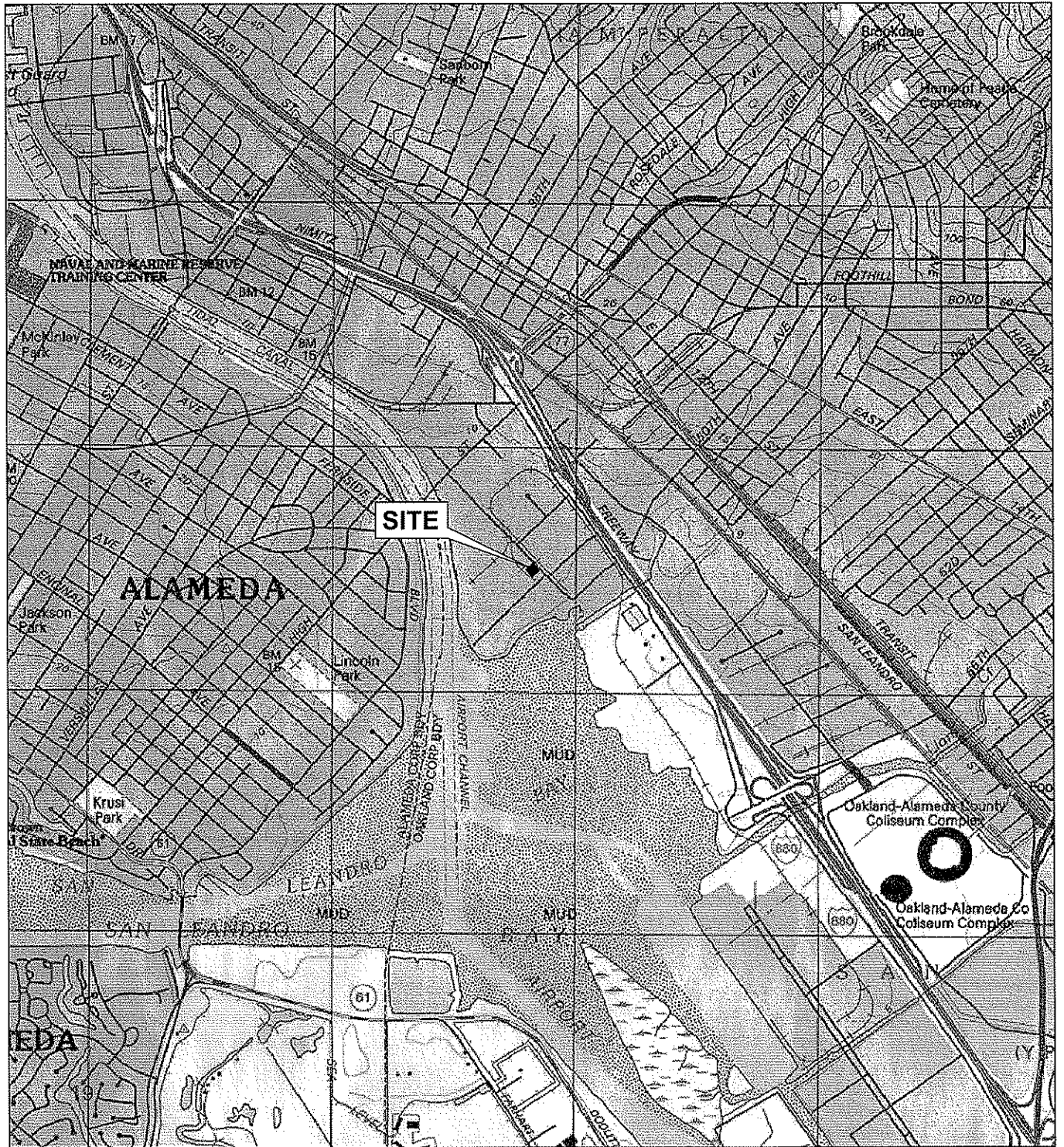
## **5.0 REFERENCES**

Applied Remedial Technologies, Inc., 2007. Feasibility Study Report, Heitz Trucking, 4919 Tidewater Avenue, Unit B, Oakland, California. 26 February.

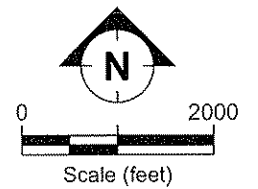
ERAS Environmental, Inc., 2006. Groundwater Monitoring Report, Quarter 1 2005, 4919 Tidewater Avenue, Oakland, California. 23 February.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2005. Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup Tables, Interim Final. February 2005.

