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**SITE CONCEPTUAL MODEL**  
**76 SERVICE STATION NO. 3292**  
**15008 EAST 14<sup>TH</sup> STREET**  
**SAN LEANDRO, CALIFORNIA**

**April 10, 2009**

**Prepared for:**

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**Sacramento, CA 95818**

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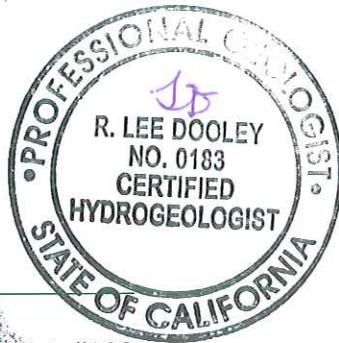
**CERTIFICATION**

The following report was prepared under the supervision and direction of the undersigned Certified California Hydrogeologist

**DELTA CONSULTANTS,**

*R. Lee Dooley*

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California Certified Hydrogeologist #183



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## **1.0 INTRODUCTION**

Delta Consultants, Inc. (Delta), on behalf of ConocoPhillips (COP) has prepared this Site Conceptual Model (SCM) for the 76 Service Station No. 3292 site, located at 15008 E 14<sup>th</sup> Street in San Leandro, California (site) (**Figure 1**). The SCM provides a working hypothesis regarding the current and future distribution of petroleum hydrocarbons and methyl tert-butyl ether (MTBE) detected in soil and groundwater beneath the site area.

The key elements of the SCM are:

- Site history and description
- Regional hydrogeologic setting
- Nature and extent of the petroleum hydrocarbon source(s)
- Contaminant fate and transport characteristics
- Potential exposure pathways
- Potential receptors

## **2.0 SITE LOCATION AND DESCRIPTION**

The following sections provide a description of the site and surrounding area.

### **2.1 Site Location**

The site (Alameda County Assessor's Parcel #80-18-21-3) is located on the eastern corner of the intersection of East 14<sup>th</sup> Street and 150<sup>th</sup> Avenue in San Leandro, California. (**Figures 1 and 2**).

### **2.2 Site Description**

The subject site is an active service station located on the eastern corner of the intersection of East 14<sup>th</sup> Street and 150<sup>th</sup> Avenue in San Leandro, California. Northern and western corners of this intersection were formerly occupied by a Mobil service station and a Phillips service station, and are currently occupied by a commercial building and Quality Tune Up service station, respectively. A Chevron service station is adjacent to the southern corner of the intersection, approximately 200 feet southwest of the subject site. Current 76 Service Station facilities include a station building housing three mechanics service bays, four dispenser islands (under two separate canopies), and two underground storage tanks (USTs) located in a common pit in the western portion of the site. A waste oil UST is present behind the station building, located in the eastern portion of the site.

## **2.3 Site Owner**

The site is currently owned by NETAJ LLC of 584 N. Rengstorff Avenue in Mountain View, California. Prior to July 12, 2007, Sun Core holding CoPII LLC held ownership.

## **3.0 SITE SETTING**

The following sections provide a summary of the regional geologic and hydrogeologic setting.

### **3.1 Regional Geologic Setting**

The site is located on the eastern shore of the San Francisco Bay, west of the Hayward Fault as shown on **Figure 3**. The site vicinity consists of Holocene alluvium, as described by Gettler-Ryan Inc., in their report dated November 24, 1999;

The subject is located on the East Bay Plain, approximately 3 miles east of the San Francisco Bay and  $\frac{3}{4}$  mile west of San Leandro Hills. The site is a relatively flat, concrete and asphalt covered lot at an elevation of approximately 35 feet above mean sea level. As mapped by Helley and others (1979), soil in the site vicinity consists of late Pleistocene alluvium consisting of weakly consolidated, slightly weathered, poorly sorted, irregularly interbedded clay, silt, sand and gravel.

### **3.2 Regional Hydrogeologic Setting**

The site overlies the East Bay Plain Basin Aquifer, which expands over 77,000 acres. Gettler-Ryan Inc., in their report dated May 23, 2003, provided the following description of the regional hydrogeologic setting;

The site is situated on terrain gently sloping to the south/southwest and the nearest surface waters are Estudillo Canal, located approximately 2,800 feet south, and San Leandro Creek, located approximately 1.4 miles south. Estudillo Creek flows toward the southwest and ultimately drains into the San Francisco Bay. Based on historical groundwater monitoring results, groundwater flow is toward the south/southwest. Previous subsurface investigations indicate that the site is underlain predominantly by silts and clays with minor interbeds of silty and clayey sands to the total depth explored of approximately 21.5 feet below ground surface (bgs) (KEI, 1991 and 1992).

## **4.0 NATURE AND EXTENT OF SOURCE**

The following sections describe the source(s) of the petroleum hydrocarbons and fuel oxygenates that have been detected in soil and groundwater beneath the site area.

### **4.1 Former USTs**

An aerial photograph taken in 1969 shows that the site was a gas station at that time (Law Associates Inc., 1990). A Union Oil Company of California revised drawing dated 6/19/1991 (originally dated 1966) shows two 12,000 gallon unleaded gasoline USTs to be located in the western portion of the site, and one 520 gallon waste oil UST located in the eastern portion of the site (**Appendix A**). These tanks are replacements of two 10,000 gallon gasoline tanks and one 280 gallon waste oil tank that were removed in January 1991.

### **4.2 UST Removal (1991)**

Two 10,000-gallon unleaded gasoline storage USTs and one 280-gallon waste oil UST were removed from the site on January 16, 1991 (KEI, March 6, 1991). UST removal activities are described in a Kaprealian Engineering, Inc. (KEI) report dated March 6, 1991. The KEI report stated that two ½-inch holes were observed in the super unleaded gasoline tank, the southern-most of the two USTs.

One soil sample (WO1) was collected from beneath the waste oil tank at a depth of 8.25 feet bgs. Four soil samples, labeled A1, A2, B1, and B2, were collected from beneath the former fuel USTs at depths between 15 and 16 feet bgs. Soil beneath samples A1, A2, B1 and B2 was excavated to a depth of 17.5 feet bgs due to "obvious contamination" (KEI, March 6, 1991). No confirmation soil samples were reported below 17.5 feet bgs. Groundwater was encountered during excavation at a depth of 16.5 feet bgs. Following excavation, 15,700 gallons of groundwater was purged from the gasoline tank pit. A water sample was collected from the pit on January 28, 1991.

On February 11 and 12, 1991, during product piping upgrade activities, KEI collected nine soil samples (P1-P9) from the product pipe trenches at depths ranging from 3.5 to 7.5 feet bgs.

A map of sample locations and a table of laboratory results are presented in **Appendix B**. All soil and groundwater samples were analyzed by Sequoia Analytical Laboratory for TPH-G, and BTEX compounds. In addition, the sample collected from beneath the waste oil tank was analyzed for total petroleum

hydrocarbons as diesel (TPH-D), total oil and grease (TOG), cadmium, chromium, lead, nickel, and zinc.

The highest concentrations of TPH-G and benzene detected in soil samples collected from the fuel tank pit were 2,600 mg/Kg and 7.1 mg/Kg in sample A1, respectively. As mentioned above, sample A1 (15.5 feet bgs) was over-excavated to 17.5 feet bgs. No constituents were detected in the soil sample collected from beneath the former waste oil tank except for zinc, which was present at a concentration of 31 mg/Kg.

Soil samples from beneath the product pipe trenches contained a maximum concentration of TPH-G at 130 mg/Kg (P9 at 7.5 feet bgs), and a maximum benzene concentration of 0.89 mg/Kg (P7 at 5 feet bgs), although both parameters were not detected in the majority of the piping samples.

The water sample collected from the fuel UST excavation pit was found to contain 13,000 µg/L TPH-G, and 64 µg/L benzene.

Twenty composite soil samples (Comp A-O and Comp 1-5) were taken from stock piles of excavated soil generated during the fuel system upgrade activities. The samples were tested for TPH-G and BTEX, and Comp J was tested for organic lead (KEI, March 7, 1991). TPH-G, benzene, toluene, xylene and ethylbenzene were found at maximum concentrations of 260 mg/Kg, 1.0 mg/Kg, 1.7 mg/Kg, 6.5 mg/Kg, and 1.7 mg/Kg, respectively. Lead was not detected in Comp J. Soil analytical data and soil sample locations are contained in **Appendix B**.

Approximately 575 cubic yards of stockpiled soil was transported to BFI Waste Systems in Livermore, California, a class III disposal site. Approximately 20 cubic yards of soil excavated from the waste oil pit was disposed of at Laidlaw Environmental Services, a class II disposal site. Approximately 150 cubic yards of soil was kept on site for treatment.

#### **4.3. Monitoring Well (MW-1 through MW-11) Installations (1991 - 1992)**

On April 23 and 24<sup>th</sup>, five monitoring wells (MW-1 through MW-5) were installed on site. MW-1 and MW-2 were installed adjacent to the site USTs, MW-3 was installed on the northern portion of the site, MW- 4 was installed on the northeastern portion of the site near the waste oil tank, and MW- 5 was installed on the southern portion of the site.

Soil samples were taken at depth of 5 feet bgs, ten feet bgs and 12-14.5 feet bgs. Soil samples were analyzed for TPH-G, and BTEX compounds. Maximum concentrations were found in MW-5 at a depth of 14.5 feet bgs. TPH-G, benzene,



toluene, ethylbenzene and xylenes were found at concentrations of 620 ppm, 6.8 ppm, 4.4 ppm, 18 ppm and 75 ppm, respectively. MW-1 was reported to contain 420 ppm TPH-G at a depth of 12 feet, MW-2 contained 12 ppm TPH-G at 12 feet, and MW-3 contained 3.5 ppm TPH-G at 13 feet bgs. MW-4 was reported to contain limited concentrations of xylenes and ethylbenzene. Soil analytical data is contained in **Appendix B**.

On May 5 through 6 1992, four offsite monitoring wells (MW-6 through MW-9) were installed north and southwest of the site. Maximum concentrations were reported in soil samples collected from the boring for MW-7 which contained 280 ppm and 540ppm TPH-G at depths of 9 and 12.5 feet bgs, respectively. MW-8 contained 1.2 ppm TPH-G at a depth of 13.5 feet bgs. Limited concentrations of BTEX compounds were reported in MW-9.

On August 13, 1992, two additional offsite monitoring wells (MW-10 and MW-11) were installed south of the site. TPH-G was reported at concentrations of 32 ppm and 47 ppm at depths of 12 and 13 feet bgs in the two wells, respectively. Boring logs for wells MW-1 through MW-11 are provided in **Appendix C** (note: the boring log for MW-6 was not provided in the original report.) None of the soil samples collected from MW-1 through MW-11 were tested for MTBE. MTBE was introduced to gasoline fuel around 1992. It is unknown when exactly this specific site began use of MTBE. MTBE production was banned in 2000.

#### **4.4. Oil/Water Separator Abandonment (1995)**

On May 31, 1995, GeoStrategies Inc. (GSI) collected one sample from a depth of 4.5 feet below an oil/water separator, formerly located in the middle service bay within the station building. The sample was analyzed for TPH-G, TPH-D, TOG, BTEX compounds, volatile organic compounds (VOCs), and metals (cadmium, chromium, lead, nickel, and zinc). A table of analytical results is contained in **Appendix B**. The sample contained 26 mg/Kg TPH-D, 50 mg/Kg TOG, 41 mg/Kg chromium, 8 mg/Kg lead, 46 mg/Kg nickel, and 45 mg/Kg zinc. No other analytes were detected.

#### **4.5 Residual Soils as On-Going Source**

The residual mass of petroleum hydrocarbons and MTBE remaining in soil appears to be limited. The most current on-site soil analytical data is from the borings EB-1 through EB-4 advanced in May 1998 to total depths of 12 feet bgs. Boring locations are shown in **Figure 2** and tables of laboratory results are presented in **Appendix B**. TPH-G, BTEX compounds, and MTBE were below the laboratory detection limit in all seven soil samples analyzed. The highest photoionization detector (PID) reading for soil samples collected from the borings was 9.8 parts per million by volume

(ppmv) for the 11.5-foot sample collected from boring EB-2, located adjacent to well MW-5.

#### **4.6 Summary**

A release of gasoline from the site USTs (current location) occurred sometime before 1991 when petroleum hydrocarbons were detected in both soil and water samples collected from the UST excavation pit. MTBE was not analyzed. A release of petroleum hydrocarbons also occurred prior to 1991 when TPH-G and BTEX constituents were detected in soils beneath the product piping runs adjacent to the northern-most fuel dispenser islands.

A release of waste oil constituents occurred sometime before 1995 when TPH-D, TOG, and metals were detected in a soil sample collected from beneath the former oil/water separator located within the station building.

MTBE, widely utilized in gasoline since 1992, was not detected in any of the soil samples collected from borings EB-1 through EB-4 in 1998.

### **5.0 FATE AND TRANSPORT CHARACTERISTICS**

The following sections describe potential contaminant migration pathways for petroleum hydrocarbons and MTBE. Plume migration and contaminant concentration trends are discussed.

#### **5.1 Underground Utility Conduits**

The exact location and depth information of utility trenches both on-site and in the site vicinity has not been determined. Based on the documents in Delta files, a survey of nearby utilities for the purpose of a preferential pathway evaluation has not been performed. The historical range of depth to groundwater (7.5 feet to 11.5 feet bgs) is comparable to the typical depth of some utility trenches, and a survey is now deemed appropriate.

#### **5.2 Soil Migration Pathways**

Soils encountered in the 1991 UST replacement excavation were described as primarily clay and sandy silt (KEI, March 1991) to a depth of 10 feet bgs. Borings for wells MW-1 through MW-11 as well as borings EB 1-4 encountered primarily clay and silt with some minor sandy interbeds (typically at depths between 10 and 15 feet bgs). Boring logs also commonly mention the occurrence of caliche deposits and root holes. The fine grained soils are of low permeability, however the presence of sand stringers, caliche, and root holes could provide pathways for the

rapid migration of groundwater contaminants. Copies of boring logs and well construction diagrams are provided in **Appendix C**. Geologic cross-sections depicting site lithology are included as **Figure 4**.

### 5.3 Hydrogeologic Pathways

Groundwater was reported seeping into the 1991 UST replacement excavation at a depth of approximately 16.5 feet bgs (KEI, March 1991). Wells MW-1 through MW-5 range in depth from 19 feet to 23 feet bgs, and are screened from 7 feet bgs to depth. On May 4, 1991 (first sampling event), static water levels in wells MW-1 through MW-5 ranged from 11.69 to 12.62 feet below top of casing. Wells MW-6 through MW-9 (installed May 1992) range in depth from 19 feet to 21.5 feet bgs, and screen intervals vary from 8 to 12 feet bgs to total depth. Initial static water levels in wells MW-6 through MW-9, measured on May 19, 1992, were between 10.98 feet and 12.41 feet bgs. Wells MW-10 and MW-11 (installed August 1992) extend to a depth of 20 feet bgs, and are screened from 7 feet to 20 feet bgs. The static water level in these wells, first measured on August 20, 1992, was 12.8 feet bgs (MW-10) and 12.5 feet bgs (MW-11). Seasonally, depth to groundwater in wells fluctuates by approximately 3 feet annually, with the highest groundwater elevations in January-March and the lowest in August-September (**see graph Appendix D**). Depth to water in wells over the year typically ranges from approximately 8 feet to 11 feet below top of casing (TOC).

The groundwater flow direction beneath the site has consistently been toward the south with a strong southwest component. A site groundwater flow direction rose diagram showing groundwater flow direction from 1991 until 2008 (a total of 38 monitoring events) is provided in **Appendix D**. Data from 1992 through November 1999 is not available. The groundwater gradient at the site historically has averaged approximately 0.005 feet/foot (ft/ft). Historic groundwater contour maps are contained in **Appendix D**.

The groundwater flow rate beneath the site can be approximated based on the hydraulic conductivity of the soil, groundwater flow gradient and effective soil porosity. The linear groundwater flow rate or velocity (V) can be calculated from the formula:

$$V = (K \times I)/N$$

where K = soil coefficient of hydraulic conductivity

I = groundwater gradient

N = effective soil porosity

The average K for the fine-grained soils (clay/silt) found at the site is estimated in the range of  $1 \times 10^{-3}$  to  $1 \times 10^{-4}$  feet per day and the effective porosity = 15%

(Freeze and Cherry, 1979). The site hydraulic gradient has averaged approximately 0.005 ft/ft. Using the above estimated parameters, a groundwater velocity of less than one foot per year is calculated. The flow rate of groundwater moving within the sand stringers encountered beneath the site at depths of approximately 10 to 15 feet bgs should also be considered. The average K for the fine-grained sand units found at the site is estimated in the range of  $1 \times 10^{-1}$  to 1 feet per day and the porosity at 30% (Freeze and Cherry, 1979). Using these estimated parameters, a maximum groundwater velocity of approximately 6 feet per year is calculated. The actual flow rate (averaged) is more likely on the order of a few feet per year. The flow rate for dissolved petroleum hydrocarbons is typically significantly slower than the groundwater due to physical and chemical interactions with the soil matrix and biological processes.

#### 5.4 Contaminant Migration Model

It appears that a release occurred at some undetermined time (between at least 1966 and 1991) from the former site USTs. Upon removal in January 1991, holes were noted in one of the two USTs, and a groundwater sample collected from the UST pit contained 13,000  $\mu\text{g/L}$  TPH-G. The depth of the UST excavation pit compared with groundwater depths suggests that the USTs were set below the water table. Steel tanks which are continuously exposed to groundwater, without protection, are highly susceptible to corrosion which could, over time, breach the walls of the tank. Once the discharged hydrocarbons entered the groundwater, they were dissolved and began migrating with the groundwater to the south-southwest. By August 1992, dissolved petroleum hydrocarbons had migrated at least 200 feet downgradient of the UST complex and were detected in the first sample collected from off-site well MW-11 (**Figure 2**) with a TPH-G concentration of 4,600  $\mu\text{g/L}$ . The current TPH-G concentration in well MW-11 is 810  $\mu\text{g/L}$  (December 17, 2008).

The well with the highest concentration of dissolved hydrocarbons on-site, since installation in 1991, continues to be well MW-5. The current TPH-G concentration in well MW-5 is 24,000  $\mu\text{g/L}$  (December 17, 2008). MW-5 is located in the southern corner of the station property directly downgradient of the fuel dispenser islands. Based upon this, it is possible that the main source of TPH-G at the site is associated with a release from the fuel dispensers and/or product piping. The timing of this suspected release would also be dated prior to 1991.

