

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

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Alameda County
Environmental Health

January 11, 2008

Ms. Donna Drogos
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, Fourth Quarter 2007
4919 Tidewater Avenue, Oakland, California

Case No. RO0000107

Dear Ms. Drogos,

On behalf of R. W. L. Investments, Inc., ETIC Engineering, Inc. prepared the attached *Semi-annual Groundwater Monitoring Report, Fourth Quarter 2007* dated January 2008 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
Fourth Quarter 2007**

**Former DiSalvo Trucking
4919 Tidewater Avenue, Unit B
Oakland, California 94601**

Fuel Leak Case Number: RO0000107

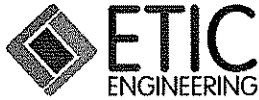
January 2008

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**



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Maura E. Dougherty
Maura E. Dougherty, P.E.
Project Manager

January 11, 2008
Date

Alan Anselmo
Alan Anselmo, P.E.
Program Manager



January 11, 2008
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

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LOP Program Manager
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1.0 INTRODUCTION

On behalf of R.W.L. Investments, Inc., ETIC Engineering, Inc. (ETIC) has prepared this *Semi-annual Groundwater Monitoring Report, Fourth 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 November 26, 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 South, Range 3, of the Mount Diablo Baseline and Meridian. The Site is currently owned by R.W.L. Investments, Inc. and leased to Heitz Trucking.

The 3.61 acre property contains a concrete warehouse and loading dock terminal along the north side of the Site, an office trailer, and a truck repair shop and maintenance building along the southern side of the Site (Figure 2). An aboveground 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 onsite investigations indicate that the area beneath the Site was likely filled to create land and lift the surface approximately 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 (ART, 2007). The thickness of the fill material varies across the Site from about 1.5 feet near the southern corner, to 4 to 5 feet along the northern portion of the property, to more than 9 feet thick along Tidewater Avenue (ART, 2007). The fill is underlain by organic clay with thin interbeds of peat material.

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). The hydraulic gradient has historically ranged from 0.001 to 0.008 foot-per-foot. Groundwater flow direction has ranged from the generally south to the west-northwest. There may not be a dominant gradient or flow direction due to the influence of tidal fluctuations from the nearby tidal canal.

2.3 TOPOGRAPHY AND SURFACE WATER

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

San Leandro Bay is located approximately 350 feet to the south of the site. 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

DiSalvo Trucking reportedly operated one 10,000-gallon diesel underground storage tank (UST), one 5,000-gallon diesel UST, and one 280-gallon used-oil UST at the Site until their removal in March 1989 (GET,1989a). The USTs were reportedly installed in 1968 with a remote dispenser system (GET, 1989b). The remote dispenser system consisted of four remote hydrants in two separate lines, one on the north side and one on the south side of the trucking terminal building. Two pressurized single-wall 2-inch diameter galvanized steel lines were connected to a red jacket pump located on the 10,000-gallon diesel UST. One 2-inch diameter product line crossed underneath the trucking terminal building and connected to the first remote hydrant on the north side of the building and the second 2-inch product line connected to the first remote hydrant on the north side of the building, adjacent to the USTs. A 1½-inch diameter galvanized steel line connected the first hydrant to the second remote hydrant in each line. The hydrant lines were located approximately 2 feet bgs (GET, 1989b).

In March 1989, the three USTs, fill lines, and the southern remote hydrant dispenser lines were removed. Two areas of corrosion were visible when the hydrant line was removed (GET, 1989b). During removal activities a 550-gallon UST was discovered and also removed. Visual inspection identified two holes in the 550-gallon UST. In addition, a 10-inch diameter pipeline crossing the excavation was discovered. The pipe was broken during excavation activities and "diesel-like fuel" drained into the UST excavation (GTE, 1994a). The pipe was cut, the middle section was removed, and the ends were capped at the limits of the excavation (GTE, 1994a).

Petroleum hydrocarbons were detected at concentrations up to 240 milligrams per kilogram (mg/kg) in soil samples collected from the UST excavation. Diesel-impacted groundwater was observed flowing into the open UST excavation from the northeastern corner.

Approximately 3,000 cubic yards of excavated soil were treated onsite by enhanced biodegradation (GTE, 1991). The excavated soil was placed into a landscape berm located between Tidewater Avenue and the site boundary and used as fill across the Site (GTE, 1994c).

The liquid-phase hydrocarbons (LPH) and contaminated groundwater were pumped from the excavation pit for disposal. In April 1989, 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 between April and August 1989 (GTE, 1991).

2.5 SUBSURFACE INVESTIGATIONS (1989 THROUGH 2006)

Subsurface investigations were performed at the Site from 1989 to 2006. Historical sampling locations are shown on Figure 3. These investigations confirmed the presence of diesel- and gasoline-impacted soil and groundwater beneath the Site and identified LPH at various locations including 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 11 soil samples and one groundwater sample were collected from 22 shallow soil borings (BH-1 through BH-22). Samples were not collected from borings with obvious petroleum impacts (GET, 1989b). Soil sampling confirmed the presence of diesel-impacted soil in the area of the former UST excavation and along the former fuel dispenser hydrant line extending from the former USTs to the northeast. The maximum TPH-d concentration (46,000 mg/kg) was detected in a soil sample collected at 5 feet bgs from boring BH-11, located approximately 10 feet west of the former UST excavation (GET, 1989b). Oil and grease was detected in the same sample at a concentration of 27,000 mg/kg.

In an April 1994 soil and groundwater investigation, Gen-Tech Environmental (GTE) drilled 14 borings (EB-1 through EB-11 and MW-1 through MW-3), collected soil and groundwater samples, and installed three groundwater monitoring wells (MW-1 through MW-3) (GTE, 1994b). The maximum concentrations of TPH-d (29,000 mg/kg) and oil and grease (36,000 mg/kg) in soil were detected in samples from boring MW-2. The maximum concentrations of TPH-d detected during grab groundwater sampling were 64,000 micrograms per liter ($\mu\text{g/L}$) from boring EB-2 and 73,000 $\mu\text{g/L}$ from boring EW-4. Groundwater monitoring well sampling conducted on April 14, 1994 indicated LPH 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 (GTE, 1994b).