## **FIGURES**



SOURCE: USGS Topographic Map








SITE LOCATION AND TOPOGRAPHIC MAP  
 HEITZ TRUCKING  
 4919 TIDEWATER  
 OAKLAND, CALIFORNIA

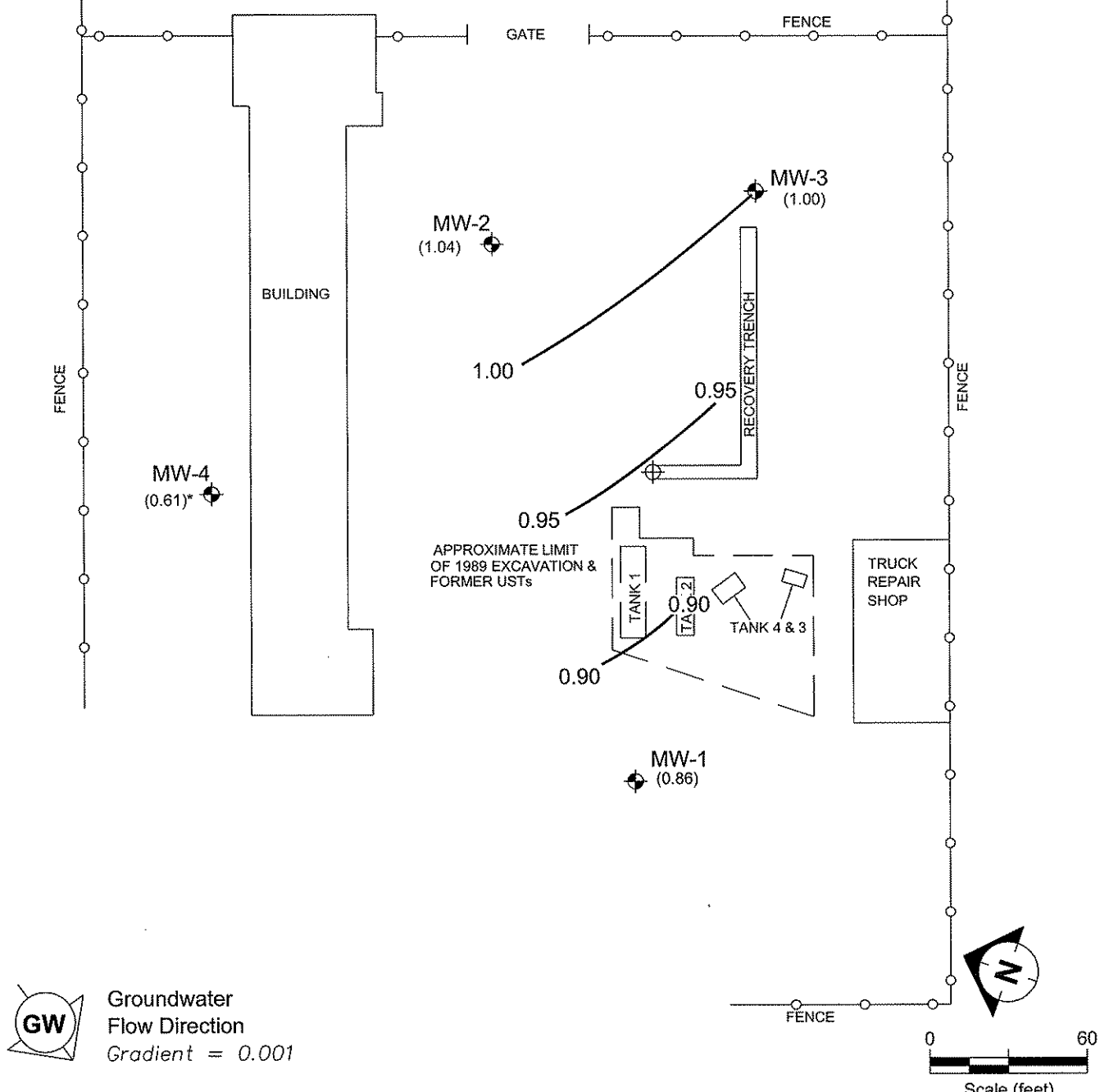
FIGURE:

**1**

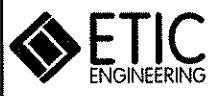
**LEGEND:**

-  Groundwater Monitoring Well
-  Recovery Well
-  (1.04) Groundwater elevation (feet)
-  Groundwater elevation contour (feet)
-  \* Denotes well elevation not used for contouring