In addition, a release responsible for the MTBE concentrations detected in groundwater beneath the site is considered to have occurred following installation of the current USTs, and prior to 1995 when site monitoring wells were first analyzed for MTBE.

The former Mobil service station (upgradient), and the current Chevron (downgradient) and Quality Tune Up stations that occupy the other three corners of the site intersection have had reported gasoline leaks according to the State of California Geotracker database. According to Geotracker, the Chevron case received closure on 7/27/1999; the Mobil and Quality Tune Up service stations are still open cases in Geotracker. In a report dated August 20, 2008, the Alameda County Health Care Services Agency (ACHCSA) denied ExxonMobil's request to close remediation efforts at their site at 14994 E. 14<sup>th</sup> Street due to the TPH-G, benzene, and MTBE concentrations remaining in groundwater. Additionally, the ACHCSA noted that there had been no investigation of a known leak in Mobil's former waste oil UST. TPH-G and benzene have historically been found in two on-site wells (MW-6, MW-3) located upgradient from the subject site's fuel system. Contaminants in these two wells are believed to originate from an unknown upgradient source.

In a report dated May 17, 1994, the Alameda County Health Care Services Agency notified Unocal that Chevron's site investigation had found compounds contained in stoker gasoline used in Unocal refineries. With this information, Chevron's case was turned over to Unocal. According to the State of California Geotracker database, the Chevron case received closure on 7/27/1999.

## 5.5 Concentration Trends

TPH-G, benzene, and MTBE have been detected in wells MW-1 through MW-11. Concentration graphs for TPH-G and MTBE for select wells are included as **Appendix E**. The graphs illustrate the declining trends in on-site (MW-1, MW-2, and MW-5) TPH-G concentrations between 1991 and 2008, and on-site MTBE concentrations between 1999 and 2008. TPH-G and MTBE concentrations in off-site, downgradient well MW-10 show decreasing trends since 1993 and 1998, respectively. Comparatively, the TPH-G concentration in off-site, upgradient well MW-7 (located at the former Mobile property) has been declining since approximately 1994 - with the exception of a spike in concentration levels between 2004 and 2005. Since 1998, the MTBE concentration has also been declining in well MW-7.

Well MW-1, on-site and immediately south of the station USTs, was first sampled in September 1991, at which time TPH-G and benzene were detected at concentrations of 26,000 µg/L and 130 µg/L, respectively. TPH-G and benzene both reached maximum historic values during May 1992 at concentrations of 29,000 µg/L and 650 µg/L, respectively. Well MW-1 was first analyzed for MTBE in November 1995, at which time MTBE was detected at a concentration of 970 µg/L. The maximum historic detection of MTBE at the site was in the groundwater sample collected from well MW-1 in May 1999, with a concentration of 21,000 µg/L. Most recently, in December 2008, TPH-G and MTBE were detected in well MW-1 at

concentrations of 3,100 µg/L and 22 µg/L, respectively. Benzene has not been routinely detected in well MW-1 since May 2002 (67 µg/L).

Well MW-5, located in the southern corner of the station and south of site fuel dispensers, was initially sampled in May 1991. At the initial sampling, well MW-5 contained detections of TPH-G and benzene at concentrations of 69,000 µg/L and 1,400 µg/L, respectively. Historic highs for TPH-G and benzene in well MW-5 were observed during 1991 and 1992. Well MW-5 was first analyzed for MTBE in November 1995, at which time it was not detected above the reporting limit. MTBE was first detected in well MW-5 in February 1996, at a concentration of 170 µg/L and the highest historical detection of MTBE in well MW-5 was 2,300 µg/L in November 1996. Most recently, in December 2008, TPH-G was detected in well MW-5 at a concentration of 24,000 µg/L, which is within the typical historic range for this well since approximately 1997. For the second consecutive event, MTBE and benzene were not detected in the most recent groundwater sample above the reporting limit of 5 µg/L.

Well MW-7, located northwest of the station at the former Mobile station, was initially sampled in May 1992. At the initial sampling, MW-7 contained detections of TPH-G and benzene at concentrations of 17,000 µg/L and 540 µg/L, respectively. This was the highest historic detection of benzene in well MW-7. The highest historic detection of TPH-G in well MW-7 was in August 1993 at a concentration of 33,000 µg/L. Groundwater samples from MW-7 were initially analyzed for MTBE in November 1995, at which time MTBE was detected in well MW-7 at a concentration of 72 µg/L. The maximum detection of MTBE in well MW-7 was 570 µg/L in November 1996. During the recent groundwater monitoring event in December 2008, TPH-G was detected in well MW-7 at a concentration of 6,900 µg/L; MTBE and benzene were not detected above the reporting limit of 5.0 µg/L. Benzene has not been routinely detected in well MW-7 since November 2003 (10 µg/L), and MTBE has not been routinely detected in well MW-7 since November 2000 (281 µg/L). MTBE was last detected in well MW-7 in December 2006 at a concentration of 3.8 µg/L.

## **6.0 SITE REMEDIATION**

In January and February of 1991, the former gasoline fuel USTs were removed from the ground, and soil was excavated to a depth of approximately 17.5 feet. Water was encountered during excavation at 16.5 feet bgs, and 15,700 gallons were subsequently purged from the UST pit. Soil from beneath the product lines were excavated to depths of 3.5 to 7.5 feet below grade.

No other remediation has been performed at the site.

## **7.0 POTENTIAL SENSITIVE RECEPTORS**

The following sections evaluate the various potential impacts to sensitive receptors from petroleum hydrocarbons and MTBE detected in soil and groundwater.

### 7.1 Environmental Screening Levels

The California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) has published Environmental Screening Levels (ESLs) for chemicals commonly found in soil and groundwater at sites where releases of chemicals have occurred. The RWQCB notes "The ESLs are considered to be conservative." The tables below compare site specific soil and groundwater concentrations for TPH-G, benzene, and MTBE with ESLs for various potential sensitive receptors. The ESL tables for various sensitive receptors as found in the November 2007 publication are referenced.

	ESL Table	TPH-G (mg/kg)	Benzene (mg/kg)	MTBE (mg/kg)
<b>Maximum Concentration Detected in Shallow Soil Sample</b>		<b>130 (P9)</b>	<b>0.89 (P7)</b>	<b>&lt;0.025 (EB 1-4)</b>
<b>Maximum Concentration Detected in Deep Soil Sample</b>		<b>620 (MW-5)</b>	<b>6.8 (MW-5)</b>	<b>&lt;0.025 (EB 1-4)</b>
Groundwater Protection (shallow soils <3 meters)*	A-1	83	0.044	0.023
Groundwater Protection (deep soils >3 meters)*	C-1	83	0.044	0.023
Direct Exposure - Residential	K-1	110	0.12	30
Direct Exposure - Commercial	K-2	450	0.27	65
Direct Exposure - Construction/Trench Workers	K-3	42,000	12	2,800

\* Ingestion. Groundwater considered a current or potential source of drinking water.

	ESL Table	TPH-G (µg/L)	Benzene (µg/L)	MTBE (µg/L)
<b>Concentration Groundwater 12/17/08</b>		<b>24,000 (MW-5)</b>	<b>&lt;5.0 (MW-5)</b>	<b>22 (MW-1)</b>
Potential Vapor Intrusion - Residential	E-1	NA	540	24,000
Potential Vapor Intrusion - Commercial	E-1	NA	1,800	80,000
California Maximum Contaminant Level (MCL)	F-3	NA	1.0	13

The maximum soil concentrations for TPH-G and benzene are above the ESLs for leaching to groundwater, direct exposure and for groundwater considered as a current or potential source of drinking water. However, these detections date back to 1991, and do not reflect any attenuation that may have occurred. Seven soil samples collected from the site in 1998 were analyzed for MTBE, and did not contain MTBE. TPH-G, benzene and MTBE, currently detected in groundwater

beneath the site area at concentrations above the respective MCLs, show decreasing concentration trends indicating a lack of significant leaching.

## **7.2 Indoor Air Inhalation – Soil and Groundwater**

No ESLs have been established for protection of indoor air from impacted soil. The RWQCB recommends direct measurement of soil gas concentrations in soil. The upward migration of any petroleum hydrocarbons remaining in soil is limited due to the low permeability of site soils. The threat of soil vapors impacting indoor air quality is considered minimal.

Benzene and MTBE ESLs have been established for evaluating potential input to indoor from impacted groundwater (see table above). Benzene and MTBE concentrations in groundwater beneath the site are below the ESLs. No ESL has been established for TPH-G concentrations in groundwater.

## **7.3 Impact to Drinking Water Supply Wells**

A review of Department of Water Resources (DWR) files was performed in 2007 by TRC to identify any wells within a ½-mile radius of the site. The well search identified 69 wells, of which 13 are water supply wells within ½ mile of the site. A copy of the TRC well survey study is provided as **Appendix F**. The nearest downgradient well, a domestic/irrigation well, is located approximately 1,250 feet southwest of the site. No municipal water supply wells were identified.

## **8.0 SUMMARY**

Delta has prepared an SCM that describes the occurrence, migration, and fate of petroleum hydrocarbons and the fuel oxygenate, MTBE, previously identified in groundwater beneath the site area. The following are the key observations and conclusions;

- Site soils are generally fine-grained consisting predominantly of clay and silt. Sand stringers, root holes, and caliche were also commonly encountered during subsurface exploration.
- Groundwater typically occurs at depths of approximately 8 to 11 feet bgs, based on seasonal variations. Depth to groundwater in monitoring wells fluctuates by approximately 3 feet annually. The groundwater flow rate is considered to be fairly slow, estimated at a few feet (< 5 feet) per year. The primary direction of groundwater flow is to the south-southwest.



- Facility plans from 1991 indicate that the site's gasoline USTs have been located in the western portion of the property, and that the waste oil UST has been located in the eastern portion of the property since at least 1966 (original date on plans).
- A release of petroleum hydrocarbons from the site USTs appears to have occurred prior to January 1991. A soil sample collected from the UST excavation pit (subsequently over-excavated) contained 2,600 mg/kg TPH-G and 7.1 mg/kg benzene. Soil samples were not tested for MTBE. It is unlikely that MTBE was in use at this station in 1991.
- A release of petroleum hydrocarbons in the vicinity of the northern-most fuel dispensers also appears to have occurred prior to 1991. TPH-G and BTEX constituents were detected in soils beneath the adjacent product piping.
- A release of waste oil constituents appears to have occurred prior to 1995. TPH-D, TOG, and metals were detected in a soil sample collected from beneath the former oil/water separator.
- Petroleum hydrocarbons released from the USTs moved horizontally and vertically through the vadose zone, dissolved into the groundwater at a depth of approximately 10 feet bgs, and migrated to the south-southwest with the natural groundwater flow gradient.
- Petroleum hydrocarbons were detected in the first groundwater samples collected from on-site wells MW-1 through MW-5 in September 1991. Maximum concentrations of TPH-G and benzene were found in well MW-5 at 69,000 µg/L and 1,400 µg/L, respectively. Well MW-5 is located downgradient of the site's fuel dispensers and the mechanics service bays/WOT in the southern corner of the site. Well MW-5 is located approximately 70 feet cross-gradient of the site's gasoline USTs.
- Petroleum hydrocarbons were detected in the first groundwater samples collected from off-site wells MW-6 through MW-11 in 1992. The maximum concentrations have been found in well MW-7, located upgradient of the subject site at the former Mobile station. The maximum downgradient concentrations have been found in well MW-10.
- MTBE was first detected in both on- and off-site wells upon initial analysis implemented in November 1995. The maximum concentrations have been found in on-site well MW-1, located immediately adjacent and downgradient of the site's UST complex. The maximum off-site concentrations have been found in well MW-11, located approximately 150 feet south (downgradient) of the site. MTBE detections in upgradient well MW-7 have historically been fairly low (< 1,000 µg/L).

- Currently, TPH-G is present in wells MW-1, 2, 2(SP), 3(SP), 5, and 7 through 11, at a maximum concentration of 24,000 in well MW-5. MTBE is currently detected above the laboratory limit in wells MW-1, MW-2(SP), and MW-11, with a maximum concentration in wells MW-1 and MW-11 at 22 µg/L .
- TPH-G and MTBE concentrations in both on- and off-site wells remain stable or continue to decline.
- The nearest water supply well (domestic) is located approximately 1,250 feet southwest.

## **9.0 CONCLUSIONS AND RECOMMENDATIONS**

Delta concludes the following;

- the lateral extent of TPH-G has been established to less than 1,000 µg/L downgradient of the site.
- an underground utility pathways study should be prepared to complete site assessment.
- the vertical extent of the TPH-G shallow plume is concluded to be limited based on the extensive clay layers beneath the site.
- Risks to the public health and the environment are considered low.
  - High concentrations of TPH-G in groundwater are confined to a small area in the southern corner of the site.
  - Vertical migration of soil vapors is limited by clay soil beneath the site.
  - Potential impact to surface water is considered low due to the distance of creeks and channels from the site.
  - Potential impact to water supply wells is considered low due to the distance of identified wells from the site.

Delta recommends continued quarterly monitoring. TPH-G concentrations in well MW-5 will be evaluated in the fourth quarter of 2009 to determine if natural attenuation is sufficient to reduce concentrations to acceptable levels.

## **10.0 LIMITATIONS**

The 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. 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 performed. 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.

## **11.0 REFERENCES**

John W. Martin Law Associates Inc., *Environmental Site Assessment of Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, October 5, 1990

Liquid Construction Inc., *Petro Tite Systems Test Report*, April 5, 2007

Kaprealian Engineering Inc., *Preliminary Groundwater Investigation at Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, May 29, 1991.

Kaprealian Engineering Inc., *Stockpiled Soil Sampling at Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, March 7, 1991

Kaprealian Engineering Inc., *Waste Oil Stockpiled Soil Sampling at Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, March 8, 1991.

Kaprealian Engineering Inc., *Continuing Groundwater Investigation at Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, July 14, 1992.

Kaprealian Engineering Inc., *Continuing Groundwater Investigation at Unocal Service Station #3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, October 5, 1992.

Alameda County Health Care Services Agency, Letter informing Unocal #3292 of Chevrons site enclosure, May 17, 1994.

Gettler Ryan Inc., *Additional Subsurface Investigation Report for Tosco 76 Branded Facility No. 3292 15008 E. 14<sup>th</sup> Street, San Leandro, California*, November 24, 1999.

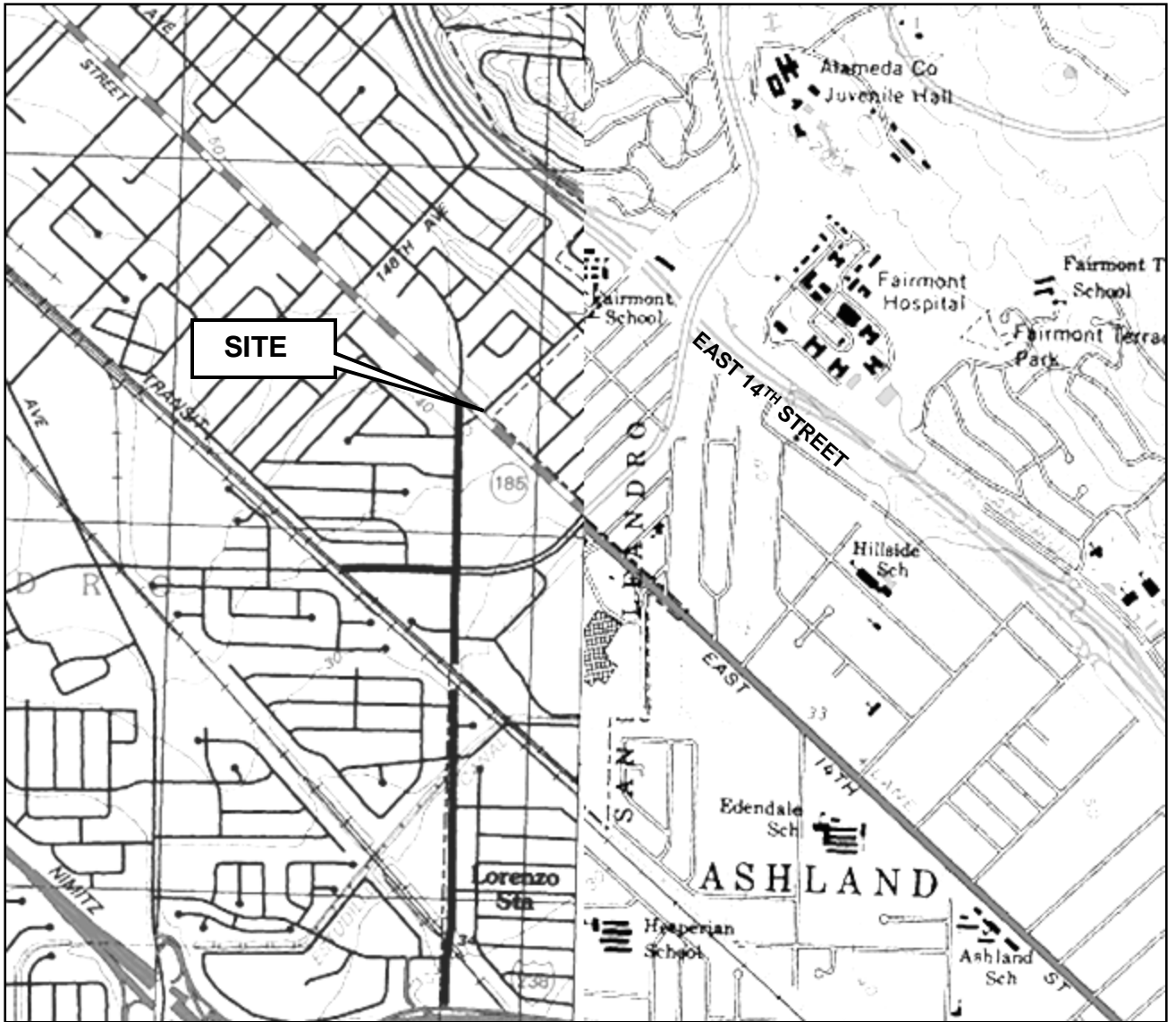
TRC, *Sensitive Receptor Survey and File Review, 76 Service station #3292, 15008 E. 14<sup>th</sup> Street, San Leandro, California*, June 28, 2007.