In July 1995, Environmental Restoration Services (Enrest) drilled two soil borings and installed monitoring well MW-4 (ART, 2007). MW-4 was installed on the northern side of the terminal building. TPH-g (450 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) during a soil and groundwater investigation in December 2000. Eight soil samples between 6 and 7 feet bgs and 16 grab groundwater samples were collected and analyzed for TPH-d. The only TPH-d detection in soil was 14 mg/kg in a sample collected from SB-16 at 6.5 feet bgs. The maximum TPH-d concentration in groundwater was 670,000 µg/L (SB-10). PIERS identified two main areas of TPH-d impacted soil: 1) located in the area of the former UST excavation and 2) from the northeast end of the recovery trench to the area of MW-2. TPH-d concentrations in groundwater along the northwestern property boundary were 44,000 µg/L (SB-14) and 48,000 µg/L (SB-15) and PIERS concluded that the groundwater contamination plume extended offsite to the northwest.

In February and April 2006, ERAS Environmental (ERAS) conducted additional subsurface investigations to further delineate vertical and lateral extents of diesel impacts in soil and groundwater at the Site (ERAS, 2006b). In February 2006, ERAS collected soil and groundwater samples from soil borings B-1 through B-9 for TPH-d analysis and Murray Engineers, Inc. (Murray) collected soil samples from borings B-6 through B-9 for geotechnical analysis (named B-1 through B-4 for the Murray report). In April 2006, an 8-inch dewatering well (EW-1) and four observation wells (OB-3 through OB-6) were installed and soil and groundwater samples were collected from borings B-10 through B-15. No LPH was encountered during these investigations. The maximum detection of TPH-d in soil was 5,400 mg/kg collected from B-9 at 4.5 feet bgs, located adjacent to the southwestern corner of the former UST excavation. The maximum concentration of TPH-d in groundwater was 2,500,000 µg/L collected from B-12 located northwest of the former UST excavation.

Geotechnical results were reported by Murray in an April 2006 *Limited Geotechnical Evaluation Contaminated Soil Replacement Report*. The report summarized the subsurface geology and provided shoring design parameters for potential excavation activities at the Site.

Applied Remedial Technologies, Inc. (ART) conducted a groundwater aquifer test and construction dewatering analysis in April 2006. ART performed both a step drawdown pumping test and a constant-rate aquifer test at well EW-1. Pumping from EW-1 (screened across the fill material and approximately three feet into the clay unit underlying the fill material) resulted in drawdowns in all observation wells screened in fill material. No

drawdown was observed in well OB-5, which was screened in the clay unit, located approximately seven feet from EW-1 (ART, 2007).

In February 2007, ART prepared a *Feasibility Study Report* to address the removal of petroleum hydrocarbons from the Site subsurface. Based on the feasibility evaluation of remedial alternatives, ART recommended groundwater extraction and treatment with limited source area remediation.

2.6 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 had LPH, which was removed by bailing. Groundwater flow direction has been difficult to determine due to tidal influence and it has generally flowed to the southwest and west with a shallow gradient. The second semi-annual 2007 groundwater sampling event took place in November 2007.

2.7 CURRENT SITE STATUS

In accordance with the May 29, 2007 letter from the ACHCSA, ETIC submitted the *Remedial Action Plan (RAP)* dated September 14, 2007. The RAP included a description of how the affected soil area would be precisely determined and how remedial alternatives other than excavation would be evaluated. ETIC will begin preparations for field activities outlined in the RAP upon approval from the ACHCSA.

3.0 GROUNDWATER MONITORING

On behalf of R.W.L. Investments, Inc., ETIC performed the semi-annual groundwater monitoring event on November 26, 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 5. 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

oil/water interface probe. Each monitoring well was purged a minimum of three casing volumes of groundwater with a disposable bailer, with the exception of MW-1 which dewatered after one 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 onsite for subsequent profiling and offsite 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 an oil/water interface probe.

A groundwater elevation contour map for the November 2007 monitoring event is presented on Figure 4, and current and historical groundwater elevations are presented in Table 2. The depth to groundwater ranged from approximately two to four feet bgs. The groundwater elevations ranged from -1.12 feet relative to msl in MW-1 to 0.76 feet relative to msl in MW-2. The direction of groundwater flow was generally to the southwest with a hydraulic gradient of approximately 0.008 foot-per-foot.

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

Laboratory analytical data for groundwater samples collected in November 2007 are presented on Figure 5. 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 of 25,000 $\mu\text{g/L}$ in MW-2, 690 $\mu\text{g/L}$ in MW-3, and 1,400 $\mu\text{g/L}$ in MW-4. TPH-d was not detected in the groundwater sample collected from MW-1.

TPH-g was detected in groundwater samples collected from two monitoring wells, at concentrations of 330 µg/L in MW-2 and 160 µg/L in MW-3. TPH-g was not detected in the groundwater samples collected from MW-1 and MW-4.

BTEX was not detected in any of the groundwater samples collected on November 26, 2007.

3.4 ANALYTICAL DATA FOR MTBE

MTBE was detected in groundwater samples collected from three monitoring wells, at concentrations of 5.0 µg/L in MW-1, 2.4 µg/L in MW-2, and 27 µg/L in MW-3. The sample from MW-3 exceeded the Title 22 California Code of Regulations (CCR) Maximum Contaminant Level (MCL) for MTBE in drinking water of 13 µg/L. MTBE was not detected in the groundwater sample collected from MW-4.

4.0 SUMMARY AND CONCLUSIONS

A summary of current Site conditions is presented below:

- During the November 26, 2007 sampling event, monitoring wells MW-1, MW-2, MW-3, and MW-4 were gauged and sampled;
- During the November 2007 event, groundwater elevations ranged from -1.12 to 0.76 feet relative to msl. The direction of groundwater flow was to the southwest with a hydraulic gradient of approximately 0.008 foot-per-foot;
- TPH-d was detected in the groundwater samples collected from MW-2, MW-3, and MW-4. TPH-g was detected in the samples from MW-2 and MW-3. 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; and
- The analytical data from November 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 PLANNED SITE ACTIVITIES