Note: Elevations referenced to Mean Sea Level



FILENAME: 202007.DWG 07/20/07



GROUNDWATER ELEVATION CONTOUR MAP  
HEITZ TRUCKING  
4919 TIDEWATER, OAKLAND, CALIFORNIA  
27 JUNE 2007

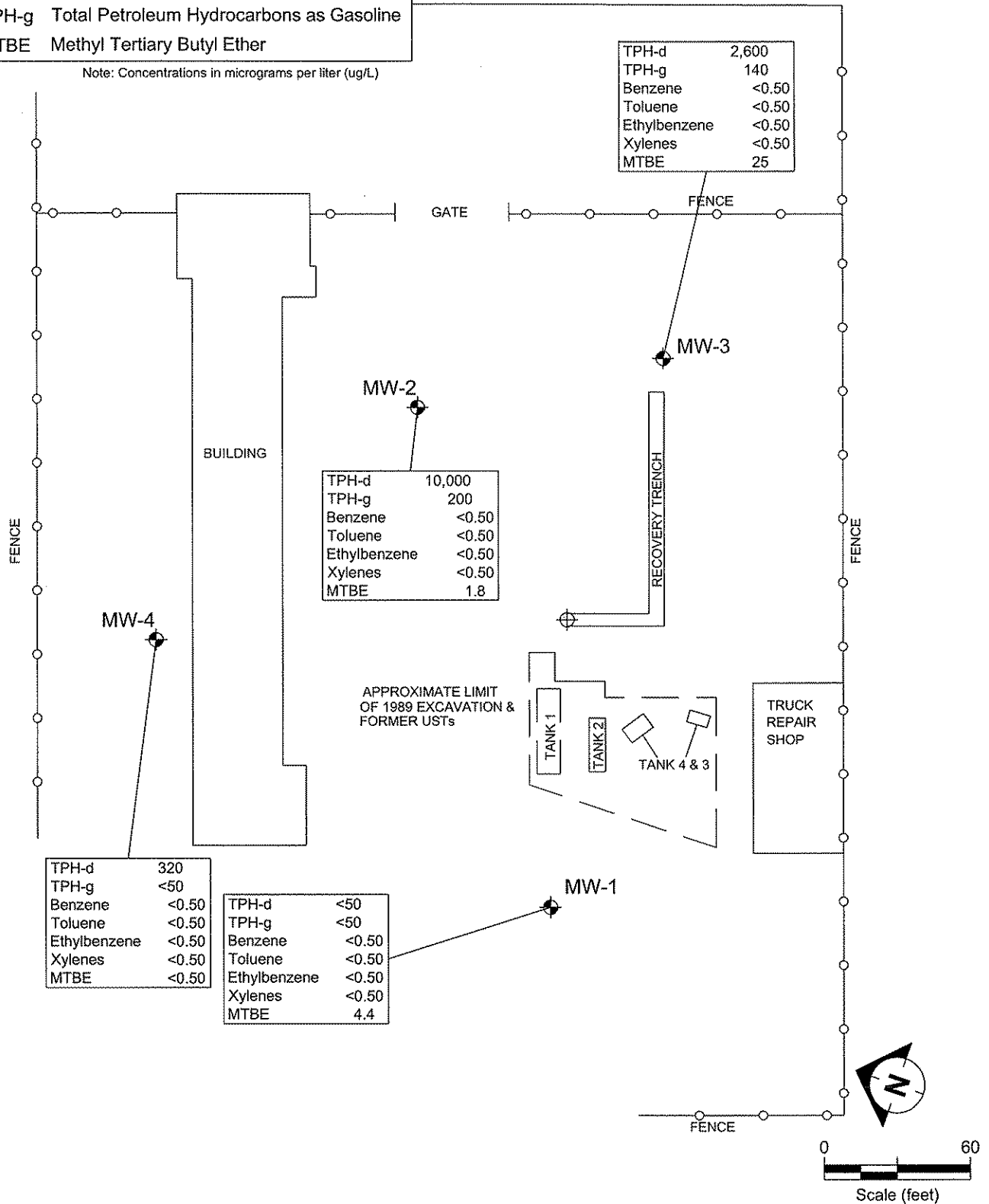
FIGURE:  
**2**



**LEGEND:**

- ⊕ Groundwater Monitoring Well
- ⊕ Recovery Well
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- MTBE Methyl Tertiary Butyl Ether

Note: Concentrations in micrograms per liter (ug/L)



FILENAME: 202007.DWG 07/20/07



SITE PLAN SHOWING GROUNDWATER ANALYTICAL RESULTS  
HEITZ TRUCKING  
4919 TIDEWATER, OAKLAND, CALIFORNIA  
27 JUNE 2007

FIGURE:

**3**

## **TABLES**

**Table 1**  
**Monitoring Well Construction Data**  
**Heitz Trucking**  
**4919 Tidewater Avenue**  
**Oakland, California 94601**

Monitoring Well	Date Installed	Top of Casing Elevation (feet msl)	Casing Material	Boring Depth (feet)	Well Depth (feet)	Boring Diameter (inches)	Casing Diameter (inches)	Slot Size (inches)	Screened Interval (feet)	Filter Pack Interval (feet)	Filter Pack Material
MW-1	4/8/1994	2.68	Sch. 40 PVC	8	8	NDA	2	0.020	3-8	2.5-8	#2/12 Sand
MW-2	4/1994	3.50	NDA	NDA	7.5	NDA	2	NDA	NDA	NDA	NDA
MW-3	4/8/1994	2.90	Sch. 40 PVC	8	8	NDA	2	0.020	3-8	2.5-8	#2/12 Sand
MW-4	7/19/1995	3.87	Sch. 40 PVC	8	8	NDA	2	0.020	3-8	2.5-8	#2/12 Sand

**Notes:**

Sch. 40 PVC = Schedule 40 polyvinyl chloride.

msl = Mean sea level.