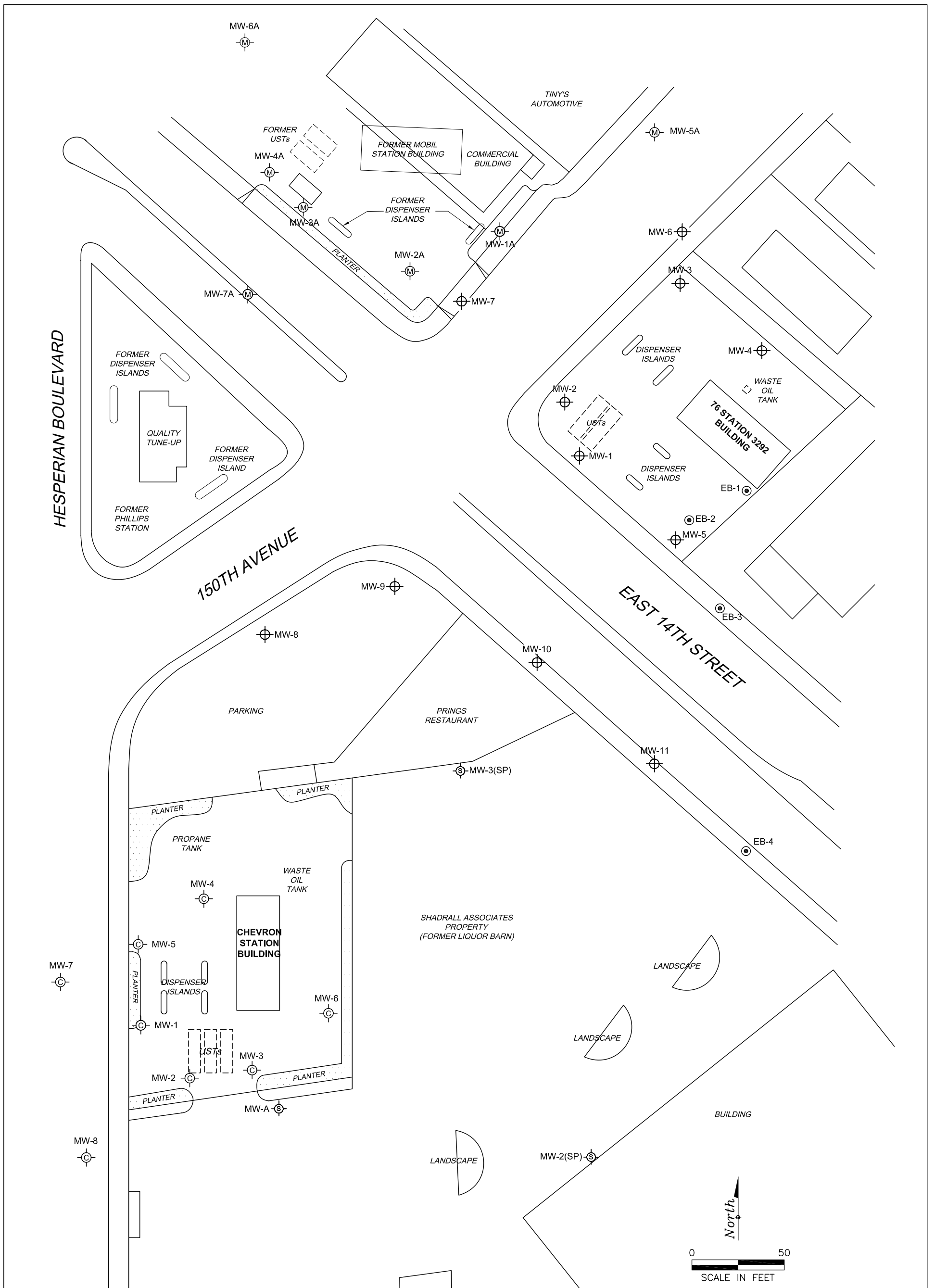
TRC, *Quarterly Monitoring Report April through June 2008*, July 15, 2008.

GeoStrategies, *Laboratory Analytical Results for Soil Samples Beneath the Oil/Water Separator...*, June 2, 1995.

## FIGURES

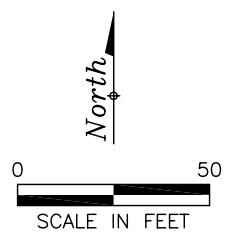
# Figure 1: Site Location





**LEGEND**

- MW-11 ⊕ Monitoring Well
- MW-3(SP) ⊕ Shadrall Monitoring Well
- MW-8 ⊕ Chevron Well
- MW-7A ⊕ Former Mobil Station Well
- EB-1 ⊙ Soil Boring

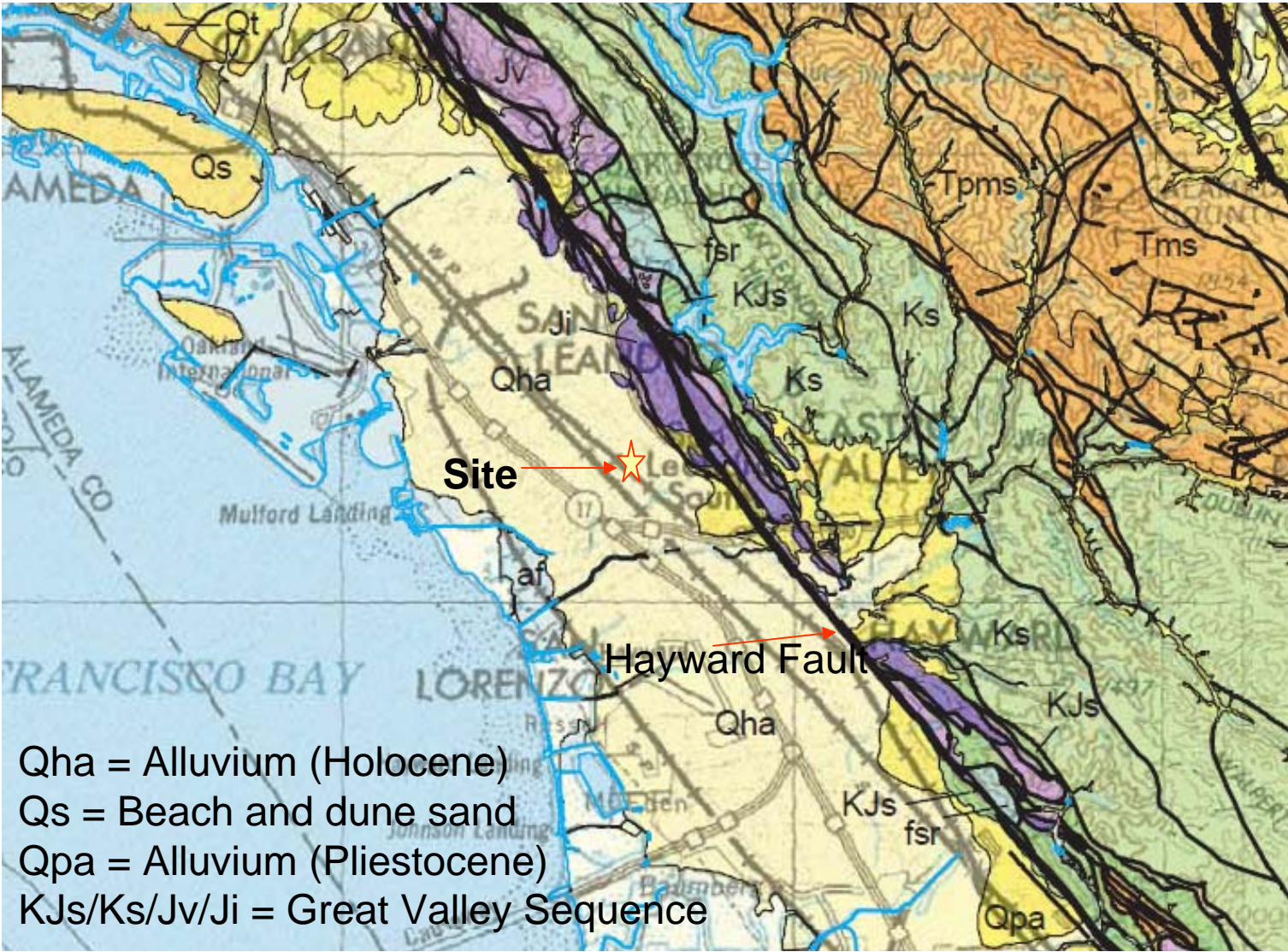


**FIGURE 2**  
SITE MAP

76 STATION 3292  
15008 EAST 14TH STREET  
SAN LEANDRO, CALIFORNIA

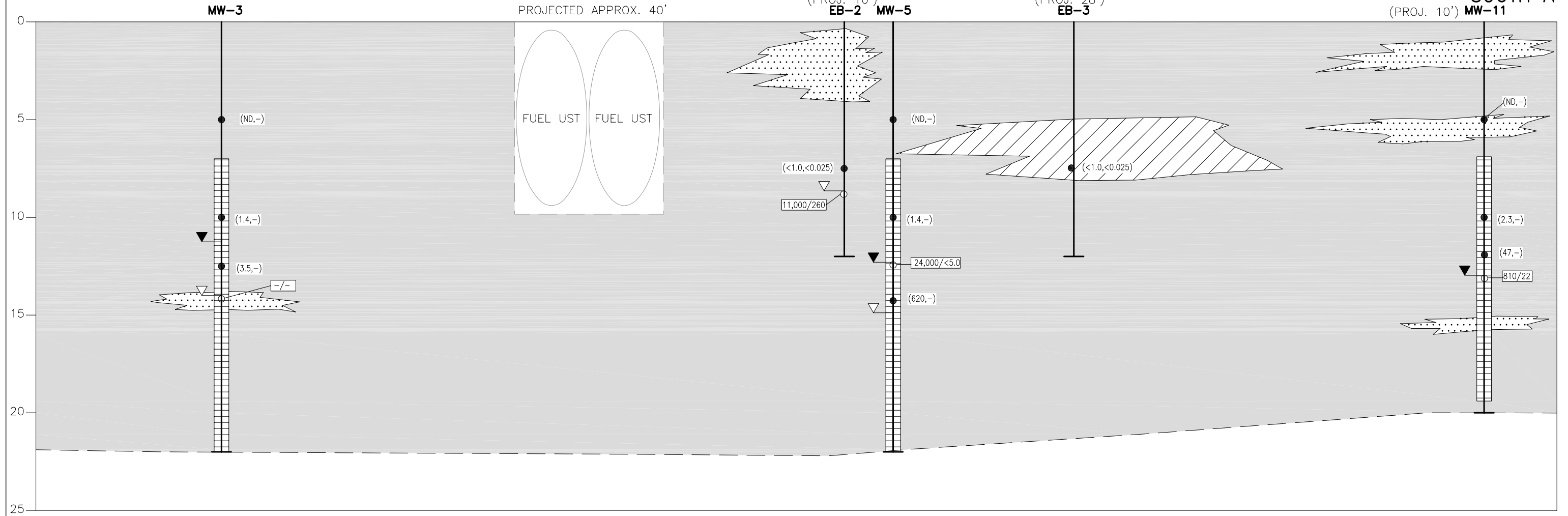
PROJECT NO. C1032-9200-2	PREPARED BY NP	DRAWN BY DR/JH	
DATE 02/18/09	REVIEWED BY DB	FILE NAME 3292_QMS(NEW)	

Figure 3: Regional Geologic Map

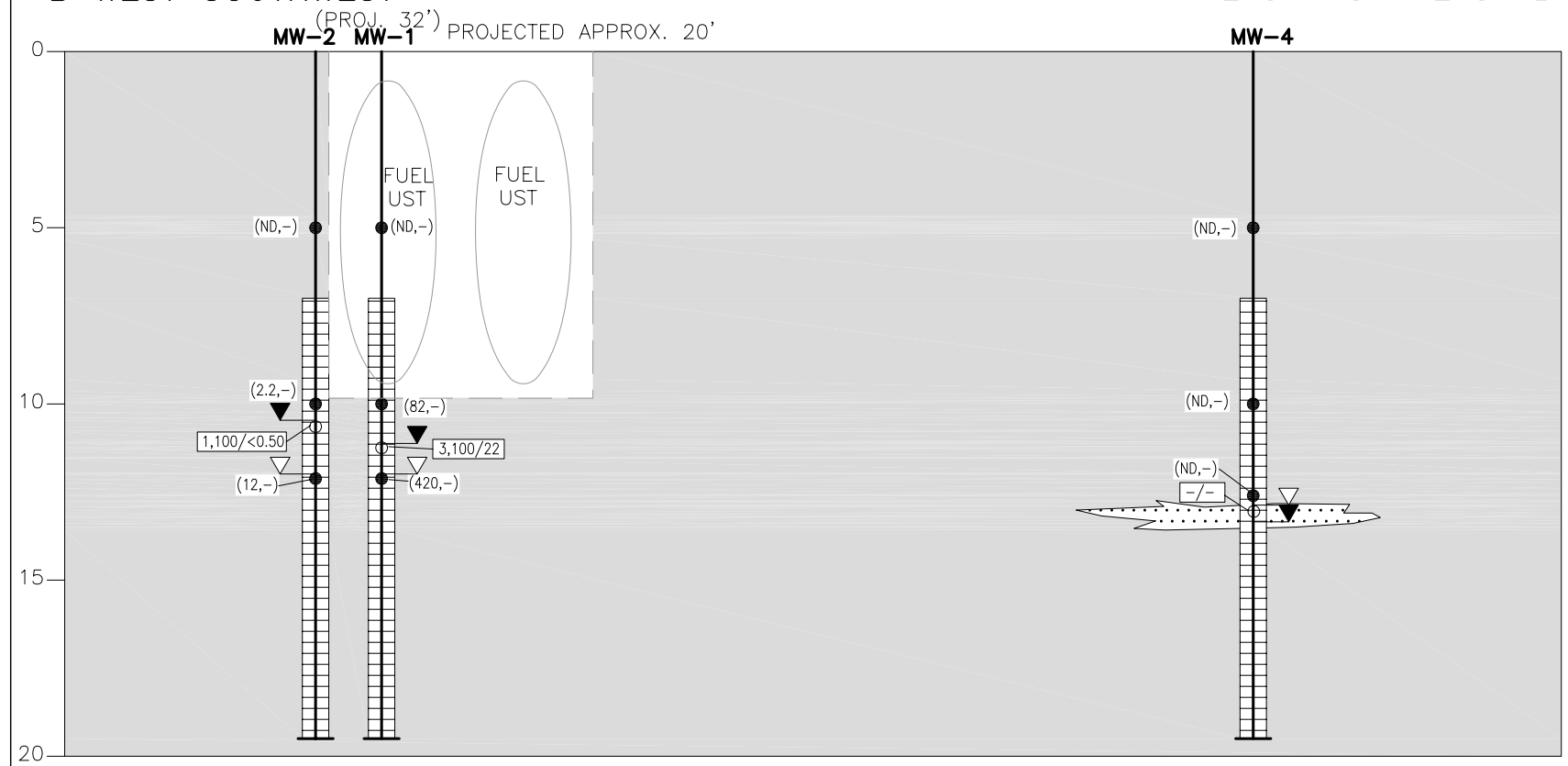




**A NORTH**



**B WEST SOUTHWEST**



**EAST NORTHEAST B'**

**LEGEND**

- MW-2 MONITORING WELL/BORING NAME
- WELL CASING/EXPLORATORY BORING
- SOIL SAMPLE LOCATION
- WELL SCREEN
- DEPTH TO STATIC GROUNDWATER (4Q08)
- DEPTH TO FIRST ENCOUNTERED WATER
- (3.5,-) ● SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, MTBE (mg/kg)
- (3100/22) ○ GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, MTBE (ug/L)
- LOW PERMEABILITY CLAY, SILT (CL, ML, CH)
- MEDIUM PERMEABILITY SAND/GRAVEL WITH CLAY/SILT (GC, SM, SC)
- HIGH PERMEABILITY SANDS AND GRAVELS (SP, GW)
- APPROXIMATE STRATIGRAPHIC BOUNDARY

**NOTES:**

- 1) ND<5.0=NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS  
- =NOT ANALYZED  
TPHg=TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
MTBE=METHYL TERT BUTYL ETHER  
mg/kg=MILLIGRAMS PER KILOGRAM  
ug/L=MICROGRAMS PER LITER
- 2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.
- 3) GROUNDWATER DATA FROM STATIC LEVEL COLLECTED ON 12/17/08.  
GROUNDWATER DATA FROM SOIL BORINGS COLLECTED ON DATE OF DRILLING.