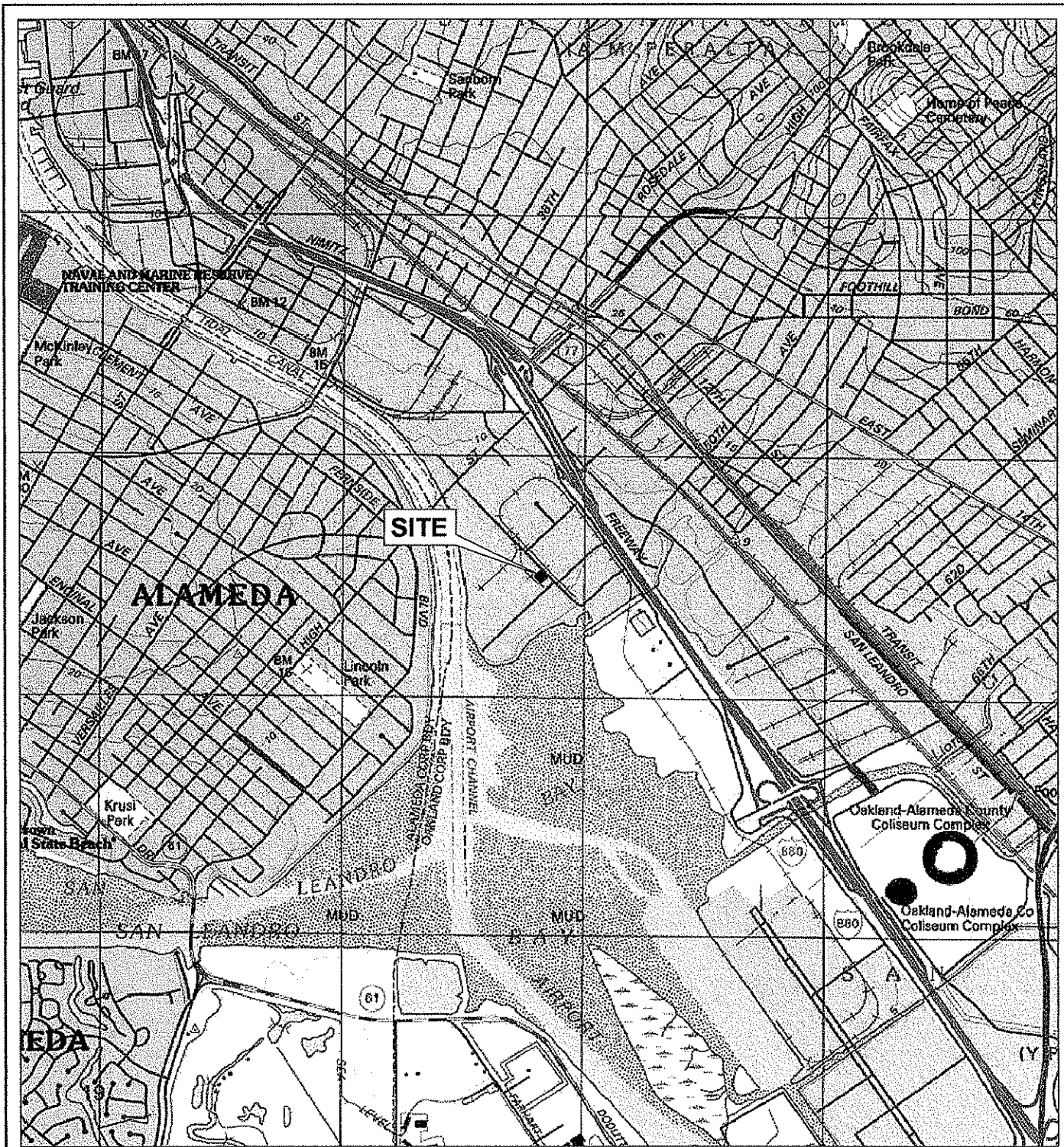
In accordance with the May 29, 2007 letter from the ACHCSA, ETIC submitted the *Remedial Action Plan* (RAP) dated September 14, 2007. ETIC will begin preparations for field activities outlined in the RAP upon approval from the ACHCSA.

The first semi-annual groundwater monitoring event for 2008 is scheduled for May.

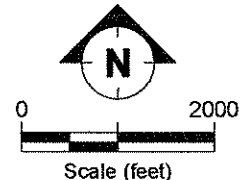
6.0 REFERENCES

- Applied Remedial Technologies, Inc. (ART), 2007. Feasibility Study Report, Heitz Trucking, 4919 Tidewater Avenue, Unit B, Oakland, California. February 26.
- ERAS Environmental, Inc. (ERAS), 2006. Groundwater Monitoring Report, Quarter 1 2005, 4919 Tidewater Avenue, Oakland, California. February 23.
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- Geo-Environmental Technology (GET), 1989a. Letter Re: Underground Tank Removal, 4919 Tidewater Ave., Oakland, California 94612. April 27.
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- Gen-Tech Environmental (GTE), 1991. Contaminated Site Interim Report and Technical Work Plan for Migration Control, 4919 Tidewater Ave., Oakland, CA 94612. March 12.
- GTE, 1994a. Summary Report of Previous Site Activity for DiSalvo Trucking, 4919 Tidewater Avenue, Oakland, California. March 24.
- GTE, 1994b. Soil and Groundwater Investigation Site at 4919 Tidewater Avenue, Oakland, CA. May17.
- GTE, 1994c. Letter Re: Supplemental Technical Report Letter on Bioremediation of Contaminated Soils and Trench Installation for the DiSalvo Trucking Facility at 4919 Tidewater Ave., Oakland, CA 94601. July 12.