NDA = No data available.

**Table 2**  
**Groundwater Elevation Data**  
**Heitz Trucking**  
**4919 Tidewater Avenue**  
**Oakland, California 94601**

<b>Monitoring Well</b>	<b>Gauging Date</b>	<b>Top of Casing Elevation (feet msl)</b>	<b>Depth to Water (feet bgs)</b>	<b>Free Product Thickness (feet)</b>	<b>Groundwater Elevation (feet msl)</b>
MW-1	4/14/1994	2.68	1.26	0.00	1.42
MW-1	11/17/1994	2.68	3.88	0.00	-1.20
MW-1	8/13/1995	2.68	3.09	0.00	-0.41
MW-1	8/23/1999	2.68	2.17	0.00	0.51
MW-1	5/26/1999	2.68	2.29	0.00	0.39
MW-1	4/26/2001	2.68	1.14	0.00	1.54
MW-1	9/5/2002	2.68	2.15	0.00	0.53
MW-1	8/18/2005	2.68	2.54	0.00	0.14
MW-1	8/19/2005	2.68	6.1	0.00	-3.42
MW-1	1/25/2006	2.68	2.02	0.00	0.66
MW-1	5/9/2006	2.68	0.30	0.00	2.38
MW-1	7/12/2006	2.68	1.81	0.00	0.87
MW-1	<b>6/27/2007</b>	<b>2.68</b>	<b>1.82</b>	<b>0.00</b>	<b>0.86</b>
MW-2	4/14/1994	3.50	1.92	0.00	1.58
MW-2	11/18/1994	3.50	1.78	0.00	1.72
MW-2	8/13/1995	3.50	2.95	0.00	0.55
MW-2	8/23/1999	3.50	2.89	0.00	0.61
MW-2	5/26/1999	3.50	2.96	0.00	0.54
MW-2	4/26/2001	3.50	1.74	0.00	1.76
MW-2	9/5/2002	3.50	3.06	0.00	0.44
MW-2	8/18/2005	3.50	2.62	0.00	0.88
MW-2	8/19/2005	3.50	2.62	0.00	0.88
MW-2	1/25/2006	3.50	1.27	0.00	2.23
MW-2	7/12/2006	3.50	2.42	0.00	1.08
MW-2	<b>6/27/2007</b>	<b>3.50</b>	<b>2.46</b>	<b>0.00</b>	<b>1.04</b>
MW-3	4/14/1994	2.90	1.33	0.00	1.57

**Table 2**  
**Groundwater Elevation Data**  
**Heitz Trucking**  
**4919 Tidewater Avenue**  
**Oakland, California 94601**

<b>Monitoring Well</b>	<b>Gauging Date</b>	<b>Top of Casing Elevation (feet msl)</b>	<b>Depth to Water (feet bgs)</b>	<b>Free Product Thickness (feet)</b>	<b>Groundwater Elevation (feet msl)</b>
MW-3	11/18/1994	2.90	1.23	0.00	1.67
MW-3	8/13/1995	2.90	2.18	0.00	0.72
MW-3	8/23/1999	2.90	2.18	0.00	0.72
MW-3	5/26/1999	2.90	2.50	0.00	0.40
MW-3	4/26/2001	2.90	1.29	0.00	1.61
MW-3	9/5/2002	2.90	2.34	0.00	0.56
MW-3	8/18/2005	2.90	2.08	0.04	0.85
MW-3	8/19/2005	2.90	2.10	0.03	0.82
MW-3	1/25/2006	2.90	0.97	0.00	1.93
MW-3	7/12/2006	2.90	1.82	0.00	1.08
MW-3	6/27/2007	2.90	1.90	0.00	1.00
MW-4	8/13/1995	3.87	3.33	0.00	0.54
MW-4	5/26/1999	3.87	3.31	0.00	0.56
MW-4	4/26/2001	3.87	1.69	0.00	2.18
MW-4	9/5/2002	3.87	3.31	0.00	0.56
MW-4	8/18/2005	3.87	3.37	0.00	0.50
MW-4	8/19/2005	3.87	3.46	0.00	0.41
MW-4	1/25/2006	3.87	2.50	0.00	1.37
MW-4	7/12/2006	3.87	3.09	0.00	0.78
MW-4	6/27/2007	3.87	3.26	0.00	0.61

**Notes:**

msl = Mean sea level.

bgs = Below ground surface.