**SCALE IN FEET**

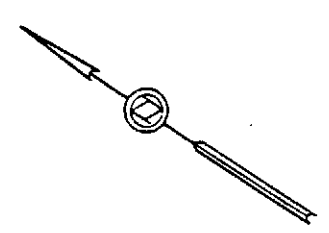
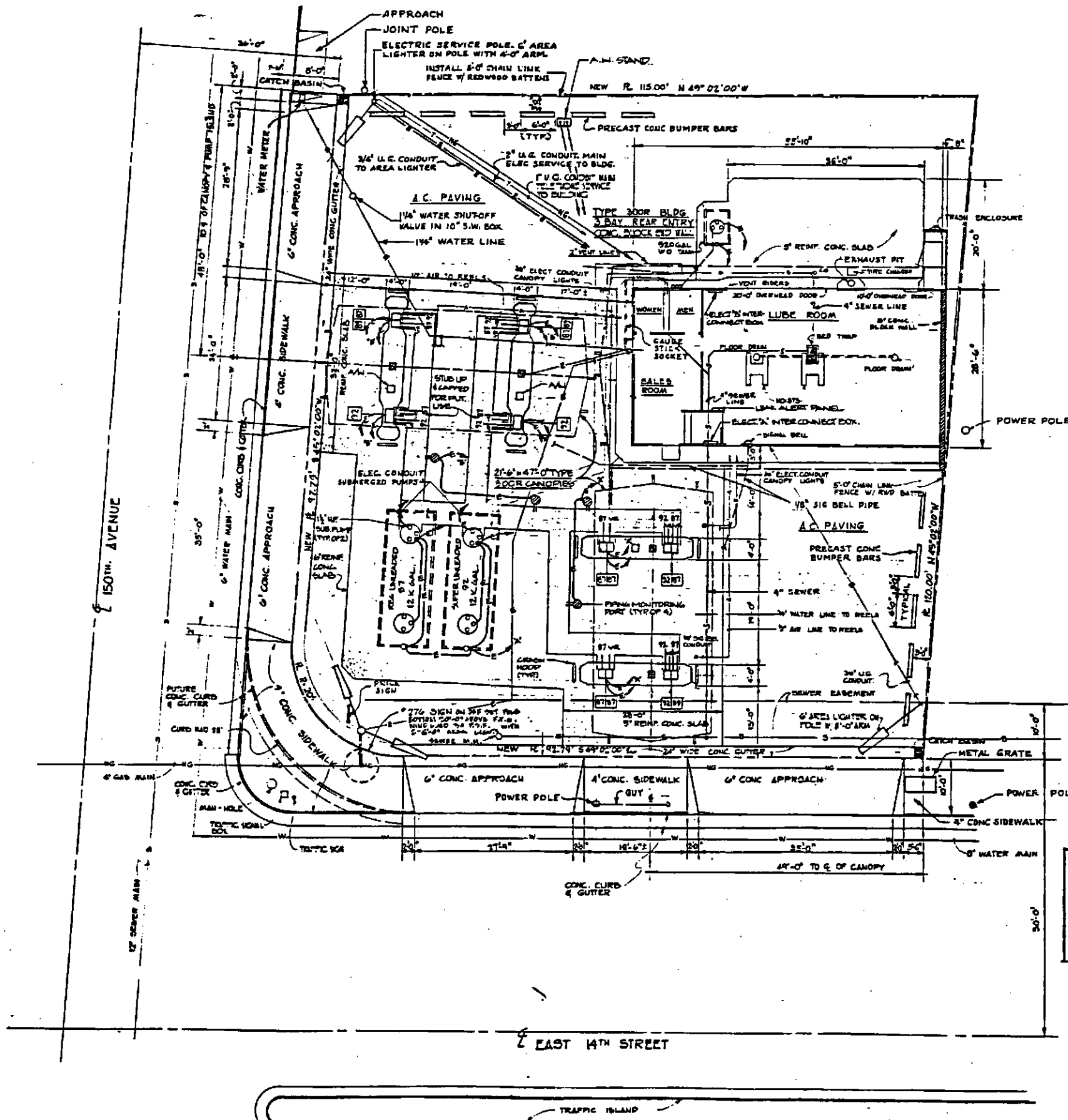
0 5 20

**FIGURE 4**  
GEOLOGIC CROSS SECTIONS  
A-A' AND B-B'  
76 STATION 3292  
15008 EAST 14TH STREET  
SAN LEANDRO, CALIFORNIA

PROJECT NO. C1032-9200-2	PREPARED BY NP	DRAWN BY JH
DATE 03/20/09	REVIEWED BY DB	FILE NAME 3292_QMS(NEW)

**DELTA**

**APPENDIX A**  
Historic Facility Plans

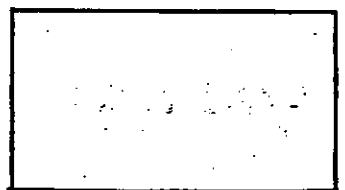


Store # 253292 Date: 6/19/91  
 Unit # 3292 Code: GEN Color   
 Description: GEN ARRANGEMENT

WESTERN REGION BOX:  
 #9532

- LEGEND**
- W — WATER
  - E — ELECTRIC
  - A — AIR
  - S — SEWER
  - V — VENT
  - P — PROPERTY BOUNDARY
  - G — NATURAL GAS

DATE	REVISED	BY/CHKD
9-16-76	DRAWING CORRECTED UNDERGROUND FACILITIES	WJ/MP
8-11-76	INSTALLED AS SHOWN.	WJ/MP
8-11-76	APPLIED 1/2" WINDS FROM DIMENSIONS TO TANKS	WJ
6/19/91	REVISIONS TO PLAN, CLINCHING, ISLANDS EXTENDED, BY DATA SERVICES CORPORATION 6/11/91.	WJ



JOB NO.	
GENERAL ARRANGEMENT SERVICE STATION #3292 15008 EAST 14TH STREET SAN LEANDRO, CALIFORNIA.	
UNION OIL COMPANY OF CALIFORNIA	F-3-3292-LI

**APPENDIX B**  
Soil/ Groundwater Data

KEI-P91-0102.R6  
October 5, 1992

TABLE 4

SUMMARY OF LABORATORY ANALYSES  
SOIL

(Collected on January 16, and  
February 11 & 12, 1991)

<u>Sample</u>	<u>Depth</u> <u>(feet)</u>	<u>TPH as</u> <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
A1	15.5	2,600	7.1	55	170	55
A2	16.0	290	1.3	1.1	1.2	1.5
B1	15.5	840	1.5	2.7	9.9	1.3
B2	15.0	150	1.6	3.3	11	2.0
P1	3.5	ND	0.0072	0.019	0.026	ND
P2	4.75	1.2	0.014	0.041	0.11	0.019
P3	3.75	ND	ND	ND	ND	ND
P4	3.75	ND	ND	ND	ND	ND
P5	3.5	ND	ND	ND	ND	ND
P6	5.0	ND	ND	ND	ND	ND
P7	5.0	7.1	0.89	0.23	0.70	0.57
P8	3.5	ND	ND	ND	ND	ND
P9	7.5	130	0.068	0.37	0.076	0.66
WO1*	8.25	ND	ND	ND	ND	ND
Detection Limits		1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

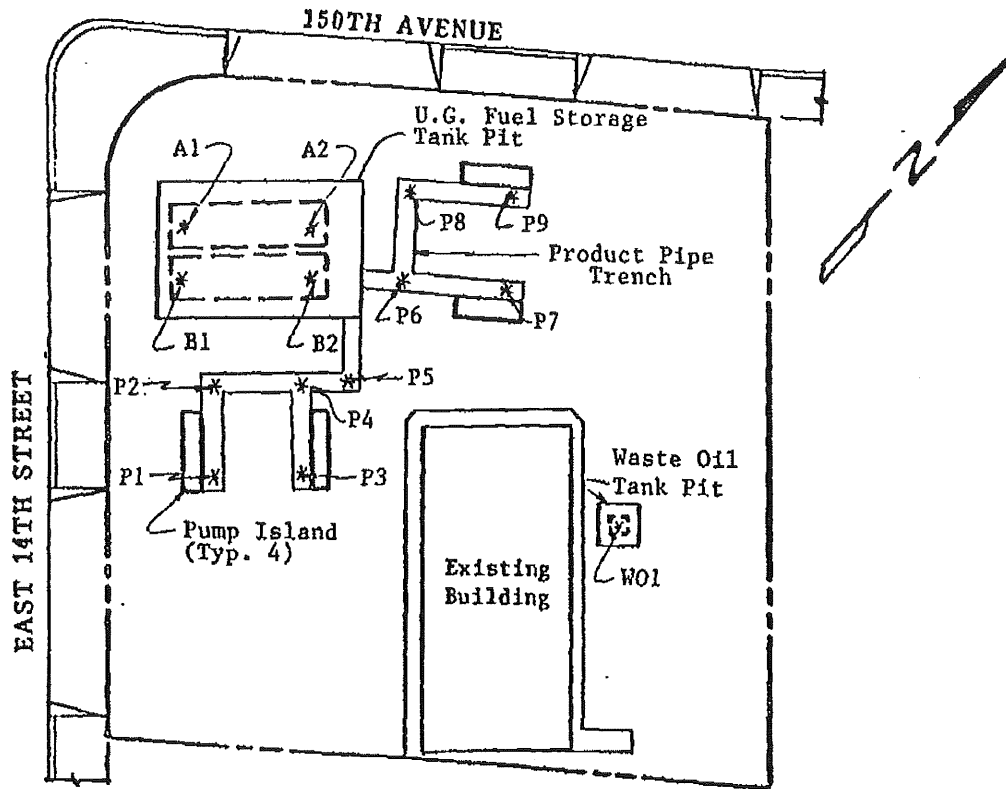
\* TOC, TPH as diesel, and all EPA method 8010 constituents were non-detectable. Metals were non-detectable, except for zinc, which showed 31 ppm.

Results in parts per million (ppm), unless otherwise indicated.



**KAPREALIAN ENGINEERING, INC.**  
Consulting Engineers

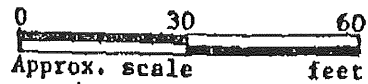
P.O. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN

LEGEND

\* Sample Point Location



Unocal S/S #3292  
15008 E. 14th Street  
San Leandro, CA

KEI-PS1-0102.R4  
May 29, 1991

TABLE 5

SUMMARY OF LABORATORY ANALYSES  
WATER

<u>Date</u>	<u>Sample #</u>	<u>TPE as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
1/28/91	W1	13,000	64	37	85	25
Detection Limits		30	0.30	0.30	0.30	0.30

Results in parts per billion (ppb), unless otherwise indicated.

KEI-J91-0102.R2  
March 7, 1991

TABLE 1

SUMMARY OF LABORATORY ANALYSES

(Collected on January 17 & 24,  
and February 14, 1991)

<u>Sample</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
Comp A	120	0.035	0.24	4.5	1.0
Comp B	67	0.021	0.076	1.3	0.32
Comp C	200	0.057	0.60	7.9	1.4
Comp D	41	0.010	0.084	0.95	0.22
Comp E	200	0.010	0.39	5.9	1.1
Comp F*	95	0.013	0.16	3.7	0.21
Comp G	47	0.015	0.30	2.2	0.24
Comp H	28	0.010	0.16	0.80	0.14
Comp I	120	0.088	1.7	6.5	1.1
Comp J**	110	0.074	1.1	6.4	0.98
Comp K	2.1	0.0063	0.010	0.026	ND
Comp L	5.0	0.0067	0.011	0.0063	ND
Comp M	210	0.73	0.67	0.83	1.1
Comp N	260	1.0	0.93	1.9	1.7
Comp O	170	0.75	0.70	2.3	1.1
Comp 1	39	0.012	0.020	ND	ND
Comp 2	35	0.010	0.060	ND	0.040
Comp 3	2.7	0.016	ND	ND	0.029
Comp 4	26	0.014	0.034	0.040	0.029
Comp 5	8.8	ND	0.013	0.032	0.028
Detection Limits	1.0	0.0050	0.0050	0.0050	0.0050

\* Reactivity, Corrosivity and Ignitability test: See attached analyses; Soluble lead was 0.62 ppm.

\*\* Organic lead was non-detectable.

ND = Non-detectable.

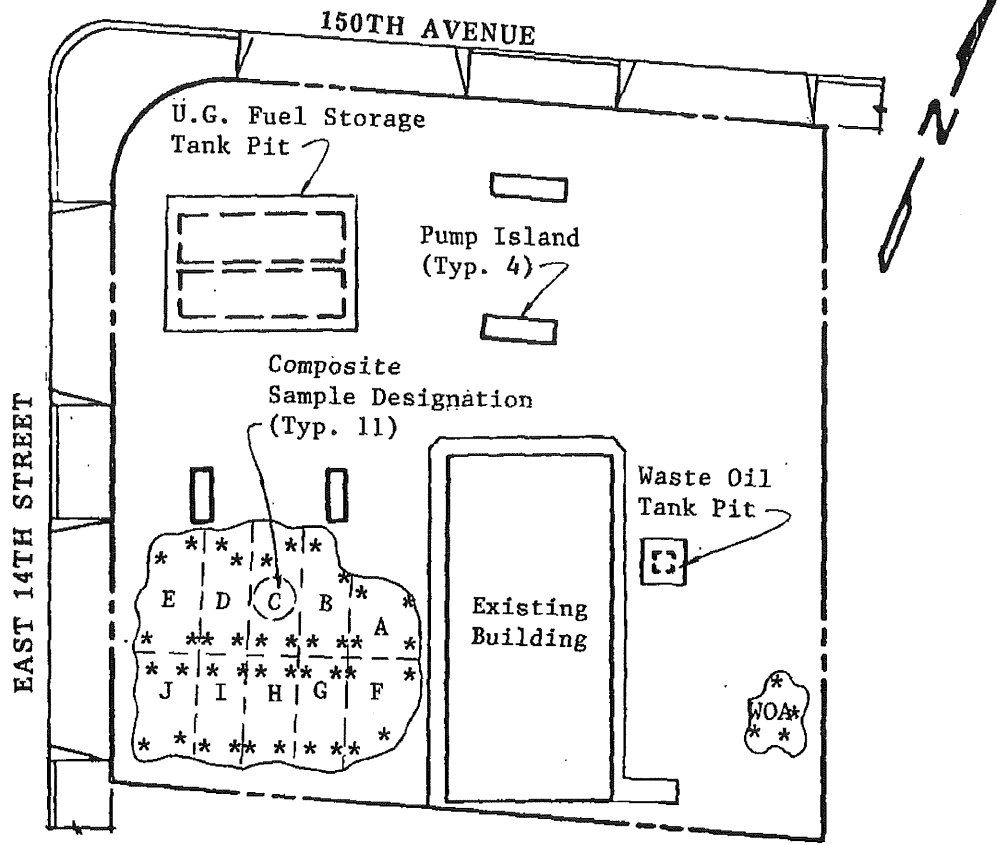
Results in parts per million (ppm), unless otherwise indicated.





**KAPREALIAN ENGINEERING, INC.**  
*Consulting Engineers*

P.O. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



**SITE PLAN**  
Figure 1

**LEGEND**

\* Sample Point Location

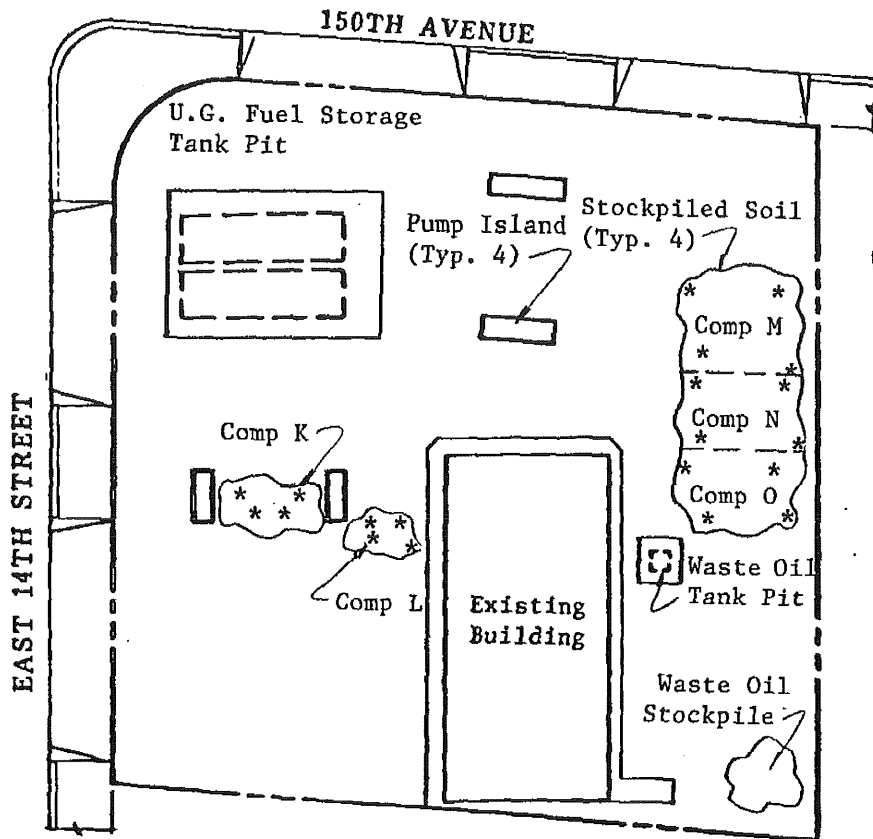


Unocal S/S #3292  
15008 E. 14th Street  
San Leandro, CA



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**SITE PLAN**  
Figure 2

**LEGEND**

\* Sample Point Location

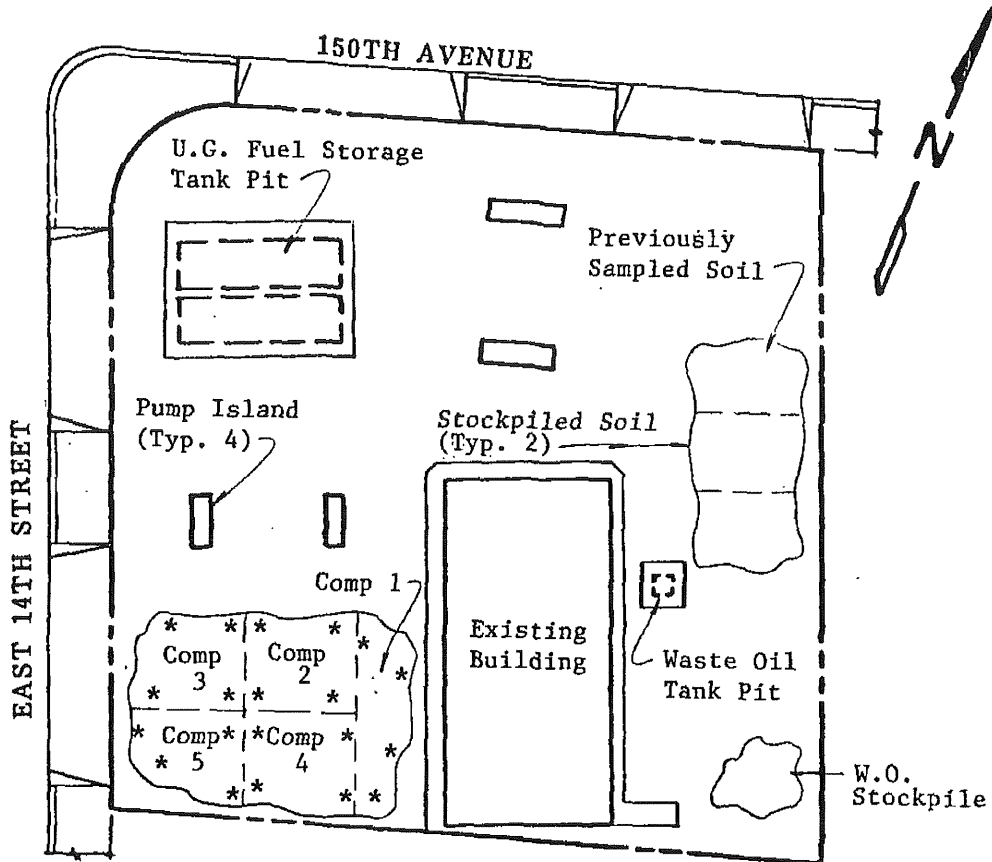


Unocal S/S #3292  
15008 E. 14th Street  
San Leandro, CA



**KAPREALIAN ENGINEERING, INC.**  
*Consulting Engineers*

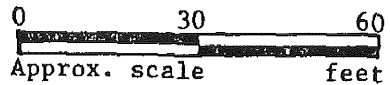
P.O. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN  
Figure 3

LEGEND

\* Sample Point Location



Unocal S/S #3292  
15008 E. 14th Street  
San Leandro, CA

KEI-J91-0102.R3  
March 8, 1991

TABLE 1

SUMMARY OF LABORATORY ANALYSES

(Results in mg/kg)  
(Collected on January 17, 1991)

<u>Parameter</u>	<u>Comp WOA</u>
Arsenic	4.9
Barium	94
Cadmium	ND
Chromium	25
Copper	21
Lead	40
Mercury	0.040
Nickel	33
Selenium	ND
Silver	ND
Thallium	ND
Vanadium	24
Zinc	150
EPA method 8080	ND
Total Organic Halides	ND

ND = Non-detectable.