Figures



SOURCE: USGS Topographic Map

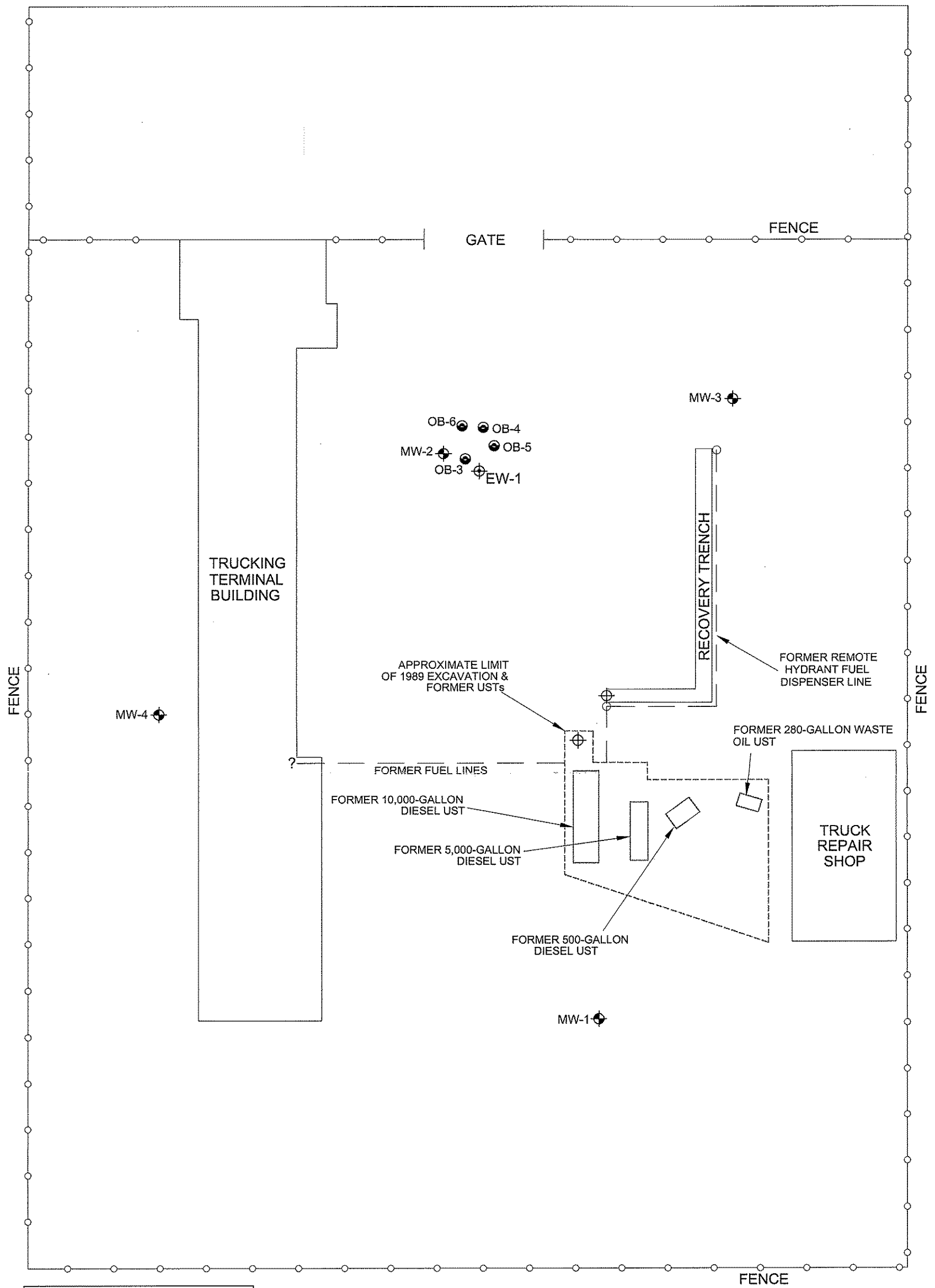


SITE LOCATION AND TOPOGRAPHIC MAP
FORMER DISALVO TRUCKING
4919 TIDEWATER
OAKLAND, CALIFORNIA

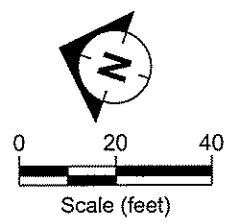
FIGURE:
1

FILENAME: TOP00707.DWG 07/20/05

TIDEWATER AVENUE



LEGEND	
	Groundwater monitoring well
	Recovery well
	Extraction well
	Observation well