**Table 3**  
**Analytical Data for Monitoring Well Groundwater Samples**  
**TPH-d, TPH-g, BTEX, and MTBE**  
**Heitz Trucking**  
**4919 Tidewater Avenue**  
**Oakland, California 94601**

Monitoring Well	Sampling Date	TPH-d (µg/L)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1	4/14/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	11/17/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	1,100
MW-1	8/13/1995	<50	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	5/26/1999	<50	60	0.6	<0.5	0.8	1.9	<0.50
MW-1	8/23/1999	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
MW-1	10/16/2000	150	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	4/26/2001	1,300	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-1	9/5/2002	<50	NA	<0.5	<0.5	<0.5	<1	9.8
MW-1	8/18/2005	410 <sup>1</sup>	<50	<1	<1	<1	<1	6.0
MW-1	1/25/2006	3,600 <sup>2</sup>	<50	2.3	<0.5	<0.5	1.2	11.0
MW-1	7/12/2006	100	<50	<0.5	<0.5	<0.5	<1	6.2
MW-1	6/27/2007	<50	<50	<0.50	<0.50	<0.50	<0.50	4.4
MW-2	4/14/1994	Not sampled due to free product.						
MW-2	10/17/1994	28,000	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-2	8/13/1995	180	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-2	5/26/1999	120	<50	<0.5	<0.5	<0.5	<0.5	<50
MW-2	8/23/1999	61	NA	<0.5	<0.5	<0.5	<0.5	NA
MW-2	10/16/2000	3,400	570	<0.5	<0.5	<0.5	<0.5	NA
MW-2	4/26/2001	57,000	2,400	<0.5	<0.5	<0.5	<0.5	NA
MW-2	9/5/2002	27,100	NA	<0.5	<0.5	<0.5	<1	5.1
MW-2	8/18/2005	13,300	<50	<10	<10	<10	<10	<30
MW-2	1/25/2006	110,000 <sup>2</sup>	1,200	<10	<10	<10	<20	<10
MW-2	7/12/2006	5,900	330	<0.5	<0.5	<0.5	<1	3.6
MW-2	6/27/2007	10,000	200	<0.50	<0.50	<0.50	<0.50	1.8
MW-3	4/14/1994	7,700	250	<0.5	<0.5	<0.5	1.2	NA
MW-3	10/17/1994	160,000	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	8/13/1995	1,500	<50	<0.5	<0.5	<0.5	<0.5	NA
MW-3	5/26/1999	1,100	160	1.6	1.1	16	54.00	<0.50
MW-3	8/23/1999	84	NA	<0.5	<0.5	<0.5	<0.5	NA
MW-3	10/16/2000	42,000	130	0.52	<0.5	<0.5	<0.5	NA
MW-3	4/26/2001	21,000	310	<0.5	<0.5	<0.5	<0.5	NA

**Table 3**  
**Analytical Data for Monitoring Well Groundwater Samples**  
**TPH-d, TPH-g, BTEX, and MTBE**  
**Heitz Trucking**  
**4919 Tidewater Avenue**  
**Oakland, California 94601**

Monitoring Well	Sampling Date	TPH-d (µg/L)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-3	9/5/2002	1,990	NA	<0.5	<0.5	<0.5	<1	31.1
MW-3	8/18/2005	Not sampled due to free product.						
MW-3	1/25/2006	21,000 <sup>2</sup>	440	<2.5	<2.5	<2.5	<5.0	29
MW-3	7/12/2006	16,000	280	<0.5	<0.5	<0.5	<1	47
MW-3	6/27/2007	2,600	140	<0.50	<0.50	<0.50	<0.50	25
MW-4	8/13/1995	<50	450	2.1	0.7	4.1	13	NA
MW-4	5/26/1999	100	600	0.7	<0.5	<0.5	5.8	<0.5
MW-4	8/23/1999	180	NA	<0.5	<0.5	<0.5	<0.5	NA
MW-4	10/16/2000	75,000	890	<0.5	<0.5	<0.5	11	NA
MW-4	4/26/2001	24,000	2,100	<0.5	<0.5	<0.5	<0.5	NA
MW-4	9/5/2002	17,000	NA	<0.5	<0.5	<0.5	<1	1.2
MW-4	8/18/2005	6,200	<50	<1	<1	<1	<1	<3
MW-4	1/25/2006	8,200	110	2.0	0.87	<0.5	2.3	4.5
MW-4	7/12/2006	5,200	250	<0.5	<0.5	<0.5	<1	0.93
MW-4	6/27/2007	320	<50	<0.50	<0.50	<0.50	<0.50	<0.50
Travel Blank	6/27/2007	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>RWQCB ESLs</b>		640	500	46	130	290	100	1,800
<b>Title 22 CCR MCLs</b>		NE	NE	1	150	300	1,750	13

**Notes:**

TPH-d = Total petroleum hydrocarbons quantified as diesel.

TPH-g = Total petroleum hydrocarbons quantified as gasoline.