KEI-P91-0102.R5  
 July 14, 1992

TABLE 3

SUMMARY OF LABORATORY ANALYSES  
 SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
4/23/91	MW1(5)	5.0	ND	ND	ND	0.0070	ND
	MW1(10)	10.0	82	0.20	0.23	0.31	0.14
	MW1(12)	12.0	420	1.2	1.3	0.72	0.78
	MW2(5)	5.0	ND	ND	ND	0.022	0.0085
	MW2(10)	10.0	2.2	0.089	ND	0.0064	ND
	MW2(12)	12.0	12	ND	0.017	0.075	0.14
	MW3(5)	5.0	ND	ND	ND	ND	ND
	MW3(10)	10.0	1.4	0.015	0.0051	0.014	ND
	MW3(13)	13.0	3.5	0.026	0.026	0.030	0.0088
	MW4(5)	5.0	ND	ND	ND	ND	ND
	MW4(10)	10.0	ND	ND	ND	0.0060	ND
	MW4(13)	13.0	ND	ND	ND	0.012	0.0088
	MW5(5)	5.0	ND	ND	ND	ND	ND
	MW5(10)	10.0	7.7	0.029	0.14	0.090	0.13
	MW5(14.5)	14.5	620	6.8	4.4	75	18
5/05/92	MW6(5.5)	5.5	ND	ND	ND	ND	ND
	MW6(10.5)	10.5	ND	ND	ND	ND	ND
	MW7(9)	9.0	280	0.45	0.45	23	7.2
	MW7(12.5)	12.5	540	1.9	0.47	47	15
5/06/92	MW8(5)	5.0	ND	ND	ND	ND	ND
	MW8(10)	10.0	ND	ND	ND	ND	ND
	MW8(11.5)	11.5	ND	ND	ND	ND	ND
	MW8(13.5)	13.5	1.2	0.011	0.0054	0.014	ND
	MW9(5)	5.0	ND	ND	0.0053	0.014	ND
	MW9(10)	10.0	ND	ND	ND	0.0078	ND
	MW9(12)	12.0	ND	ND	ND	0.0074	ND
Detection Limits			1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

KEI-P91-0102.R6  
October 5, 1992

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
8/13/92	MW10(5)	5.0	ND	ND	ND	0.0098	ND
	MW10(10)	10.0	1.2	0.013	0.0064	0.013	0.019
	MW10(13)	13.00	32	ND	0.11	0.065	0.99
	MW11(5)	5.0	ND	ND	ND	0.0063	ND
	MW11(10)	10.0	2.3	ND	0.0050	0.014	0.037
	MW11(12)	12.0	47	ND	0.056	0.38	0.46
	Detection Limits		1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

GEOSTRATEGIES, INC.

SAMPLE ID: QWS-S-4.5  
 AEN LAB NO: 9506003-01  
 AEN WORK ORDER: 9506003  
 CLIENT PROJ. ID: 4531.701

DATE SAMPLED: 05/31/95  
 DATE RECEIVED: 06/01/95  
 REPORT DATE: 06/02/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
<b>BTEX &amp; Gasoline HCs</b>					
Benzene	EPA 8020 71-43-2	ND	5	ug/kg	06/01/95
Toluene	108-88-3	ND	5	ug/kg	06/01/95
Ethylbenzene	100-41-4	ND	5	ug/kg	06/01/95
Xylenes, Total	1330-20-7	ND	5	ug/kg	06/01/95
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	06/01/95
<b>#Extraction for TPH</b>					
TPH as Diesel	EPA 3550 GC-FID	-	-	Extrn Date	06/01/95
<b>#Digestion, Metals AA/ICP</b>					
Cadmium	EPA 308Q EPA 6010	-	-	Prep Date	06/01/95
Chromium	EPA 6010	ND	0.2	mg/kg	06/02/95
Lead	EPA 6010	41 *	0.5	mg/kg	06/02/95
Nickel	EPA 6010	8 *	1	mg/kg	06/02/95
Zinc	EPA 6010	46 *	1	mg/kg	06/02/95
<b>#Soil Extrn for HCs (IR)</b>					
<b>#Soil Extrn for O&amp;G (IR)</b>					
Hydrocarbons (IR)	EM 5520EF	-	-	Extrn Date	06/01/95
Oil & Grease (IR)	EM 5520E	-	-	Extrn Date	06/01/95
<b>EPA 8010 - Soil matrix</b>					
Bromodichloromethane	EPA 8010 75-27-4	ND	5	ug/kg	06/01/95
Bromoform	75-25-2	ND	5	ug/kg	06/01/95
Bromomethane	74-83-9	ND	20	ug/kg	06/01/95
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	06/01/95
Chlorobenzene	108-90-7	ND	5	ug/kg	06/01/95
Chloroethane	75-00-3	ND	20	ug/kg	06/01/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	5	ug/kg	06/01/95
Chloroform	67-66-3	ND	5	ug/kg	06/01/95
Chloromethane	74-87-3	ND	20	ug/kg	06/01/95

## GROSTRATEGIES, INC.

SAMPLE ID: OW9-9-4.5  
 AEN LAB NO: 9506003-01  
 AEN WORK ORDER: 9506003  
 CLIENT PROJ. ID: 4531.701

DATE SAMPLED: 05/31/95  
 DATE RECEIVED: 06/01/95  
 REPORT DATE: 06/02/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
1,2-Dichlorobenzene	95-50-1	ND	5	ug/kg	06/01/95
1,3-Dichlorobenzene	541-73-1	ND	5	ug/kg	06/01/95
1,4-Dichlorobenzene	106-46-7	ND	5	ug/kg	06/01/95
Dichlorodifluoromethane	75-71-8	ND	20	ug/kg	06/01/95
1,1-Dichloroethane	75-34-3	ND	5	ug/kg	06/01/95
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	06/01/95
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	06/01/95
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	06/01/95
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	06/01/95
1,2-Dichloropropane	78-87-3	ND	5	ug/kg	06/01/95
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	06/01/95
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	06/01/95
Methylene Chloride	75-09-2	ND	20	ug/kg	06/01/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	06/01/95
Tetrachloroethene	127-18-4	ND	5	ug/kg	06/01/95
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	06/01/95
1,1,2-Trichloroethane	79-00-3	ND	5	ug/kg	06/01/95
Trichloroethene	79-01-6	ND	5	ug/kg	06/01/95
Trichlorofluoromethane	75-69-4	ND	20	ug/kg	06/01/95
1,1,2-Trichlorotrifluoroethane	76-13-1	ND	5	ug/kg	06/01/95
Vinyl Chloride	75-01-6	ND	20	ug/kg	06/01/95

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit



Table 1. Analytical Results - Tosco 76 Branded Facility No. 3292, 15008 East 14th Street, San Leandro, California.

Sample ID	Depth (feet)	Date	TPHg	B	T	E	X	MTBE	Moisture %	Organic Content %	Density		Porosity %
											Bulk gm/cc	Grain gm/cc	
<b>Soil Samples</b>													
EB1-5	5.0	05/07/98	--	--	--	--	--	--	18.2	8,400	1.54	2.56	39.8
EB1-6.5	6.5	05/07/98	--	--	--	--	--	--	16.5	3,600	1.63	2.58	37.0
EB1-7.5	7.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--
EB1-9.5	9.5	05/07/98	--	--	--	--	--	--	19.3	350	1.70	2.57	34.1
EB2-7.5	7.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--
EB3-7.0	7.0	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--
EB4-5.5	5.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--
<-----ppm----->													
<b>Grab Groundwater Samples</b>													
EB-1	--	05/07/98	140	1.0	<0.50	<0.050	<0.050	3.4	--	--	--	--	--
EB-2	--	05/07/98	11,000	<10	<10	370	35	260	--	--	--	--	--
EB-3	--	05/07/98	570	<0.50	<0.50	13	3.2	7.9	--	--	--	--	--
EB-4	--	05/07/98	2,000	23	<2.5	4.0	<2.5	300	--	--	--	--	--

**EXPLANATION:**

TPHg = Total Petroleum Hydrocarbons as gasoline  
 MTBE = Methyl t-Butyl Ether  
 ppm = Parts per million  
 gm/cc = grams per cubic centimeter  
 -- = Not analyzed/not applicable

**ANALYTICAL METHODS:**

TPHg = EPA Method 8015Mod  
 Benzene, toluene, ethylbenzene, xylenes, MTBE = EPA Method 8020  
 Porosity = API RP-40  
 Density = D-2937  
 Moisture content = D-2216  
 Organic Content = Walkley-Black

**ANALYTICAL LABORATORY:**

Sequoia Analytical (ELAP #1210)