Source: Basemap from Applied Remedial Technologies, February 2007

FILENAME: SAMPLE0807.DWG 08/17/07

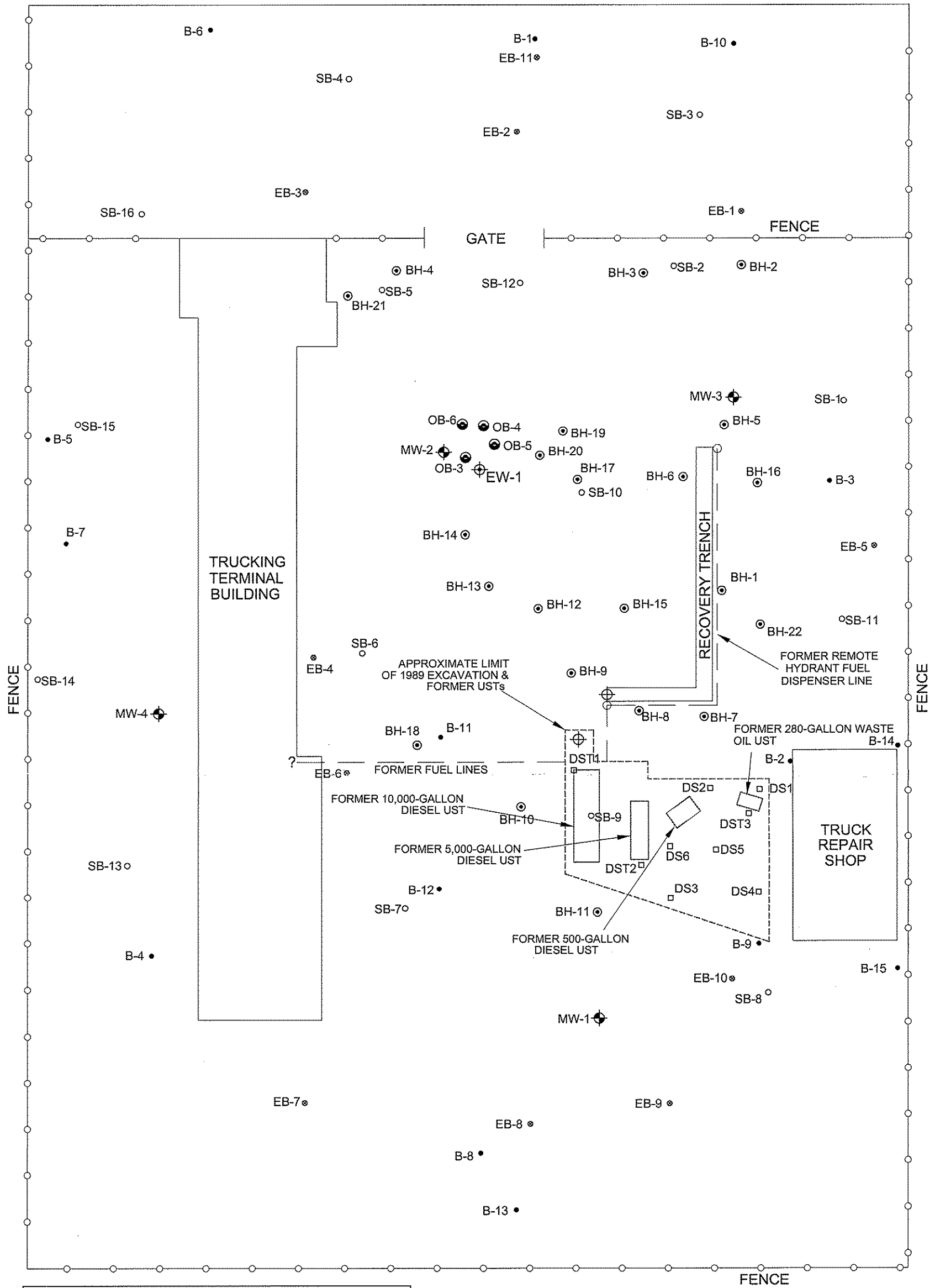


SITE MAP
FORMER DISALVO TRUCKING
4919 TIDEWATER
OAKLAND, CALIFORNIA

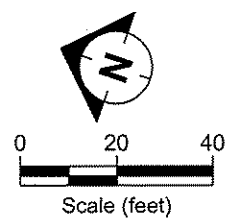
FIGURE:

2

TIDEWATER AVENUE



LEGEND	
	Groundwater monitoring well
	Recovery well
	Extraction well
	Observation well
	Excavation sampling location (GET, 1989)
	Soil sampling location (GET, 1989)
	Soil and groundwater sampling location (GEN-TECH, 1994)
	Soil and groundwater sampling location (PIERS, 2000)
	Soil and groundwater sampling location (ERAS, 2006)



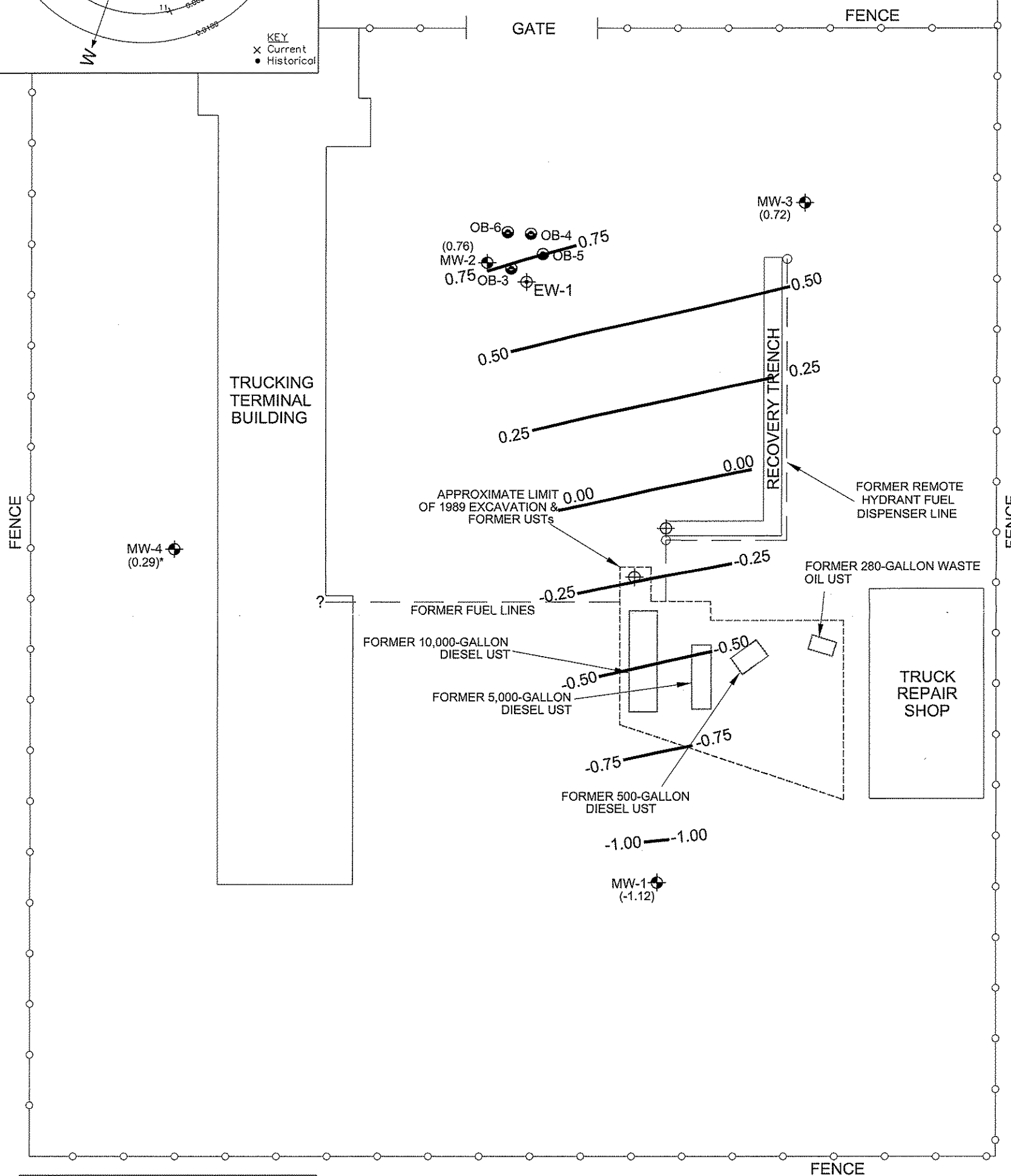
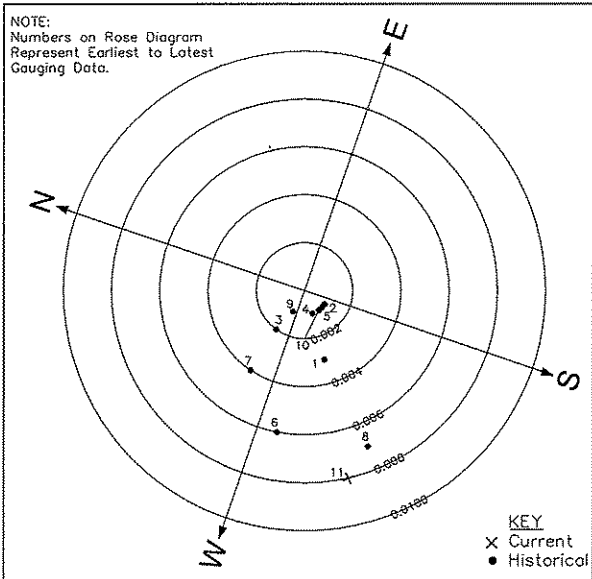
Source: Basemap from Applied Remedial Technologies, February 2007