MTBE = Methyl tertiary butyl ether.

µg/L = Micrograms per liter.

NA = Not analyzed.

RWQCB ESLs - San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for groundwater that is not a current or potential source of drinking water (February 2005).

Title 22 CCR MCLs - Title 22 California Code of Regulations Maximum Contaminant Levels (June 2004).

NE = Not established.

<50 = Analyte not detected above the laboratory method reporting limit indicated.

1. Chromatogram does not resemble the typical diesel pattern.
2. Q106 TPH-d sample collected on 2/2/2006.

**Appendix A**  
**Field Data Forms**







## GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: MW-1	Date: 06-27-07
Project No: TMTIDE1, S107	Personnel: ALEX	

**GAUGING DATA**

Water Level Measuring Method: INTERFACE PROBE      Measuring Point Description:

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
		6.77	1.82	4.95	1	2	4	6	.79
				0.04	0.16	0.64	1.44		

**PURGING DATA**

Purge Method: *Waterra*      Purge Depth:      Purge Rate: (gpm)

Time:	1153					
Volume Purged (gal)	1	2	3			
Temperature (C)	23.97					
pH	6.61					
Spec. Cond. (uS/cm)	9389					
DO (mg/L)	1.54					
DO (%)	18.9					
ORP (mV)	-145.0					
Odor (Y/N)	~					
Casing Volumes	1	2	3			
Dewatered (Y/N)	~					

Comments/Observations: *PID NOT REGULAR 80%*

**SAMPLING DATA**

Time Sampled: *1300*      Approximate Depth to Water During Sampling: *5.15* (feet)

Comments: *DEWATERED AT 1.5 GALLONS*

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity/ Color	Analytical Method
MW-1	7	VOA	HCl	40 mL	/	SEE COC
					/	
					/	

Total Purge Volume: *1.5* (gallons)      Disposal: *OK*

Weather Conditions: *OK*

Problems Encountered During Purging and Sampling: *YES DEWATERED*

Comments:



## GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: MW-2	Date: 06-27-07
Project No: TMTIDE1, S107	Personnel: ALEX	

### GAUGING DATA

Water Level Measuring Method: INTERFACE PROBE      Measuring Point Description:

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
		7.19	2.46	4.73	X 1	2	4	6	.75
				0.04	0.16	0.64	1.44		

### PURGING DATA

Purge Method: *Waterra*      Purge Depth:      Purge Rate: (gpm)

Time	1106	1109	1112			
Volume Purged (gal)	1	2	3			
Temperature (C)	23.33	23.34	23.21			
pH	6.42	6.39	6.40			
Spec. Cond. (uS/cm)	2951	2958	2961			
DO (mg/L)	2.10	1.79	1.63			
DO (%)	24.9	21.2	19.3			
ORP (mV)	-88.0	-90.6	-93.0			
Odor (Y/N)	N	N	N			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

### SAMPLING DATA

Time Sampled: 1125      Approximate Depth to Water During Sampling: 3.37 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity/ Color	Analytical Method
MW-2	7	VOA	HCl	40 mL	/	SEE COC
					/	
					/	

Total Purge Volume: 3 (gallons)      Disposal:

Weather Conditions: OK

Problems Encountered During Purging and Sampling: NONE

Comments:



## GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: <b>MW-3</b>	Date: 06-27-07
Project No: TMTIDE1, S107	Personnel: Alex	

### GAUGING DATA

Water Level Measuring Method: INTERFACE PROBE      Measuring Point Description:

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
	6.93	- 1.90	= 5.03	X	1	2	4	6	.80
				0.04	0.16	0.64	1.44		

### PURGING DATA

Purge Method: *Waterma*      Purge Depth:      Purge Rate: (gpm)

Time:	1037	1059	1043			
Volume Purged (gal)	1	2	3			
Temperature (C)	23.86	23.84	23.83			
pH	4.59	6.59	6.59			
Spec. Cond. (uS/cm)	3260	3006	2957			
DO (mg/L)	2.06	1.95	1.96			
DO (%)	24.7	23.3	22.7			
ORP (mV)	-135.7	-138	-138.5			
Odor (Y/N)	N	N	N			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

### SAMPLING DATA

Time Sampled: 1055      Approximate Depth to Water During Sampling: 1.98 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity/ Color	Analytical Method
<b>MW-3</b>	<b>7</b>	<b>VOA</b>	<b>HCl</b>	<b>40 mL</b>	/	<b>SEE COC</b>
					/	
					/	

Total Purge Volume: 3 (gallons)      Disposal:

Weather Conditions: OK

Problems Encountered During Purging and Sampling: none

Comments: No BOTS



## GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: MW-4	Date: 06-27-07
Project No: TMTIDE1, S107	Personnel: ALEX	

GAUGING DATA									
Water Level Measuring Method: INTERFACE PROBE				Measuring Point Description:					
WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
		7.70	3.26	4.44	1	2	4	6	.71
				0.04	0.16	0.64	1.44		