**GEOTECHNICAL LABORATORY:**

PTS Laboratories

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-1 (Screen Interval in feet: 7.0-19.0)</b>														
09/19/91	--	--	--	--	--	26000	--	130	16	1300	1800	--	--	
12/18/91	--	--	--	--	--	17000	--	160	20	1400	1600	--	--	
03/17/92	--	--	--	--	--	23000	--	320	19	1000	940	--	--	
05/19/92	--	--	--	--	--	29000	--	650	370	1100	1200	--	--	
08/20/92	--	--	--	--	--	18000	--	230	22	640	950	--	--	
09/16/92	36.72	13.67	0.00	23.05	--	--	--	--	--	--	--	--	--	
10/12/92	36.72	14.07	0.00	22.65	-0.40	--	--	--	--	--	--	--	--	
11/10/92	36.72	13.96	0.00	22.76	0.11	18000	--	220	ND	690	830	--	--	
12/10/92	36.72	13.15	0.00	23.57	0.81	--	--	--	--	--	--	--	--	
01/15/93	36.72	10.02	0.00	26.70	3.13	--	--	--	--	--	--	--	--	
02/20/93	36.72	9.01	0.00	27.71	1.01	19000	--	190	ND	880	620	--	--	
03/18/93	36.72	9.48	0.00	27.24	-0.47	--	--	--	--	--	--	--	--	
04/20/93	36.72	9.15	0.00	27.57	0.33	--	--	--	--	--	--	--	--	
05/21/93	36.72	9.80	0.00	26.92	-0.65	27000	--	150	200	1200	950	--	--	
06/22/93	36.72	10.33	0.00	26.39	-0.53	--	--	--	--	--	--	--	--	
07/23/93	36.72	10.79	0.00	25.93	-0.46	--	--	--	--	--	--	--	--	
08/23/93	36.72	11.27	0.00	25.45	-0.48	24000	--	160	110	840	810	--	--	
09/24/93	36.37	11.35	0.00	25.02	-0.43	--	--	--	--	--	--	--	--	
11/23/93	36.37	11.84	0.00	24.53	-0.49	18000	--	210	63	900	620	--	--	
02/24/94	36.37	9.45	0.00	26.92	2.39	18000	--	74	30	940	480	--	--	
05/25/94	36.37	10.45	0.00	25.92	-1.00	6400	--	72	ND	170	67	--	--	
08/23/94	36.37	11.98	0.00	24.39	-1.53	24000	--	130	57	970	320	--	--	
11/23/94	36.37	11.17	0.00	25.20	0.81	23000	--	180	44	970	270	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-1 continued</b>														
02/03/95	36.37	8.01	0.00	28.36	3.16	20000	--	77	17	950	390	--	--	
05/10/95	36.37	8.51	0.00	27.86	-0.50	16000	--	230	27	880	630	--	--	
08/02/95	36.37	10.00	0.00	26.37	-1.49	18000	--	190	ND	860	590	--	--	
11/02/95	36.37	11.11	0.00	25.26	-1.11	--	--	--	--	--	--	--	--	
11/20/95	36.37	11.19	0.00	25.18	-0.08	20000	--	180	ND	960	450	970	--	
02/08/96	36.37	7.74	0.00	28.63	3.45	15000	--	43	16	940	410	5200	--	
05/08/96	36.37	8.50	0.00	27.87	-0.76	16000	--	37	16	930	410	1600	--	
08/09/96	36.37	9.72	0.00	26.65	-1.22	2300	--	25	ND	77	39	1200	--	
11/07/96	36.37	10.74	0.00	25.63	-1.02	38000	--	140	ND	1900	5600	ND	--	
02/10/97	36.37	7.92	0.00	28.45	2.82	7300	--	91	ND	170	68	1700	--	
02/11/97	36.37	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/97	36.37	9.24	0.00	27.13	--	11000	--	120	ND	470	110	1200	--	
08/05/97	36.37	10.20	0.00	26.17	-0.96	530	--	5.9	ND	5.6	ND	430	--	
11/04/97	36.37	10.71	0.00	25.66	-0.51	4100	--	50	7	64	14	97	--	
02/12/98	36.37	6.27	0.00	30.10	4.44	8500	--	160	ND	550	ND	1900	--	
05/15/98	36.34	7.62	0.00	28.72	-1.38	5600	--	57	ND	290	ND	1500	--	
08/12/98	36.34	8.85	0.00	27.49	-1.23	ND	--	ND	ND	ND	ND	5800	--	
11/12/98	36.34	9.71	0.00	26.63	-0.86	ND	--	16	ND	ND	ND	12000	13000	
03/01/99	36.34	7.85	0.00	28.49	1.86	5700	--	43	ND	320	ND	5000	9600	
05/12/99	36.34	8.70	0.00	27.64	-0.85	ND	--	36	ND	ND	ND	12000	21000	
08/11/99	36.34	9.81	0.00	26.53	-1.11	ND	--	ND	ND	ND	ND	5760	8650	
11/04/99	36.34	10.72	0.00	25.62	-0.91	1640	--	11	ND	ND	ND	3330	3630	
02/29/00	36.34	7.31	0.00	29.03	3.41	195	--	ND	ND	ND	ND	580	657	
05/08/00	36.34	8.27	0.00	28.07	-0.96	9010	--	60.5	ND	402	ND	2260	1780	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-1 continued</b>														
08/08/00	36.34	9.85	0.00	26.49	-1.58	2060	--	34.8	ND	38.7	ND	1710	1990	
11/06/00	36.34	10.05	0.00	26.29	-0.20	2300	--	19.3	ND	4.37	ND	592	--	
02/07/01	36.34	9.64	0.00	26.70	0.41	2700	--	25	ND	38	ND	1500	840	
05/09/01	36.34	9.81	0.00	26.53	-0.17	5550	--	42.7	ND	48.4	ND	605	431	
08/24/01	36.34	11.21	0.00	25.13	-1.40	15000	--	130	ND<20	170	ND<20	820	--	
11/16/01	36.34	11.49	0.00	24.85	-0.28	8900	--	65	ND<10	46	ND<10	640	490	
02/21/02	36.34	8.93	0.00	27.41	2.56	7400	--	73	ND<10	100	ND<10	400	170	
05/10/02	36.34	9.82	0.00	26.52	-0.89	6000	--	67	6.7	58	ND<5.0	ND<50	--	
08/26/02	36.34	11.03	0.00	25.31	-1.21	--	9200	ND<10	ND<10	62	ND<20	--	120	
11/07/02	36.34	11.53	0.00	24.81	-0.50	--	2200	ND<2.5	ND<2.5	4.6	ND<5.0	--	20	
02/14/03	36.34	9.03	0.00	27.31	2.50	--	4300	ND<2.5	ND<2.5	23	ND<5.0	--	35	
05/12/03	36.34	8.61	0.00	27.73	0.42	--	5000	ND<0.50	0.50	13	ND<1.0	--	32	
08/11/03	36.34	10.37	0.00	25.97	-1.76	--	2900	ND<0.50	ND<0.50	4.4	ND<1.0	--	17	
11/13/03	36.34	11.21	0.00	25.13	-0.84	--	8100	ND<5.0	ND<5.0	45	ND<10	--	82	
02/17/04	36.34	9.35	0.00	26.99	1.86	--	8200	ND<2.5	ND<2.5	84	ND<5.0	--	33	
05/20/04	36.34	10.15	0.00	26.19	-0.80	--	9200	ND<5.0	ND<5.0	78	ND<10	--	24	
08/25/04	36.34	11.37	0.00	24.97	-1.22	--	8500	ND<2.5	ND<2.5	64	ND<5.0	--	33	
11/02/04	36.34	10.93	0.00	25.41	0.44	--	9500	ND<5.0	ND<5.0	34	ND<10	--	61	
03/17/05	36.34	8.28	0.00	28.06	2.65	--	10000	ND<0.50	0.96	35	ND<1.0	--	21	
06/13/05	36.34	8.59	0.00	27.75	-0.31	--	8500	ND<5.0	ND<5.0	48	ND<10	--	10	
09/27/05	36.34	10.25	0.00	26.09	-1.66	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	100	
12/20/05	36.34	9.61	0.00	26.73	0.64	--	6000	ND<0.50	0.62	20	ND<1.0	--	9.9	
03/10/06	36.34	7.58	0.00	28.76	2.03	--	4500	ND<2.5	ND<2.5	22	ND<5.0	--	10	
06/20/06	36.34	8.76	0.00	27.58	-1.18	--	4700	ND<2.5	ND<2.5	10	ND<5.0	--	3.2	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-1 continued</b>														
09/25/06	36.34	9.01	0.00	27.33	-0.25	--	5600	ND<1.0	ND<1.0	7.8	ND<1.0	--	3.0	
12/18/06	36.34	9.25	0.00	27.09	-0.24	--	8300	2.1	1.2	220	37	--	ND<0.50	
03/29/07	36.34	9.53	0.00	26.81	-0.28	--	5300	ND<0.50	ND<0.50	12	ND<0.50	--	5.8	
06/26/07	36.34	10.46	0.00	25.88	-0.93	--	5300	ND<0.50	ND<0.50	7.4	ND<0.50	--	4.9	
09/26/07	36.34	11.46	0.00	24.88	-1.00	--	2600	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	17	
12/18/07	36.34	11.24	0.00	25.10	0.22	--	6100	ND<2.5	ND<2.5	2.9	ND<5.0	--	42	
03/25/08	36.34	9.57	0.00	26.77	1.67	--	3100	ND<2.5	ND<2.5	4.0	ND<5.0	--	8.6	
06/18/08	36.34	10.78	0.00	25.56	-1.21	--	1400	ND<0.50	0.56	1.4	ND<1.0	--	6.3	
<b>MW-2 (Screen Interval in feet: 7.0-19.5)</b>														
05/04/91	--	--	--	--	--	19000	--	6.6	1.4	460	630	--	--	
09/19/91	--	--	--	--	--	19000	--	100	6.8	790	310	--	--	
12/18/91	--	--	--	--	--	10000	--	110	5.1	420	96	--	--	
03/17/92	--	--	--	--	--	16000	--	110	ND	730	220	--	--	
05/19/92	--	--	--	--	--	17000	--	140	87	680	170	--	--	
08/20/92	--	--	--	--	--	13000	--	52	ND	660	70	--	--	
09/16/92	36.89	13.80	0.00	23.09	--	--	--	--	--	--	--	--	--	
10/12/92	36.89	14.19	0.00	22.70	-0.39	--	--	--	--	--	--	--	--	
11/10/92	36.89	14.06	0.00	22.83	0.13	11000	--	36	7.2	570	45	--	--	
12/10/92	36.89	13.21	0.00	23.68	0.85	--	--	--	--	--	--	--	--	
01/15/93	36.89	10.12	0.00	26.77	3.09	--	--	--	--	--	--	--	--	
02/20/93	36.89	9.07	0.00	27.82	1.05	1500	--	2.9	3.8	9.1	ND	--	--	
03/18/93	36.89	9.55	0.00	27.34	-0.48	--	--	--	--	--	--	--	--	
04/20/93	36.89	9.19	0.00	27.70	0.36	--	--	--	--	--	--	--	--	
05/21/93	36.89	9.84	0.00	27.05	-0.65	9500	--	37	ND	470	62	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-2 continued</b>														
06/22/93	36.89	10.37	0.00	26.52	-0.53	--	--	--	--	--	--	--	--	
07/23/93	36.89	10.83	0.00	26.06	-0.46	--	--	--	--	--	--	--	--	
08/23/93	36.89	11.30	0.00	25.59	-0.47	15000	--	110	ND	590	64	--	--	
09/24/93	36.34	11.14	0.00	25.20	-0.39	--	--	--	--	--	--	--	--	
11/23/93	36.34	11.69	0.00	24.65	-0.55	11000	--	80	10	480	20	--	--	
02/24/94	36.34	9.27	0.00	27.07	2.42	11000	--	44	ND	580	32	--	--	
05/25/94	36.34	10.30	0.00	26.04	-1.03	11000	--	50	ND	400	22	--	--	
08/23/94	36.34	11.82	0.00	24.52	-1.52	12000	--	45	10	360	20	--	--	
11/23/94	36.34	10.97	0.00	25.37	0.85	15000	--	61	24	440	ND	--	--	
02/03/95	36.34	7.87	0.00	28.47	3.10	9700	--	5.7	ND	250	10	--	--	
05/10/95	36.34	8.38	0.00	27.96	-0.51	7500	--	56	4.7	310	33	--	--	
08/02/95	36.34	9.36	0.00	26.98	-0.98	8200	--	53	22	220	25	--	--	
11/02/95	36.34	10.95	0.00	25.39	-1.59	5000	--	56	4.5	170	7.7	110	--	
02/08/96	36.34	7.52	0.00	28.82	3.43	7200	--	ND	ND	170	ND	ND	--	
05/08/96	36.34	8.21	0.00	28.13	-0.69	8400	--	5.6	9	170	10	130	--	
08/09/96	36.34	9.54	0.00	26.80	-1.33	3100	--	24	ND	80	ND	64	--	
11/07/96	36.34	10.69	0.00	25.65	-1.15	36000	--	140	ND	1900	5600	ND	--	
02/10/97	36.34	7.75	0.00	28.59	2.94	4600	--	27	ND	53	ND	ND	--	
02/11/97	36.34	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/97	36.34	9.14	0.00	27.20	--	5300	--	61	ND	78	20	180	--	
08/05/97	36.34	10.23	0.00	26.11	-1.09	3100	--	35	ND	13	ND	58	--	
11/04/97	36.34	10.65	0.00	25.69	-0.42	1200	--	16	ND	11	25	53	--	
02/12/98	36.34	6.20	0.00	30.14	4.45	630	--	12	ND	7.3	ND	48	--	
05/15/98	36.30	7.50	0.00	28.80	-1.34	3600	--	19	ND	33	ND	72	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-2 continued</b>														
08/12/98	36.30	8.82	0.00	27.48	-1.32	3100	--	44	6.1	15	5.7	270	--	
11/12/98	36.30	9.60	0.00	26.70	-0.78	3200	--	44	ND	15	ND	180	--	
03/01/99	36.30	7.81	0.00	28.49	1.79	3600	--	45	6.2	7.5	ND	570	--	
05/12/99	36.30	8.65	0.00	27.65	-0.84	3100	--	65	ND	15	17	450	--	
08/11/99	36.30	9.95	0.00	26.35	-1.30	3260	--	33.6	ND	ND	ND	154	--	
11/04/99	36.30	10.78	0.00	25.52	-0.83	3160	--	38.9	7.1	ND	ND	120	--	
02/29/00	36.30	7.44	0.00	28.86	3.34	3770	--	13.5	ND	12	ND	105	--	
05/08/00	36.30	8.42	0.00	27.88	-0.98	3840	--	ND	ND	9.54	ND	ND	--	
08/08/00	36.30	9.66	0.00	26.64	-1.24	3080	--	40.8	ND	ND	ND	149	--	
11/06/00	36.30	9.79	0.00	26.51	-0.13	2510	--	38.8	4.42	ND	ND	82.6	--	
02/07/01	36.30	9.43	0.00	26.87	0.36	9300	--	140	120	71	140	790	--	
05/09/01	36.30	9.65	0.00	26.65	-0.22	3300	--	37.9	ND	ND	ND	120	--	
08/24/01	36.30	11.06	0.00	25.24	-1.41	3100	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	--	
11/16/01	36.30	11.19	0.00	25.11	-0.13	2200	--	28	ND<5.0	ND<5.0	ND<5.0	76	--	
02/21/02	36.30	8.73	0.00	27.57	2.46	2700	--	33	ND<5.0	ND<5.0	ND<5.0	100	--	
05/10/02	36.30	9.71	0.00	26.59	-0.98	2300	--	30	ND<5.0	ND<5.0	ND<5.0	ND<50	--	
08/26/02	36.30	10.88	0.00	25.42	-1.17	--	4400	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	
11/07/02	36.30	11.16	0.00	25.14	-0.28	--	1100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<10	
02/14/03	36.30	8.91	0.00	27.39	2.25	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
05/12/03	36.30	8.73	0.00	27.57	0.18	--	2900	ND<0.50	ND<0.50	0.89	ND<1.0	--	ND<2.0	
08/11/03	36.30	10.51	0.00	25.79	-1.78	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/13/03	36.30	11.06	0.00	25.24	-0.55	--	1100	1.2	0.68	0.78	2.6	--	ND<2.0	
02/17/04	36.30	9.17	0.00	27.13	1.89	--	2800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
05/20/04	36.30	10.02	0.00	26.28	-0.85	--	2500	ND<0.50	0.96	1.1	ND<1.0	--	ND<0.50	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-2 continued</b>														
08/25/04	36.30	11.19	0.00	25.11	-1.17	--	2900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/02/04	36.30	10.74	0.00	25.56	0.45	--	2500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/17/05	36.30	8.13	0.00	28.17	2.61	--	2700	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/13/05	36.30	8.47	0.00	27.83	-0.34	--	4100	ND<0.50	ND<0.50	1.4	ND<1.0	--	ND<0.50	
09/27/05	36.30	10.11	0.00	26.19	-1.64	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/20/05	36.30	9.39	0.00	26.91	0.72	--	2100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/10/06	36.30	7.43	0.00	28.87	1.96	--	2300	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	
06/20/06	36.30	8.59	0.00	27.71	-1.16	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/25/06	36.30	9.76	0.00	26.54	-1.17	--	2300	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/18/06	36.30	9.07	0.00	27.23	0.69	--	1200	ND<0.50	ND<0.50	ND<0.50	0.58	--	ND<0.50	Sampled on 12-26-06
03/29/07	36.30	10.36	0.00	25.94	-1.29	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
06/26/07	36.30	10.30	0.00	26.00	0.06	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
09/26/07	36.30	11.30	0.00	25.00	-1.00	--	500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/18/07	36.30	11.05	0.00	25.25	0.25	--	460	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/25/08	36.30	9.42	0.00	26.88	1.63	--	1600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/18/08	36.30	10.63	0.00	25.67	-1.21	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>MW-2(SP) (Screen Interval in feet: 11.0-21.0)</b>														
05/08/96	35.44	9.12	0.00	26.32	--	540	--	0.68	21	1	1.7	ND	--	
08/09/96	35.44	9.98	0.00	25.46	-0.86	170	--	ND	7.8	ND	ND	ND	--	
11/07/96	35.44	10.98	0.00	24.46	-1.00	430	--	8.9	1.5	ND	ND	10	--	
02/10/97	35.44	8.63	0.00	26.81	2.35	230	--	4.6	1	ND	ND	10	--	
02/11/97	35.44	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/97	35.44	9.58	0.00	25.86	--	ND	--	ND	ND	ND	ND	14	--	
08/05/97	35.44	10.62	0.00	24.82	-1.04	360	--	5.5	50	ND	ND	ND	--	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-2(SP) continued</b>														
11/04/97	35.44	11.06	0.00	24.38	-0.44	280	--	2.9	13	ND	0.54	ND	--	
02/12/98	35.44	7.71	0.00	27.73	3.35	440	--	10	1.6	ND	0.69	13	--	
05/15/98	35.44	8.50	0.00	26.94	-0.79	540	--	10	1.1	ND	1.1	15	--	
08/12/98	35.44	9.43	0.00	26.01	-0.93	ND	--	ND	ND	ND	ND	ND	--	
11/12/98	35.44	9.98	0.00	25.46	-0.55	300	--	6.1	ND	ND	4	ND	--	
03/01/99	35.44	8.70	0.00	26.74	1.28	57	--	ND	ND	ND	ND	4.5	--	
05/12/99	35.44	9.45	0.00	25.99	-0.75	ND	--	ND	ND	ND	ND	5	--	
08/11/99	35.44	10.08	0.00	25.36	-0.63	337	--	ND	ND	ND	ND	12.4	--	
11/04/99	35.44	10.91	0.00	24.53	-0.83	317	--	8.31	ND	ND	ND	7.81	--	
02/29/00	35.44	8.04	0.00	27.40	2.87	--	--	--	--	--	--	--	--	Sampled semi-annually
05/08/00	35.44	9.10	0.00	26.34	-1.06	131	--	ND	ND	ND	ND	ND	4.83	
08/08/00	35.44	9.91	0.00	25.53	-0.81	--	--	--	--	--	--	--	--	
11/06/00	35.44	10.20	0.00	25.24	-0.29	183	--	ND	ND	ND	ND	ND	--	
02/07/01	35.44	9.70	0.00	25.74	0.50	--	--	--	--	--	--	--	--	
05/09/01	35.44	9.98	0.00	25.46	-0.28	ND	--	ND	ND	ND	ND	ND	--	
08/24/01	35.44	11.15	0.00	24.29	-1.17	--	--	--	--	--	--	--	--	Sampled semi-annually
11/16/01	35.44	11.31	0.00	24.13	-0.16	250	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
02/21/02	35.44	9.55	0.00	25.89	1.76	--	--	--	--	--	--	--	--	
05/10/02	35.44	10.01	0.00	25.43	-0.46	180	--	ND<0.50	ND<0.50	ND<0.50	0.71	10	--	
08/26/02	35.44	11.03	0.00	24.41	-1.02	--	--	--	--	--	--	--	--	Sampled semi-annually
11/07/02	35.44	11.12	0.00	24.32	-0.09	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.4	
02/14/03	35.44	9.60	0.00	25.84	1.52	--	--	--	--	--	--	--	--	Sampled semi-annually
05/12/03	35.44	9.21	0.00	26.23	0.39	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.4	
08/11/03	35.44	10.87	0.00	24.57	-1.66	--	--	--	--	--	--	--	--	Monitored Only

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-2(SP)	continued													
11/13/03	35.44	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
02/17/04	35.44	9.79	0.00	25.65	--	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	35.44	10.29	0.00	25.15	-0.50	--	260	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	
08/25/04	35.44	11.25	0.00	24.19	-0.96	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	35.44	10.87	0.00	24.57	0.38	--	150	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.1	
03/17/05	35.44	8.91	0.00	26.53	1.96	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	35.44	9.10	0.00	26.34	-0.19	--	260	ND<0.50	ND<0.50	0.64	ND<1.0	--	10	
09/27/05	35.44	10.34	0.00	25.10	-1.24	--	--	--	--	--	--	--	--	Sampled semi-annually
12/20/05	35.44	10.48	0.00	24.96	-0.14	--	260	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.6	
03/10/06	35.44	8.50	0.00	26.94	1.98	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/20/06	35.44	9.26	0.00	26.18	-0.76	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	
09/25/06	35.44	10.11	0.00	25.33	-0.85	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/06	35.44	9.64	0.00	25.80	0.47	--	120	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.6	
03/29/07	35.44	9.77	0.00	25.67	-0.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/26/07	35.44	10.48	0.00	24.96	-0.71	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	4.0	
09/26/07	35.44	11.32	0.00	24.12	-0.84	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/07	35.44	11.15	0.00	24.29	0.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/25/08	35.44	9.02	0.00	26.42	2.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/18/08	35.44	10.75	0.00	24.69	-1.73	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.3	
MW-3	(Screen Interval in feet: 7.0-22.5)													
05/04/91	--	--	--	--	--	9100	--	2	ND	55	180	--	--	
09/19/91	--	--	--	--	--	7600	--	ND	13	190	170	--	--	
12/18/91	--	--	--	--	--	5900	--	54	6.4	110	64	--	--	
03/17/92	--	--	--	--	--	5800	--	66	7.5	100	58	--	--	