SITE MAP WITH HISTORICAL SAMPLING LOCATIONS
 FORMER DISALVO TRUCKING
 4919 TIDEWATER
 OAKLAND, CALIFORNIA

FIGURE:

3

TIDEWATER AVENUE

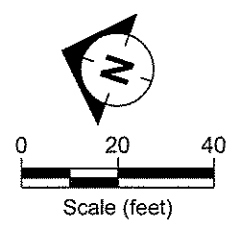


LEGEND

- ◆ Groundwater monitoring well
- ⊕ Recovery well
- ⊕ Extraction well
- Observation well
- (0.76) Groundwater elevation (feet)
- ~ Groundwater elevation contour (feet)
- * Not used in contouring

Note: Elevations referenced to Mean Sea Level

GW
Groundwater Flow Direction
Gradient = 0.008



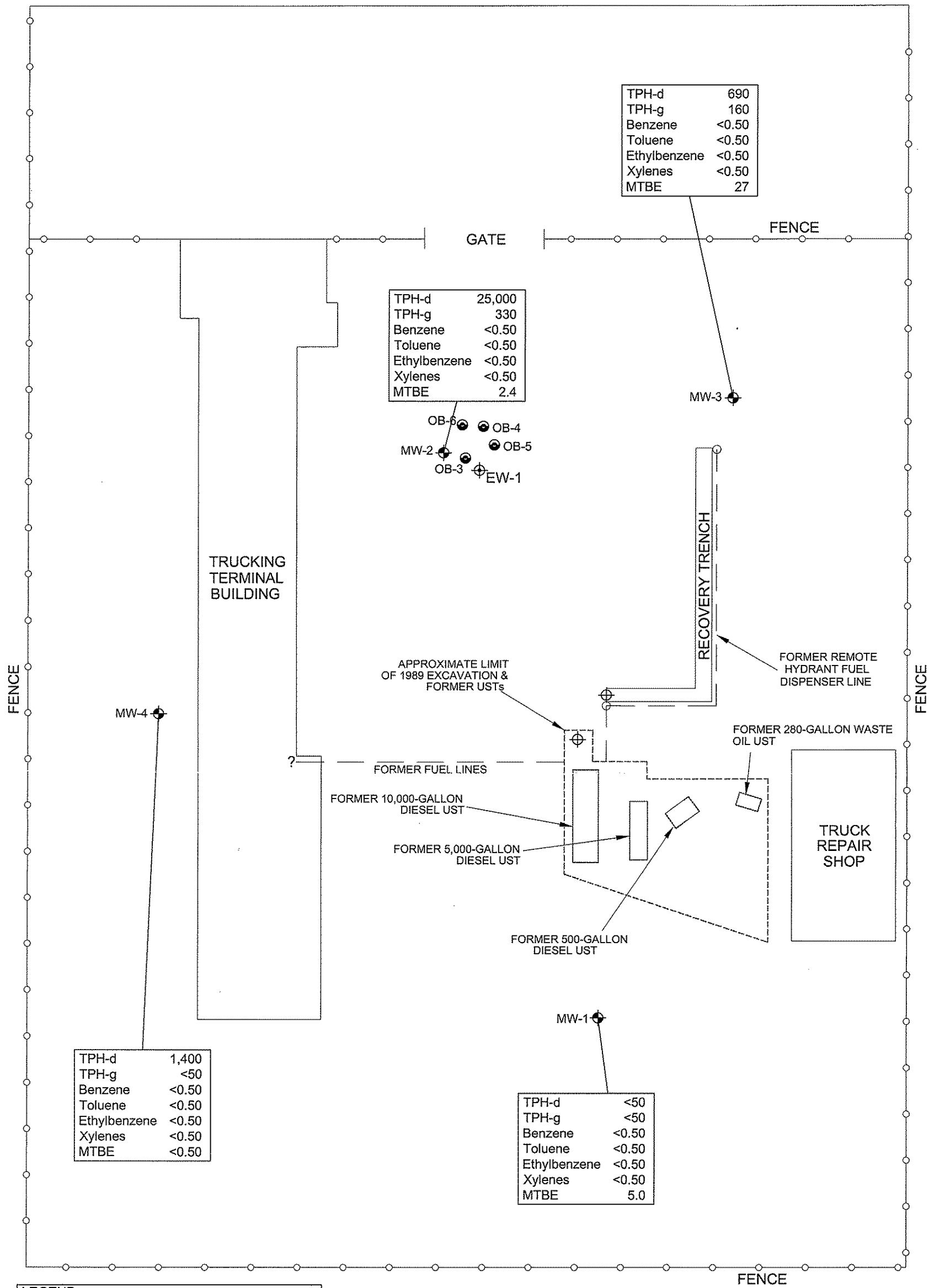
Source: Basemap from Applied Remedial Technologies, February 2007

GROUNDWATER ELEVATION CONTOUR MAP
NOVEMBER 26, 2007
FORMER DISALVO TRUCKING
4919 TIDEWATER, OAKLAND, CALIFORNIA

FIGURE:

4

TIDEWATER AVENUE

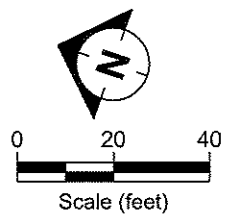


LEGEND

- ◆ Groundwater monitoring well
- ⊕ Recovery well
- ⊖ Extraction well
- ⊙ Observation 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 (µg/L).



Source: Basemap from Applied Remedial Technologies, February 2007.