PURGING DATA						
Purge Method: Waterra		Purge Depth:		Purge Rate:		(gpm)
Time:	1214	1219	1224			
Volume Purged (gal)	1	2	3			
Temperature (C)	21.50	21.46	21.20			
pH	6.77	6.78	6.77			
Spec. Cond. (uS/cm)	8341	8540	9333			
DO (mg/L)	1.57	1.49	1.44			
DO (%)	18.3	17.4	16.8			
ORP (mV)	-155.5	-156.2	-157.9			
Odor (Y/N)	N	N	N			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			
Comments/Observations:						

SAMPLING DATA	
Time Sampled: 1315	Approximate Depth to Water During Sampling: 4.10 (feet)
Comments:	

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity/ Color	Analytical Method
MW-4	7	VOA	HCl	40 mL	/	SEE COC
					/	
					/	

Total Purge Volume: 3 (gallons)	Disposal:
Weather Conditions: OK	
Problems Encountered During Purging and Sampling: none	
Comments:	

## **Appendix B**

### **Laboratory Analytical Report and Chain-of-Custody Documentation**



Report Number : 57251

Date : 7/2/2007

Maura Dougherty  
ETIC Engineering, Inc  
2285 Morello Avenue  
Pleasant Hill, CA 94523

Subject : 5 Water Samples  
Project Name : Tidewater  
Project Number : TMTIDE1, S107

Dear Ms. Dougherty,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 57251

Date : 7/2/2007

Project Name : Tidewater

Project Number : TMTIDE1, S107

Sample : MW-1

Matrix : Water

Lab Number : 57251-01

Sample Date :6/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Methyl-t-butyl ether (MTBE)</b>	4.4	0.50	ug/L	EPA 8260B	6/29/2007
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	91.9		% Recovery	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	113		% Recovery	EPA 8260B	6/29/2007
<b>TPH as Diesel (Silica Gel)</b>	< 50	50	ug/L	M EPA 8015	6/29/2007
Octacosane (Diesel Silica Gel Surr)	109		% Recovery	M EPA 8015	6/29/2007

Sample : MW-2

Matrix : Water

Lab Number : 57251-02

Sample Date :6/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Methyl-t-butyl ether (MTBE)</b>	1.8	0.50	ug/L	EPA 8260B	6/29/2007
<b>TPH as Gasoline</b>	200	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	6/29/2007
<b>TPH as Diesel (Silica Gel)</b>	10000	50	ug/L	M EPA 8015	6/29/2007
Octacosane (Diesel Silica Gel Surr)	106		% Recovery	M EPA 8015	6/29/2007

Approved By:

Jocel Kiff





Report Number : 57251

Date : 7/2/2007

Project Name : Tidewater

Project Number : TMTIDE1, S107

Sample : MW-3

Matrix : Water

Lab Number : 57251-03

Sample Date :6/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Methyl-t-butyl ether (MTBE)</b>	25	0.50	ug/L	EPA 8260B	6/29/2007
<b>TPH as Gasoline</b>	140	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	6/29/2007
<b>TPH as Diesel (Silica Gel)</b>	2600	50	ug/L	M EPA 8015	6/29/2007
Octacosane (Diesel Silica Gel Surr)	102		% Recovery	M EPA 8015	6/29/2007

Sample : MW-4

Matrix : Water

Lab Number : 57251-04

Sample Date :6/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Toluene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Ethylbenzene</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Total Xylenes</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>Methyl-t-butyl ether (MTBE)</b>	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
<b>TPH as Gasoline</b>	< 50	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	90.0		% Recovery	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	6/29/2007
<b>TPH as Diesel (Silica Gel)</b>	320	50	ug/L	M EPA 8015	6/29/2007
Octacosane (Diesel Silica Gel Surr)	97.5		% Recovery	M EPA 8015	6/29/2007

Approved By:

Jdel Kiff



Report Number : 57251

Date : 7/2/2007

Project Name : Tidewater

Project Number : TMTIDE1, S107

Sample : QCTB

Matrix : Water

Lab Number : 57251-05

Sample Date :6/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	92.7		% Recovery	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	6/29/2007

Approved By:

Joel Kiff

Report Number : 57251

Date : 7/2/2007


QC Report : Method Blank Data

Project Name : Tidewater

Project Number : TMTIDE1, S107

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	6/29/2007
Octacosane (Diesel Silica Gel Surr)	110		%	M EPA 8015	6/29/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	91.8		%	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	113		%	EPA 8260B	6/29/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/29/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/29/2007
Toluene - d8 (Surr)	101		%	EPA 8260B	6/29/2007
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	6/29/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:  \_\_\_\_\_  
Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 57251