**Table 2**  
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**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-3 continued</b>														
05/19/92	--	--	--	--	--	3400	--	25	3.6	66	41	--	--	
08/20/92	--	--	--	--	--	4500	--	58	ND	65	35	--	--	
09/16/92	36.84	13.74	0.00	23.10	--	--	--	--	--	--	--	--	--	
10/12/92	36.84	14.13	0.00	22.71	-0.39	--	--	--	--	--	--	--	--	
11/10/92	36.84	14.03	0.00	22.81	0.10	3400	--	37	ND	85	34	--	--	
12/10/92	36.84	13.15	0.00	23.69	0.88	--	--	--	--	--	--	--	--	
01/15/93	36.84	10.07	0.00	26.77	3.08	--	--	--	--	--	--	--	--	
02/20/93	36.84	9.02	0.00	27.82	1.05	1600	--	12	18	8.9	12	--	--	
03/18/93	36.84	9.50	0.00	27.34	-0.48	--	--	--	--	--	--	--	--	
04/20/93	36.84	9.02	0.00	27.82	0.48	--	--	--	--	--	--	--	--	
05/21/93	36.84	9.70	0.00	27.14	-0.68	2600	--	42	ND	43	15	--	--	
06/22/93	36.84	10.28	0.00	26.56	-0.58	--	--	--	--	--	--	--	--	
07/23/93	36.84	10.74	0.00	26.10	-0.46	--	--	--	--	--	--	--	--	
08/23/93	36.84	11.24	0.00	25.60	-0.50	2900	--	25	ND	50	18	--	--	
09/24/93	36.42	11.20	0.00	25.22	-0.38	--	--	--	--	--	--	--	--	
11/23/93	36.42	11.78	0.00	24.64	-0.58	2300	--	34	ND	24	5.6	--	--	
02/24/94	36.42	9.21	0.00	27.21	2.57	3400	--	46	ND	53	11	--	--	
05/25/94	36.42	10.34	0.00	26.08	-1.13	1400	--	20	ND	ND	ND	--	--	
08/23/94	36.42	11.88	0.00	24.54	-1.54	2900	--	37	49	14	2.9	--	--	
11/23/94	36.42	10.98	0.00	25.44	0.90	3200	--	48	ND	22	ND	--	--	
02/03/95	36.42	7.82	0.00	28.60	3.16	780	--	13	ND	2.1	ND	--	--	
05/10/95	36.42	8.38	0.00	28.04	-0.56	1300	--	ND	ND	ND	ND	--	--	
08/02/95	36.42	9.49	0.00	26.93	-1.11	1500	--	6.3	ND	16	2.1	--	--	
11/02/95	36.42	11.00	0.00	25.42	-1.51	1100	--	5.2	2.1	7.4	0.5	15	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-3 continued</b>														
02/08/96	36.42	7.41	0.00	29.01	3.59	450	--	ND	ND	ND	ND	ND	--	
05/08/96	36.42	8.20	0.00	28.22	-0.79	590	--	ND	11	10	ND	ND	--	
08/09/96	36.42	9.53	0.00	26.89	-1.33	ND	--	ND	ND	ND	ND	ND	--	
11/07/96	36.42	10.96	0.00	25.46	-1.43	140	--	1.2	ND	ND	ND	5.6	--	
02/10/97	36.42	7.71	0.00	28.71	3.25	89	--	1.8	ND	ND	ND	ND	--	
02/11/97	36.42	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/97	36.42	9.17	0.00	27.25	--	52	--	ND	ND	ND	5.1	5.1	--	
08/05/97	36.42	10.27	0.00	26.15	-1.10	ND	--	ND	ND	ND	ND	ND	--	
11/04/97	36.42	10.83	0.00	25.59	-0.56	93	--	1.8	ND	ND	ND	6.2	--	
02/12/98	36.42	6.00	0.00	30.42	4.83	56	--	0.59	ND	ND	ND	2.7	--	
05/15/98	36.42	7.42	0.00	29.00	-1.42	130	--	0.68	ND	ND	0.63	10	--	
08/12/98	36.42	8.84	0.00	27.58	-1.42	50	--	ND	ND	ND	ND	ND	--	
11/12/98	36.42	9.57	0.00	26.85	-0.73	60	--	ND	ND	ND	ND	3.8	--	
03/01/99	36.42	8.74	0.00	27.68	0.83	66	--	ND	ND	ND	ND	3.2	--	
05/12/99	36.42	8.92	0.00	27.50	-0.18	ND	--	ND	ND	ND	ND	ND	--	
08/11/99	36.42	10.18	0.00	26.24	-1.26	ND	--	ND	ND	ND	ND	ND	--	
11/04/99	36.42	11.06	0.00	25.36	-0.88	ND	--	ND	ND	ND	ND	ND	--	
02/29/00	36.42	--	--	--	--	--	--	--	--	--	--	--	--	Not Monitored/Sampled
08/08/00	36.42	10.03	0.00	26.39	--	--	--	--	--	--	--	--	--	
11/06/00	36.42	10.10	0.00	26.32	-0.07	--	--	--	--	--	--	--	--	
02/07/01	36.42	9.81	0.00	26.61	0.29	--	--	--	--	--	--	--	--	
05/09/01	36.42	9.58	0.00	26.84	0.23	--	--	--	--	--	--	--	--	
08/24/01	36.42	11.12	0.00	25.30	-1.54	--	--	--	--	--	--	--	--	
11/16/01	36.42	10.84	0.00	25.58	0.28	--	--	--	--	--	--	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-3 continued</b>														
02/21/02	36.42	8.68	0.00	27.74	2.16	--	--	--	--	--	--	--	--	
05/10/02	36.42	9.71	0.00	26.71	-1.03	--	--	--	--	--	--	--	--	
08/26/02	36.42	10.85	0.00	25.57	-1.14	--	--	--	--	--	--	--	--	
11/07/02	36.42	10.89	0.00	25.53	-0.04	--	--	--	--	--	--	--	--	
02/14/03	36.42	8.72	0.00	27.70	2.17	--	--	--	--	--	--	--	--	
05/12/03	36.42	8.25	0.00	28.17	0.47	--	--	--	--	--	--	--	--	
08/11/03	36.42	10.64	0.00	25.78	-2.39	--	--	--	--	--	--	--	--	
11/13/03	36.42	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
02/17/04	36.42	9.17	0.00	27.25	--	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	36.42	10.03	0.00	26.39	-0.86	--	--	--	--	--	--	--	--	Monitored Only
08/25/04	36.42	11.26	0.00	25.16	-1.23	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	36.42	10.78	0.00	25.64	0.48	--	--	--	--	--	--	--	--	Monitored Only
03/17/05	36.42	8.13	0.00	28.29	2.65	--	--	--	--	--	--	--	--	Monitored Only
06/13/05	36.42	8.41	0.00	28.01	-0.28	--	--	--	--	--	--	--	--	Monitored only
09/27/05	36.42	10.13	0.00	26.29	-1.72	--	--	--	--	--	--	--	--	Monitored Only
12/20/05	36.42	10.20	0.00	26.22	-0.07	--	--	--	--	--	--	--	--	Monitored Only
03/10/06	36.42	7.39	0.00	29.03	2.81	--	--	--	--	--	--	--	--	Monitored Only
06/20/06	36.42	8.17	0.00	28.25	-0.78	--	--	--	--	--	--	--	--	Monitored Only
09/25/06	36.42	9.53	0.00	26.89	-1.36	--	--	--	--	--	--	--	--	Monitored Only
12/18/06	36.42	9.01	0.00	27.41	0.52	--	--	--	--	--	--	--	--	Monitored Only
03/29/07	36.42	9.19	0.00	27.23	-0.18	--	--	--	--	--	--	--	--	Monitored Only
06/26/07	36.42	10.09	0.00	26.33	-0.90	--	--	--	--	--	--	--	--	Monitored Only
09/26/07	36.42	11.10	0.00	25.32	-1.01	--	--	--	--	--	--	--	--	Monitored Only
12/18/07	36.42	11.12	0.00	25.30	-0.02	--	--	--	--	--	--	--	--	Monitored only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-3 continued</b>														
03/25/08	36.42	9.62	0.00	26.80	1.50	--	--	--	--	--	--	--	--	Monitored Only
06/18/08	36.42	10.27	0.00	26.15	-0.65	--	--	--	--	--	--	--	--	Monitored Only
<b>MW-3(SP) (Screen Interval in feet: 11.0-21.0)</b>														
05/08/96	35.81	8.73	0.00	27.08	--	4700	--	7.9	36	13	4	42	--	
08/09/96	35.81	9.73	0.00	26.08	-1.00	2000	--	ND	14	7.6	ND	ND	--	
11/07/96	35.81	10.88	0.00	24.93	-1.15	1800	--	29	ND	ND	ND	40	--	
02/10/97	35.81	8.16	0.00	27.65	2.72	3500	--	70	14	ND	ND	150	--	
05/07/97	35.81	9.35	0.00	26.46	-1.19	3100	--	48	ND	ND	ND	110	--	
08/05/97	35.81	10.44	0.00	25.37	-1.09	3200	--	43	5.7	ND	ND	61	--	
11/04/97	35.81	10.90	0.00	24.91	-0.46	2600	--	34	ND	ND	ND	53	--	
02/12/98	35.81	6.77	0.00	29.04	4.13	3200	--	62	ND	ND	ND	100	--	
05/15/98	35.82	8.02	0.00	27.80	-1.24	ND	--	ND	ND	ND	ND	2.5	--	
08/12/98	35.82	9.11	0.00	26.71	-1.09	110	--	ND	4.1	ND	ND	ND	--	
11/12/98	35.82	9.81	0.00	26.01	-0.70	1800	--	37	2.8	ND	ND	55	--	
03/01/99	35.82	8.27	0.00	27.55	1.54	2900	--	12	3.6	ND	ND	110	--	
05/12/99	35.82	8.92	0.00	26.90	-0.65	4100	--	34	ND	ND	ND	45	--	
08/11/99	35.82	9.59	0.00	26.23	-0.67	3220	--	22.8	ND	ND	ND	50.8	--	
11/04/99	35.82	10.86	0.00	24.96	-1.27	2460	--	26.6	ND	ND	ND	52.1	--	
02/29/00	35.82	7.92	0.00	27.90	2.94	--	--	--	--	--	--	--	--	Sampled semi-annually
05/08/00	35.82	9.07	0.00	26.75	-1.15	1080	--	ND	ND	ND	ND	ND	ND	
08/08/00	35.82	9.86	0.00	25.96	-0.79	--	--	--	--	--	--	--	--	
11/06/00	35.82	10.12	0.00	25.70	-0.26	3100	--	35	ND	ND	ND	95.7	--	
02/07/01	35.82	9.65	0.00	26.17	0.47	--	--	--	--	--	--	--	--	
05/09/01	35.82	9.79	0.00	26.03	-0.14	3350	--	34	ND	ND	ND	ND	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-3(SP)	continued													
08/24/01	35.82	11.09	0.00	24.73	-1.30	--	--	--	--	--	--	--	--	Sampled semi-annually
11/16/01	35.82	11.29	0.00	24.53	-0.20	3300	--	47	ND<10	ND<10	ND<10	ND<100	--	
02/21/02	35.82	9.19	0.00	26.63	2.10	--	--	--	--	--	--	--	--	
05/10/02	35.82	9.84	0.00	25.98	-0.65	4700	--	55	ND<5.0	ND<5.0	ND<5.0	140	--	
08/26/02	35.82	10.95	0.00	24.87	-1.11	--	--	--	--	--	--	--	--	Sampled semi-annually
11/07/02	35.82	11.33	0.00	24.49	-0.38	--	2600	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	
02/14/03	35.82	9.92	0.00	25.90	1.41	--	--	--	--	--	--	--	--	Sampled semi-annually
05/12/03	35.82	9.74	0.00	26.08	0.18	--	420	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
08/11/03	35.82	11.26	0.00	24.56	-1.52	--	--	--	--	--	--	--	--	Monitored Only
11/13/03	35.82	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
02/17/04	35.82	9.54	0.00	26.28	--	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	35.82	10.11	0.00	25.71	-0.57	--	3200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
08/25/04	35.82	11.22	0.00	24.60	-1.11	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	35.82	10.85	0.00	24.97	0.37	--	4500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/17/05	35.82	8.55	0.00	27.27	2.30	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	35.82	8.75	0.00	27.07	-0.20	--	4100	ND<0.50	ND<0.50	1.1	ND<1.0	--	ND<0.50	
09/27/05	35.82	10.20	0.00	25.62	-1.45	--	--	--	--	--	--	--	--	Sampled semi-annually
12/20/05	35.82	10.35	0.00	25.47	-0.15	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/10/06	35.82	7.80	0.00	28.02	2.55	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/20/06	35.82	8.88	0.00	26.94	-1.08	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/25/06	35.82	9.93	0.00	25.89	-1.05	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/06	35.82	9.40	0.00	26.42	0.53	--	1900	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
03/29/07	35.82	9.55	0.00	26.27	-0.15	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/26/07	35.82	10.37	0.00	25.45	-0.82	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-3(SP) continued														
09/26/07	35.82	11.33	0.00	24.49	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/07	35.82	11.11	0.00	24.71	0.22	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/25/08	35.82	9.61	0.00	26.21	1.50	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/18/08	35.82	10.70	0.00	25.12	-1.09	--	1600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-4		(Screen Interval in feet: 7.0-19.5)												
05/04/91	--	--	--	--	--	6300	--	ND	ND	2.8	61	--	--	
09/19/91	--	--	--	--	--	1800	--	0.83	ND	54	46	--	--	
12/18/91	--	--	--	--	--	2500	--	28	2.5	54	22	--	--	
03/17/92	--	--	--	--	--	1800	--	3.7	1.4	90	21	--	--	
05/19/92	--	--	--	--	--	2000	--	20	3.5	42	8.3	--	--	
08/20/92	--	--	--	--	--	1000	--	15	ND	11	3	--	--	
09/16/92	37.40	14.31	0.00	23.09	--	--	--	--	--	--	--	--	--	
10/12/92	37.40	14.72	0.00	22.68	-0.41	--	--	--	--	--	--	--	--	
11/10/92	37.40	14.57	0.00	22.83	0.15	690	--	9.1	ND	16	2.8	--	--	
12/10/92	37.40	13.67	0.00	23.73	0.90	--	--	--	--	--	--	--	--	
01/15/93	37.40	10.62	0.00	26.78	3.05	--	--	--	--	--	--	--	--	
02/20/93	37.40	9.59	0.00	27.81	1.03	2400	--	40	2.1	33	ND	--	--	
03/18/93	37.40	9.97	0.00	27.43	-0.38	--	--	--	--	--	--	--	--	
04/20/93	37.40	9.67	0.00	27.73	0.30	--	--	--	--	--	--	--	--	
05/21/93	37.40	10.32	0.00	27.08	-0.65	1900	--	31	ND	20	4.5	--	--	
06/22/93	37.40	10.91	0.00	26.49	-0.59	--	--	--	--	--	--	--	--	
07/23/93	37.40	11.38	0.00	26.02	-0.47	--	--	--	--	--	--	--	--	
08/23/93	37.40	11.86	0.00	25.54	-0.48	1200	--	5	ND	16	ND	--	--	
09/24/93	37.04	11.85	0.00	25.19	-0.35	--	--	--	--	--	--	--	--	



**Table 2**  
**HHSTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-4 continued</b>														
11/23/93	37.04	12.44	0.00	24.60	-0.59	720	--	10	ND	8.7	ND	--	--	
02/24/94	37.04	9.89	0.00	27.15	2.55	1300	--	8.9	ND	20	ND	--	--	
05/25/94	37.04	11.02	0.00	26.02	-1.13	1700	--	22	ND	4.5	ND	--	--	
08/23/94	37.04	12.57	0.00	24.47	-1.55	690	--	9.2	1.3	7.1	1.9	--	--	
11/23/94	37.04	11.65	0.00	25.39	0.92	420	--	5	1.1	4.2	1.2	--	--	
02/03/95	37.04	8.52	0.00	28.52	3.13	620	--	6.4	ND	9.3	ND	--	--	
05/10/95	37.04	9.97	0.00	27.07	-1.45	280	--	2.8	ND	2.7	2.4	--	--	
08/02/95	37.04	10.18	0.00	26.86	-0.21	290	--	3.6	ND	2.8	ND	--	--	
11/02/95	37.04	11.67	0.00	25.37	-1.49	42000	--	390	210	2800	6300	270	--	
02/08/96	37.04	8.15	0.00	28.89	3.52	130	--	2.1	ND	1.5	0.69	ND	--	
05/08/96	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
08/09/96	37.04	10.24	0.00	26.80	--	ND	--	ND	ND	ND	ND	ND	--	
11/07/96	37.04	11.58	0.00	25.46	-1.34	ND	--	ND	ND	ND	ND	ND	--	
02/10/97	37.04	8.45	0.00	28.59	3.13	ND	--	ND	ND	ND	ND	ND	--	
05/07/97	37.04	9.85	0.00	27.19	-1.40	ND	--	ND	ND	ND	ND	ND	--	
08/05/97	37.04	11.04	0.00	26.00	-1.19	50	--	0.76	ND	ND	ND	ND	--	
11/04/97	37.04	11.46	0.00	25.58	-0.42	ND	--	ND	ND	ND	ND	ND	--	
02/12/98	37.04	5.75	0.00	31.29	5.71	ND	--	ND	ND	ND	ND	ND	--	
05/15/98	37.04	7.28	0.00	29.76	-1.53	ND	--	ND	ND	ND	ND	ND	--	
08/12/98	37.04	9.85	0.00	27.19	-2.57	ND	--	ND	ND	ND	ND	ND	--	
11/12/98	37.04	10.28	0.00	26.76	-0.43	ND	--	ND	ND	ND	ND	ND	--	
03/01/99	37.04	8.51	0.00	28.53	1.77	ND	--	ND	ND	ND	ND	ND	--	
05/12/99	37.04	9.32	0.00	27.72	-0.81	ND	--	ND	ND	ND	ND	ND	--	
08/11/99	37.04	10.65	0.00	26.39	-1.33	ND	--	ND	ND	ND	ND	ND	--	

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**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-4 continued														
11/04/99	37.04	11.48	0.00	25.56	-0.83	ND	--	ND	ND	ND	ND	ND	--	
02/29/00	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Not Monitored/Sampled
08/08/00	37.04	10.67	0.00	26.37	--	--	--	--	--	--	--	--	--	
11/06/00	37.04	10.56	0.00	26.48	0.11	--	--	--	--	--	--	--	--	
02/07/01	37.04	10.40	0.00	26.64	0.16	--	--	--	--	--	--	--	--	
05/09/01	37.04	9.16	0.00	27.88	1.24	--	--	--	--	--	--	--	--	
08/24/01	37.04	11.80	0.00	25.24	-2.64	--	--	--	--	--	--	--	--	
11/16/01	37.04	10.46	0.00	26.58	1.34	--	--	--	--	--	--	--	--	
02/21/02	37.04	9.37	0.00	27.67	1.09	--	--	--	--	--	--	--	--	
05/10/02	37.04	10.41	0.00	26.63	-1.04	--	--	--	--	--	--	--	--	
08/26/02	37.04	11.55	0.00	25.49	-1.14	--	--	--	--	--	--	--	--	
11/07/02	37.04	10.44	0.00	26.60	1.11	--	--	--	--	--	--	--	--	
02/14/03	37.04	9.28	0.00	27.76	1.16	--	--	--	--	--	--	--	--	
05/12/03	37.04	8.69	0.00	28.35	0.59	--	--	--	--	--	--	--	--	
08/11/03	37.04	10.83	0.00	26.21	-2.14	--	--	--	--	--	--	--	--	
11/13/03	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
02/17/04	37.04	9.84	0.00	27.20	--	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	37.04	10.68	0.00	26.36	-0.84	--	--	--	--	--	--	--	--	Monitored Only
08/25/04	37.04	11.59	0.00	25.45	-0.91	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	37.04	11.49	0.00	25.55	0.10	--	--	--	--	--	--	--	--	Monitored Only
03/17/05	37.04	9.01	0.00	28.03	2.48	--	--	--	--	--	--	--	--	Monitored only
06/13/05	37.04	9.17	0.00	27.87	-0.16	--	--	--	--	--	--	--	--	Monitored only
09/27/05	37.04	10.50	0.00	26.54	-1.33	--	--	--	--	--	--	--	--	Monitored Only
12/20/05	37.04	10.66	0.00	26.38	-0.16	--	--	--	--	--	--	--	--	Monitored Only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-4 continued</b>														
03/10/06	37.04	8.42	0.00	28.62	2.24	--	--	--	--	--	--	--	--	Monitored Only
06/20/06	37.04	9.09	0.00	27.95	-0.67	--	--	--	--	--	--	--	--	Monitored Only
09/25/06	37.04	10.03	0.00	27.01	-0.94	--	--	--	--	--	--	--	--	Monitored Only
12/18/06	37.04	9.70	0.00	27.34	0.33	--	--	--	--	--	--	--	--	Monitored Only
03/29/07	37.04	9.93	0.00	27.11	-0.23	--	--	--	--	--	--	--	--	Monitored Only
06/26/07	37.04	10.72	0.00	26.32	-0.79	--	--	--	--	--	--	--	--	Monitored Only
09/26/07	37.04	11.95	0.00	25.09	-1.23	--	--	--	--	--	--	--	--	Monitored Only
12/18/07	37.04	11.79	0.00	25.25	0.16	--	--	--	--	--	--	--	--	Monitored only
03/25/08	37.04	10.53	0.00	26.51	1.26	--	--	--	--	--	--	--	--	Monitored Only
06/18/08	37.04	11.40	0.00	25.64	-0.87	--	--	--	--	--	--	--	--	Monitored Only
<b>MW-5 (Screen Interval in feet: 7.0-22.5)</b>														
05/04/91	--	--	--	--	--	69000	--	1400	2500	3500	15000	--	--	
09/19/91	--	--	--	--	--	57000	--	1600	2700	5200	20000	--	--	
12/18/91	--	--	--	--	--	31000	--	1600	3100	4800	19000	--	--	
03/17/92	--	--	--	--	--	81000	--	850	1600	4800	18000	--	--	
05/19/92	--	--	--	--	--	84000	--	760	1500	4000	17000	--	--	
08/20/92	--	--	--	--	--	58000	--	660	1700	4200	19000	--	--	
09/16/92	36.40	13.37	0.00	23.03	--	--	--	--	--	--	--	--	--	
10/12/92	36.40	13.75	0.00	22.65	-0.38	--	--	--	--	--	--	--	--	
11/10/92	36.40	13.68	0.00	22.72	0.07	57000	--	800	1800	4400	18000	--	--	
12/10/92	36.40	12.58	0.00	23.82	1.10	--	--	--	--	--	--	--	--	
01/15/93	36.40	9.71	0.00	26.69	2.87	--	--	--	--	--	--	--	--	
02/20/93	36.40	8.69	0.00	27.71	1.02	17000	--	75	ND	1000	620	--	--	
03/18/93	36.40	9.16	0.00	27.24	-0.47	--	--	--	--	--	--	--	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-5 continued														
04/20/93	36.40	8.88	0.00	27.52	0.28	--	--	--	--	--	--	--	--	
05/21/93	36.40	9.56	0.00	26.84	-0.68	55000	--	ND	160	3500	12000	--	--	
06/22/93	36.40	10.05	0.00	26.35	-0.49	--	--	--	--	--	--	--	--	
07/23/93	36.40	10.53	0.00	25.87	-0.48	--	--	--	--	--	--	--	--	
08/23/93	36.40	10.98	0.00	25.42	-0.45	61000	--	340	380	3600	14000	--	--	
09/24/93	35.94	10.94	0.00	25.00	-0.42	--	--	--	--	--	--	--	--	
11/23/93	35.94	11.45	0.00	24.49	-0.51	46000	--	290	310	4100	15000	--	--	
02/24/94	35.94	9.02	0.00	26.92	2.43	57000	--	140	400	4400	16000	--	--	
05/25/94	35.94	10.03	0.00	25.91	-1.01	53000	--	ND	ND	4000	14000	--	--	
08/23/94	35.94	11.57	0.00	24.37	-1.54	61000	--	360	380	4800	17000	--	--	
11/23/94	35.94	10.71	0.00	25.23	0.86	46000	--	230	260	3900	14000	--	--	
02/03/95	35.94	7.69	0.00	28.25	3.02	56000	--	140	330	3500	13000	--	--	
05/10/95	35.94	8.20	0.00	27.74	-0.51	27000	--	160	170	2200	5200	--	--	
08/02/95	35.94	9.23	0.00	26.71	-1.03	65000	--	260	300	3500	12000	--	--	
11/02/95	35.94	10.70	0.00	25.24	-1.47	240	--	0.76	ND	1.1	ND	ND	--	
02/08/96	35.94	7.36	0.00	28.58	3.34	54000	--	210	150	3400	12000	170	--	
05/08/96	35.94	8.25	0.00	27.69	-0.89	52000	--	170	200	3600	11000	170	--	
08/09/96	35.94	9.37	0.00	26.57	-1.12	25000	--	54	16	1700	4700	ND	--	
11/07/96	35.94	10.65	0.00	25.29	-1.28	2100	--	42	ND	9.3	ND	2300	--	
02/10/97	35.94	7.63	0.00	28.31	3.02	15000	--	46	29	1400	4100	ND	--	
05/07/97	35.94	8.98	0.00	26.96	-1.35	38000	--	120	ND	2000	5100	380	--	
08/05/97	35.94	11.08	0.00	24.86	-2.10	310	--	1	ND	17	40	ND	--	
11/04/97	35.94	10.72	0.00	25.22	0.36	20000	--	ND	ND	1500	2800	280	--	
02/12/98	35.94	6.08	0.00	29.86	4.64	33000	--	120	ND	1700	3800	ND	--	