SITE MAP SHOWING GROUNDWATER ANALYTICAL RESULTS
 NOVEMBER 26, 2007
 FORMER DISALVO TRUCKING
 4919 TIDEWATER, OAKLAND, CALIFORNIA

FIGURE:
5

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	Sch. 40 PVC	8	8	NDA	2	0.02	3-8	2.5-8	#2/12 Sand
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
OB3	4/7/2006	NDA	Sch. 40 PVC	8	8	8	2	0.020	2-7	1.5-7	#2/12 Sand
OB4	4/7/2006	NDA	Sch. 40 PVC	NDA	10	8	2	0.020	2.5-10	2-10	#2/12 Sand
OB5	4/7/2006	NDA	Sch. 40 PVC	NDA	15	NDA	2	0.020	10-15	8.5-15	#2/12 Sand
OB6	4/7/2006	NDA	Sch. 40 PVC	NDA	7.5	8	2	0.020	2-6.5	1-6.5	#2/12 Sand
EW1	4/14/2006	NDA	Sch. 40 PVC	11.5	11.5	36	8	0.032	NDA	NDA	#2/12 Sand-1/4" gravel mix

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

Monitoring Well	Gauging Date	Top of Casing Elevation (feet msl)	Depth to Water (feet bgs)	Free Product Thickness (feet)	Groundwater Elevation (feet msl)
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	6.10	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	6/27/2007	2.68	1.82	0.00	0.86
MW-1	11/26/2007	2.68	3.80	0.00	-1.12
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	6/27/2007	3.50	2.46	0.00	1.04
MW-2	11/26/2007	3.50	2.74	0.00	0.76

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

Monitoring Well	Gauging Date	Top of Casing Elevation (feet msl)	Depth to Water (feet bgs)	Free Product Thickness (feet)	Groundwater Elevation (feet msl)
MW-3	4/14/1994	2.90	1.33	0.00	1.57
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-3	11/26/2007	2.90	2.18	0.00	0.72
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
MW-4	11/26/2007	3.87	3.58	0.00	0.29

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 ¹	<50	<1	<1	<1	<1	6.0
MW-1	1/25/2006	3,600 ²	<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-1	11/26/2007	<50	<50	<0.50	<0.50	<0.50	<0.50	5.0
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 ²	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-2	11/26/2007	25,000	330	<0.50	<0.50	<0.50	<0.50	2.4
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

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	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
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 ²	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-3	11/26/2007	690	160	<0.50	<0.50	<0.50	<0.50	27
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
MW-4	11/26/2007	1,400	<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
Travel Blank	11/26/2007	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50
Title 22 CCR MCLs		NE	NE	1	150	300	1,750	13

Notes:

µg/L = Micrograms per liter.

TPH-d = Total petroleum hydrocarbons quantified as diesel.

TPH-g = Total petroleum hydrocarbons quantified as gasoline.

MTBE = Methyl tertiary butyl ether.

NA = Not analyzed.

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: 11-20-07
Project No: TMTIDE1, S207	Personnel: AWK	

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)
		6.70	3.80	2.90	1	4	6	.46	1.39
				0.04	0.16	0.64	1.44		

PURGING DATA

Purge Method: BAILER Purge Depth: Purge Rate: (gpm)

Time:	1021				
Volume Purged (gal)	5	1	1.5		
Temperature (C)	20.54				
pH	6.86				
Spec. Cond. (uS/cm)	17762				
DO (mg/L) (%)	1.76 20.8				
ORP (mV)	-85.5				
Odor (Y/N)	N				
Casing Volumes	1	2	3		
Dewatered (Y/N)	N				

Comments/Observations: DEWATERED AT .75 GALLON / DID NOT RECOVER 80%

SAMPLING DATA

Time Sampled: 1225 Approximate Depth to Water During Sampling: 5.35 (feet)

Comments:

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: .75 (gallons) Disposal:

Weather Conditions: OK

Problems Encountered During Purging and Sampling: Y DEWATERED

Comments:



GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: MW-2	Date: 11-26-07
Project No: TMTIDE1, S207	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)	
	7.22	- 2.74	= 4.48	X	1	2	4	6	.71	= 2.15
					0.04	0.16	0.64	1.44		

PURGING DATA						
Purge Method: BAILER		Purge Depth:		Purge Rate:		(gpm)
Time:	1101	1104	1109			
Volume Purged (gal)	1	2	3			
Temperature (C)	20.89	21.04	21.02			
pH	6.75	6.74	6.73			
Spec. Cond. (uS/cm)	3923	3967	3975			
DO (mg/L) (%)	1.27 / 14.3	.84 / 9.6	.74 / 8.6			
ORP (mV)	-31.2	-35.6	-34.7			
Odor (Y/N)	Y	Y	Y			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

SAMPLING DATA	
Time Sampled: 1135	Approximate Depth to Water During Sampling: 3.60 (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: K	
Problems Encountered During Purging and Sampling: NONE	
Comments:	



GROUNDWATER PURGE AND SAMPLE

Project Name: Tidewater, 4919 Tidewater Ave, Oakland CA	Well No: MW-3	Date: 11-26-07
Project No: TMTIDE1, S207	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)
	6.97	- 2.18	= 4.79	X 1	②	4	6	.76	= 2.29
				0.04	0.16	0.64	1.44		

PURGING DATA						
Purge Method: BAILER		Purge Depth:		Purge Rate:		(gpm)
Time:	1031	1034	1038			
Volume Purged (gal)	1	2	3			
Temperature (C)	19.15	19.22	19.19			
pH	6.78	6.78	6.78			
Spec. Cond. (uS/cm)	3075	3346	3170			
DO (mg/L) (%)	1.52 / 16.5	1.81 / 8.9	1.83 / 9.1			
ORP (mV)	-62.2	-71.7	-73.0			
Odor (Y/N)	N	N	N			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

SAMPLING DATA		
Time Sampled: 1050	Approximate Depth to Water During Sampling: 2.40 (feet)	
Comments:		

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity/ Color	Analytical Method
MW-3	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: MW-4	Date: 11-26-07
Project No: TMTIDE1, S207	Personnel: ALK	

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)								
	7.71	- 3.58	= 4.13	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">0.04</td> <td style="text-align: center;">0.16</td> <td style="text-align: center;">0.64</td> <td style="text-align: center;">1.44</td> </tr> </table>	1	2	4	6	0.04	0.16	0.64	1.44	166	= 198
1	2	4	6											
0.04	0.16	0.64	1.44											

PURGING DATA

Purge Method: BAILER Purge Depth: Purge Rate: (gpm)

Time:	1003	1008	1013			
Volume Purged (gal)	1	2	3			
Temperature (C)	17.65	18.14	17.92			
pH	6.82	6.82	6.84			
Spec. Cond. (uS/cm)	11534	13490	13474			
DO (mg/L) (%)	2.65 28.8	2.03 22.5	2.			
ORP (mV)	-79.9	-70.0	-71.2			
Odor (Y/N)	Y	Y	Y			
Casing Volumes	1	2	3			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