Date : 7/2/2007

**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Project Name : **Tidewater**

Project Number : **TMTIDE1, S107**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH-D (Si Gel)	Blank	<50	1000	1000	848	871	ug/L	M EPA 8015	6/29/07	84.8	87.1	2.71	70-130	25
Benzene	57253-02	<0.50	40.0	40.0	40.8	38.5	ug/L	EPA 8260B	6/29/07	102	96.3	5.81	70-130	25
Toluene	57253-02	<0.50	40.0	40.0	35.4	33.8	ug/L	EPA 8260B	6/29/07	88.4	84.4	4.67	70-130	25
Tert-Butanol	57253-02	<5.0	200	200	196	182	ug/L	EPA 8260B	6/29/07	98.2	90.8	7.75	70-130	25
Methyl-t-Butyl Ether	57253-02	<0.50	40.0	40.0	34.0	32.7	ug/L	EPA 8260B	6/29/07	85.0	81.7	4.06	70-130	25
Benzene	57244-04	<0.50	40.0	40.0	40.6	39.7	ug/L	EPA 8260B	6/29/07	102	99.2	2.28	70-130	25
Toluene	57244-04	<0.50	40.0	40.0	40.7	39.7	ug/L	EPA 8260B	6/29/07	102	99.2	2.44	70-130	25
Tert-Butanol	57244-04	<5.0	200	200	223	225	ug/L	EPA 8260B	6/29/07	111	112	1.03	70-130	25
Methyl-t-Butyl Ether	57244-04	<0.50	40.0	40.0	36.7	36.4	ug/L	EPA 8260B	6/29/07	91.8	90.9	0.957	70-130	25

Approved By:  \_\_\_\_\_  
 Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 57251

Date : 7/2/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : Tidewater

Project Number : TMTIDE1, S107

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/29/07	103	70-130
Toluene	40.0	ug/L	EPA 8260B	6/29/07	89.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/29/07	93.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/29/07	84.8	70-130
Benzene	40.0	ug/L	EPA 8260B	6/29/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	6/29/07	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/29/07	110	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/29/07	91.4	70-130

KIFF ANALYTICAL, LLC

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

Approved By:

  
Joel Kiff



2795 2nd Street Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4802

SRG # / Lab No. 57251

Project Contact (Hardcopy or PDF To): Maura Dougherty		California EDF Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Chain-of-Custody Record and Analysis Request													
Address: 2285 Morello Avenue Pleasant Hill, CA 94523		Sampling Company Log Code: TMTIDE1, S107															
Phone: 925-602-4710		Fax: 925-602-4720		Global ID: T0600100451		Analysis Request										TAT	
Project #: TMTIDE1, S107		P.O. #:		EDF Deliverable To (Email Address): mdougherty@eticeng.com		MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb MTBE (EPA 8260B) @ 0.5 ppb BTEX (EPA 8260B) TPH Gas (EPA 8260B) 5 Oxygenates (EPA 8260B) 7 Oxygenates (EPA 8260B) Lead Scav (1,2 DCA & EDB-EPA 8260B) Volatile Halocarbons (EPA 8260B) Volatile Organics Full List (EPA 8260B) Volatile Organics (EPA 824.2 Drinking Water) TPH as Diesel (EPA 8015M) w/ silica gel cleanup TPH as Motor Oil (EPA 8015M) Filter & acidify then analyze-Lead (EPA 6010) W.E.T. Lead (STLC)										<input type="checkbox"/> 12 hr	For Lab Use Only
Project Name: Tidewater		Sampler Signature: <i>Alan Marshall</i>														<input type="checkbox"/> 24 hr	
Project Address: 4919 Tidewater Avenue Oakland, CA		Sampling		Container			Preservative			Matrix			<input type="checkbox"/> 48hr				
Sample Designation	Date	Time	40-ml HCL VOA	Sleeve	Unpres. Poly.	Glass	Tedlar	HCl	HNO <sub>3</sub>	None	Water	Soil	Air	<input type="checkbox"/> 72 hr			
MW-1	06-27-07	1300	7					X			X			<input checked="" type="checkbox"/> 1 wk			
MW-2		1125	7					X			X			01			
MW-3		1055	7					X			X			02			
MW-4		1315	7					X			X			03			
QCTB		0830	6					X			X			04			
Relinquished by: <i>Alan Marshall</i>		Date 06-27-07	Time 1500	Received by:		Remarks: Please also send the PDF report to : eticlabreports@eticeng.com											
Relinquished by:		Date	Time	Received by:		Bill to: ETIC Engineering, Inc., 2285 Morello Avenue, Pleasant Hill, CA 94523											
Relinquished by:		Date 062807	Time 1240	Received by Laboratory: <i>[Signature]</i> K.F. Analytical		For Lab Use Only: Sample Receipt											
Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present												
0.2	AG	062807	1455	JL-5	<input checked="" type="checkbox"/> Yes / No												