SAMPLING DATA 1245

Time Sampled: Approximate Depth to Water During Sampling: 4.07 (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 : 59773

Date : 12/3/2007

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

Subject : 5 Water Samples
Project Name : Tidewater
Project Number : TMTIDE1, S207

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 : 59773

Date : 12/3/2007

Project Name : Tidewater

Project Number : TMTIDE1, S207

Sample : MW-1

Matrix : Water

Lab Number : 59773-01

Sample Date :11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Methyl-t-butyl ether (MTBE)	5.0	0.50	ug/L	EPA 8260B	11/28/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/28/2007
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	11/28/2007
4-Bromofluorobenzene (Surr)	98.1		% Recovery	EPA 8260B	11/28/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/1/2007
Octacosane (Diesel Silica Gel Surr)	115		% Recovery	M EPA 8015	12/1/2007

Sample : MW-2

Matrix : Water

Lab Number : 59773-02

Sample Date :11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Methyl-t-butyl ether (MTBE)	2.4	0.50	ug/L	EPA 8260B	11/28/2007
TPH as Gasoline	330	50	ug/L	EPA 8260B	11/28/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/28/2007
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	11/28/2007
TPH as Diesel (Silica Gel)	25000	50	ug/L	M EPA 8015	12/1/2007
Octacosane (Diesel Silica Gel Surr)	122		% Recovery	M EPA 8015	12/1/2007

Approved By:

Joel Kiff



Report Number : 59773

Date : 12/3/2007

Project Name : Tidewater

Project Number : TMTIDE1, S207

Sample : MW-3

Matrix : Water

Lab Number : 59773-03

Sample Date :11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Methyl-t-butyl ether (MTBE)	27	0.50	ug/L	EPA 8260B	11/28/2007
TPH as Gasoline	160	50	ug/L	EPA 8260B	11/28/2007
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	11/28/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	11/28/2007
TPH as Diesel (Silica Gel)	690	50	ug/L	M EPA 8015	12/1/2007
Octacosane (Diesel Silica Gel Surr)	125		% Recovery	M EPA 8015	12/1/2007

Sample : MW-4

Matrix : Water

Lab Number : 59773-04

Sample Date :11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/28/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/28/2007
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	11/28/2007
4-Bromofluorobenzene (Surr)	99.9		% Recovery	EPA 8260B	11/28/2007
TPH as Diesel (Silica Gel)	1400	50	ug/L	M EPA 8015	12/1/2007
Octacosane (Diesel Silica Gel Surr)	108		% Recovery	M EPA 8015	12/1/2007

Approved By:

Joel Kiff



Report Number : 59773

Date : 12/3/2007

Project Name : Tidewater

Project Number : TMTIDE1, S207

Sample : QCTB

Matrix : Water

Lab Number : 59773-05

Sample Date : 11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/27/2007
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	11/27/2007
4-Bromofluorobenzene (Surr)	96.5		% Recovery	EPA 8260B	11/27/2007

Approved By:

Joel Kiff

Report Number : 59773

Date : 12/3/2007

QC Report : Method Blank Data

Project Name : **Tidewater**

Project Number : **TMTIDE1, S207**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Silica Gel Surr)	102		%	M EPA 8015	11/28/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/27/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/27/2007
Toluene - d8 (Surr)	99.7		%	EPA 8260B	11/27/2007
4-Bromofluorobenzene (Surr)	98.2		%	EPA 8260B	11/27/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

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

Approved By:


Joel Kiff

Report Number : 59773


Date : 12/3/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : Tidewater

Project Number : TMTIDE1, S207

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	973	940	ug/L	M EPA 8015	11/28/07	97.3	94.0	3.45	70-130	25
Benzene	59753-01	<0.50	40.0	40.0	40.8	39.1	ug/L	EPA 8260B	11/27/07	102	97.7	4.27	70-130	25
Toluene	59753-01	<0.50	40.0	40.0	40.4	38.5	ug/L	EPA 8260B	11/27/07	101	96.2	4.91	70-130	25
Tert-Butanol	59753-01	<5.0	200	200	210	209	ug/L	EPA 8260B	11/27/07	105	104	0.576	70-130	25
Methyl-t-Butyl Ether	59753-01	<0.50	40.0	40.0	42.4	41.8	ug/L	EPA 8260B	11/27/07	106	104	1.48	70-130	25

Approved By:  _____
Joel Kiff

Report Number : 59773

Date : 12/3/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Tidewater**

Project Number : **TMTIDE1, S207**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/27/07	106	70-130
Toluene	40.0	ug/L	EPA 8260B	11/27/07	108	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/27/07	109	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/27/07	108	70-130

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Approved By:


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 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No.

59773

Page 1 of 1

Project Contact (Hardcopy or PDF To): Maura Dougherty
 Address: 2285 Morello Avenue Pleasant Hill, CA 94523
 Phone: 925-602-4710 Fax: 925-602-4720
 Project #: TMTIDE1, S207 P.O. #:
 Project Name: Tidewater
 Global ID: T0600100451
 EDF Deliverable To (Email Address): mdougherty@eticeng.com
 Sampler Signature: *for Marable*

Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling		Container				Preservative			Matrix			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 524-2 Drinking Water)	TPH as Diesel (EPA 8015M) w/ silica gel cleanup	TPH as Motor Oil (EPA 8015M)	Filter & acidify then analyze-Lead (EPA 8010)	W.E.T. Lead (STLC)	TAT	For Lab Use Only			
	Date	Time	40-ml HCL VOA	Sleeve	Unpres. Poly.	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil																	Air		
MW-1	11-26-07	1225	7					X			X			X	X	X						X							<input type="checkbox"/> 12 hr		
MW-2		1135	7					X			X			X	X	X						X								<input type="checkbox"/> 24 hr	
MW-3		1050	7					X			X			X	X	X						X								<input type="checkbox"/> 48 hr	
MW-4		1245	7					X			X			X	X	X						X								<input type="checkbox"/> 72 hr	
QCTB		0700	6					X			X			X	X	X														<input checked="" type="checkbox"/> 1 wk	

Relinquished by: *for Marable* Date: 11-26-07 Time: 1430 Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: 112707 Time: 1127 Received by: *for KIFF Analytical*

Remarks: Please also send the PDF report to : eticiareports@eticeng.com

Bill to: ETIC Engineering, Inc., 2285 Morello Avenue, Pleasant Hill, CA 94523

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
2.3	JLB	112707	1641	LRS	(Yes) / No