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**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-5 continued</b>														
05/15/98	35.92	7.40	0.00	28.52	-1.34	30000	--	ND	ND	2200	4900	ND	--	
08/12/98	35.92	8.69	0.00	27.23	-1.29	24000	--	100	ND	ND	3400	1000	--	
11/12/98	35.92	9.48	0.00	26.44	-0.79	13000	--	65	ND	1100	1400	780	--	
03/01/99	35.92	7.54	0.00	28.38	1.94	29000	--	75	ND	2000	4100	690	--	
05/12/99	35.92	8.48	0.00	27.44	-0.94	19000	--	110	ND	990	1900	330	--	
08/11/99	35.92	9.74	0.00	26.18	-1.26	24300	--	ND	ND	1540	1740	ND	--	
11/04/99	35.92	10.56	0.00	25.36	-0.82	19500	--	37.1	ND	1300	1030	ND	--	
02/29/00	35.92	7.19	0.00	28.73	3.37	--	--	--	--	--	--	--	--	Sampled semi-annually
05/08/00	35.92	8.23	0.00	27.69	-1.04	25700	--	37.6	ND	2020	3500	ND	--	
08/08/00	35.92	9.51	0.00	26.41	-1.28	--	--	--	--	--	--	--	--	
11/06/00	35.92	10.04	0.00	25.88	-0.53	14100	--	37.1	ND	1250	497	ND	--	
02/07/01	35.92	9.23	0.00	26.69	0.81	--	--	--	--	--	--	--	--	
05/09/01	35.92	9.44	0.00	26.48	-0.21	15600	--	ND	ND	1290	476	ND	--	
08/24/01	35.92	10.75	0.00	25.17	-1.31	--	--	--	--	--	--	--	--	Sampled semi-annually
11/16/01	35.92	10.93	0.00	24.99	-0.18	15000	--	40	ND<25	1100	54	ND<250	--	
02/21/02	35.92	8.52	0.00	27.40	2.41	--	--	--	--	--	--	--	--	
05/10/02	35.92	9.47	0.00	26.45	-0.95	23000	--	86	ND<25	1500	450	ND<250	--	
08/26/02	35.92	10.60	0.00	25.32	-1.13	--	--	--	--	--	--	--	--	Sampled semi-annually
11/07/02	35.92	10.83	0.00	25.09	-0.23	--	8000	ND<2.5	ND<2.5	650	ND<5.0	--	ND<10	
02/14/03	35.92	8.70	0.00	27.22	2.13	--	--	--	--	--	--	--	--	Sampled semi-annually
05/12/03	35.92	8.62	0.00	27.30	0.08	--	10000	ND<25	ND<25	1200	ND<50	--	ND<100	
08/11/03	35.92	10.52	0.00	25.40	-1.90	--	--	--	--	--	--	--	--	Monitored Only
11/13/03	35.92	10.82	0.00	25.10	-0.30	--	31000	ND<20	ND<20	2100	71	--	ND<80	
02/17/04	35.92	8.96	0.00	26.96	1.86	--	--	--	--	--	--	--	--	Monitored Only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-5 continued</b>														
05/20/04	35.92	9.80	0.00	26.12	-0.84	--	23000	ND<20	ND<20	1600	62	--	ND<20	
08/25/04	35.92	10.95	0.00	24.97	-1.15	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	35.92	10.48	0.00	25.44	0.47	--	21000	ND<20	ND<20	1300	ND<40	--	ND<20	
03/17/05	35.92	7.99	0.00	27.93	2.49	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	35.92	8.31	0.00	27.61	-0.32	--	27000	ND<10	ND<10	1800	100	--	11	
09/27/05	35.92	9.90	0.00	26.02	-1.59	--	--	--	--	--	--	--	--	Sampled semi-annually
12/20/05	35.92	9.16	0.00	26.76	0.74	--	27000	ND<25	ND<25	1700	ND<50	--	27	
03/10/06	35.92	7.29	0.00	28.63	1.87	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/20/06	35.92	8.45	0.00	27.47	-1.16	--	37000	ND<12	ND<12	1300	25	--	19	
09/25/06	35.92	9.37	0.00	26.55	-0.92	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/06	35.92	8.90	0.00	27.02	0.47	--	6400	2.0	ND<0.50	250	ND<0.50	--	44	
03/29/07	35.92	9.14	0.00	26.78	-0.24	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/26/07	35.92	10.10	0.00	25.82	-0.96	--	20000	0.87	ND<0.50	770	12	--	12	
09/26/07	35.92	11.06	0.00	24.86	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/07	35.92	10.76	0.00	25.16	0.30	--	9800	ND<2.5	ND<2.5	420	ND<5.0	--	6.2	
03/25/08	35.92	9.22	0.00	26.70	1.54	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/18/08	35.92	10.38	0.00	25.54	-1.16	--	17000	ND<5.0	ND<5.0	510	ND<10	--	ND<5.0	
<b>MW-6 (Screen Interval in feet: 8.0-20.0)</b>														
05/19/92	--	--	--	--	--	1300	--	2	2.1	ND	2.7	--	--	
08/20/92	--	--	--	--	--	280	--	8.4	ND	0.51	0.84	--	--	
09/16/92	36.03	12.91	0.00	23.12	--	--	--	--	--	--	--	--	--	
10/12/92	36.03	13.28	0.00	22.75	-0.37	--	--	--	--	--	--	--	--	
11/10/92	36.03	13.18	0.00	22.85	0.10	490	--	7	1.2	1.7	ND	--	--	
12/10/92	36.03	12.33	0.00	23.70	0.85	--	--	--	--	--	--	--	--	

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**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-6 continued</b>														
01/15/93	36.03	9.25	0.00	26.78	3.08	--	--	--	--	--	--	--	--	
02/20/93	36.03	8.24	0.00	27.79	1.01	2400	--	43	ND	33	2	--	--	
03/18/93	36.03	8.74	0.00	27.29	-0.50	--	--	--	--	--	--	--	--	
04/20/93	36.03	8.12	0.00	27.91	0.62	--	--	--	--	--	--	--	--	
05/21/93	36.03	8.83	0.00	27.20	-0.71	940	--	18	1	7.1	2.7	--	--	
06/22/93	36.03	9.38	0.00	26.65	-0.55	--	--	--	--	--	--	--	--	
07/23/93	36.03	9.87	0.00	26.16	-0.49	--	--	--	--	--	--	--	--	
08/23/93	36.03	10.35	0.00	25.68	-0.48	1000	--	9.4	2.3	5	2.3	--	--	
09/24/93	35.67	10.34	0.00	25.33	-0.35	--	--	--	--	--	--	--	--	
11/23/93	35.67	10.96	0.00	24.71	-0.62	520	--	ND	1.7	1.9	0.82	--	--	
02/24/94	35.67	8.39	0.00	27.28	2.57	810	--	12	ND	2.6	0.77	--	--	
05/25/94	35.67	9.55	0.00	26.12	-1.16	500	--	11	ND	ND	0.73	--	--	
08/23/94	35.67	10.97	0.00	24.70	-1.42	570	--	8.8	2.5	3.2	2.6	--	--	
11/23/94	35.67	10.21	0.00	25.46	0.76	460	--	6.4	1.1	1.9	1.1	--	--	
02/03/95	35.67	6.99	0.00	28.68	3.22	660	--	4.8	13	1.4	ND	--	--	
05/10/95	35.67	7.53	0.00	28.14	-0.54	470	--	ND	0.65	1.4	0.67	--	--	
08/02/95	35.67	8.68	0.00	26.99	-1.15	360	--	3.2	ND	1.6	ND	--	--	
11/02/95	35.67	10.20	0.00	25.47	-1.52	470	--	ND	0.92	0.89	0.58	5.5	--	
02/08/96	35.67	6.66	0.00	29.01	3.54	450	--	3.1	ND	1.1	0.68	ND	--	
05/08/96	35.67	7.40	0.00	28.27	-0.74	ND	--	ND	ND	ND	ND	ND	--	
08/09/96	35.67	8.72	0.00	26.95	-1.32	ND	--	ND	ND	ND	ND	ND	--	
11/07/96	35.67	10.12	0.00	25.55	-1.40	ND	--	ND	ND	ND	ND	ND	--	
02/10/97	35.67	6.88	0.00	28.79	3.24	ND	--	ND	ND	ND	ND	ND	--	
05/07/97	35.67	8.32	0.00	27.35	-1.44	ND	--	ND	1.1	ND	ND	ND	--	

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-6 continued														
08/05/97	35.67	9.64	0.00	26.03	-1.32	55	--	0.79	ND	ND	ND	ND	--	
11/04/97	35.67	10.30	0.00	25.37	-0.66	ND	--	ND	ND	ND	ND	ND	--	
02/12/98	35.67	5.10	0.00	30.57	5.20	ND	--	ND	ND	ND	ND	ND	--	
05/15/98	35.68	6.61	0.00	29.07	-1.50	ND	--	ND	ND	ND	ND	ND	--	
08/12/98	35.68	8.02	0.00	27.66	-1.41	ND	--	ND	ND	ND	ND	ND	--	
11/12/98	35.68	8.74	0.00	26.94	-0.72	ND	--	ND	ND	ND	ND	ND	--	
03/01/99	35.68	7.22	0.00	28.46	1.52	ND	--	ND	ND	ND	ND	ND	--	
05/12/99	35.68	8.05	0.00	27.63	-0.83	ND	--	ND	ND	ND	ND	ND	--	
08/11/99	35.68	9.53	0.00	26.15	-1.48	ND	--	ND	ND	ND	ND	ND	--	
11/04/99	35.68	10.44	0.00	25.24	-0.91	ND	--	ND	ND	ND	ND	ND	--	
02/29/00	35.68	--	--	--	--	--	--	--	--	--	--	--	--	Not Monitored/Sampled
08/08/00	35.68	9.16	0.00	26.52	--	--	--	--	--	--	--	--	--	
11/06/00	35.68	9.28	0.00	26.40	-0.12	--	--	--	--	--	--	--	--	
02/07/01	35.68	9.18	0.00	26.50	0.10	--	--	--	--	--	--	--	--	
05/09/01	35.68	8.76	0.00	26.92	0.42	--	--	--	--	--	--	--	--	
08/24/01	35.68	10.33	0.00	25.35	-1.57	--	--	--	--	--	--	--	--	
11/16/01	35.68	9.97	0.00	25.71	0.36	--	--	--	--	--	--	--	--	
02/21/02	35.68	7.86	0.00	27.82	2.11	--	--	--	--	--	--	--	--	
05/10/02	35.68	8.93	0.00	26.75	-1.07	--	--	--	--	--	--	--	--	
08/26/02	35.68	10.09	0.00	25.59	-1.16	--	--	--	--	--	--	--	--	
11/07/02	35.68	9.93	0.00	25.75	0.16	--	--	--	--	--	--	--	--	
02/14/03	35.68	7.90	0.00	27.78	2.03	--	--	--	--	--	--	--	--	
05/12/03	35.68	7.51	0.00	28.17	0.39	--	--	--	--	--	--	--	--	
08/11/03	35.68	9.44	0.00	26.24	-1.93	--	--	--	--	--	--	--	--	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-6 continued														
11/13/03	35.68	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
02/17/04	35.68	8.38	0.00	27.30	--	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	35.68	9.23	0.00	26.45	-0.85	--	--	--	--	--	--	--	--	Monitored Only
08/25/04	35.68	10.79	0.00	24.89	-1.56	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	35.68	10.00	0.00	25.68	0.79	--	--	--	--	--	--	--	--	Monitored Only
03/17/05	35.68	7.27	0.00	28.41	2.73	--	--	--	--	--	--	--	--	Monitored only
06/13/05	35.68	7.64	0.00	28.04	-0.37	--	--	--	--	--	--	--	--	Monitored only
09/27/05	35.68	9.36	0.00	26.32	-1.72	--	--	--	--	--	--	--	--	Monitored Only
12/20/05	35.68	9.43	0.00	26.25	-0.07	--	--	--	--	--	--	--	--	Monitored Only
03/10/06	35.68	6.45	0.00	29.23	2.98	--	--	--	--	--	--	--	--	Monitored Only
06/20/06	35.68	7.74	0.00	27.94	-1.29	--	--	--	--	--	--	--	--	Monitored Only
09/25/06	35.68	8.96	0.00	26.72	-1.22	--	--	--	--	--	--	--	--	Monitored Only
12/18/06	35.68	8.19	0.00	27.49	0.77	--	--	--	--	--	--	--	--	Monitored Only
03/29/07	35.68	9.52	0.00	26.16	-1.33	--	--	--	--	--	--	--	--	Monitored Only
06/26/07	35.68	9.57	0.00	26.11	-0.05	--	--	--	--	--	--	--	--	Monitored Only
09/26/07	35.68	10.56	0.00	25.12	-0.99	--	--	--	--	--	--	--	--	Monitored Only
12/18/07	35.68	10.28	0.00	25.40	0.28	--	--	--	--	--	--	--	--	Monitored only
03/25/08	35.68	8.62	0.00	27.06	1.66	--	--	--	--	--	--	--	--	Monitored Only
06/18/08	35.68	9.92	0.00	25.76	-1.30	--	--	--	--	--	--	--	--	Monitored Only
MW-7 (Screen Interval in feet: 11.0-21.5)														
05/19/92	--	--	--	--	--	17000	--	540	90	1200	1900	--	--	
08/20/92	--	--	--	--	--	13000	--	460	54	ND	3100	--	--	
09/16/92	36.40	13.23	0.00	23.17	--	--	--	--	--	--	--	--	--	
10/12/92	36.40	13.65	0.00	22.75	-0.42	--	--	--	--	--	--	--	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-7 continued														
11/10/92	36.40	13.54	0.00	22.86	0.11	1800	--	74	ND	230	350	--	--	
12/10/92	36.40	12.52	0.00	23.88	1.02	--	--	--	--	--	--	--	--	
01/15/93	36.40	9.59	0.00	26.81	2.93	--	--	--	--	--	--	--	--	
02/20/93	36.40	8.55	0.00	27.85	1.04	1800	--	37	4.6	11	7.7	--	--	
03/18/93	36.40	8.98	0.00	27.42	-0.43	--	--	--	--	--	--	--	--	
04/20/93	36.40	8.52	0.00	27.88	0.46	--	--	--	--	--	--	--	--	
05/21/93	36.40	9.16	0.00	27.24	-0.64	22000	--	330	37	2100	2900	--	--	
06/22/93	36.40	9.66	0.00	26.74	-0.50	--	--	--	--	--	--	--	--	
07/23/93	36.40	10.15	0.00	26.25	-0.49	--	--	--	--	--	--	--	--	
08/23/93	36.40	10.65	0.00	25.75	-0.50	33000	--	360	ND	2500	4300	--	--	
09/24/93	36.09	10.77	0.00	25.32	-0.43	--	--	--	--	--	--	--	--	
11/23/93	36.09	11.28	0.00	24.81	-0.51	19000	--	310	30	2500	2300	--	--	
02/24/94	36.09	8.95	0.00	27.14	2.33	16000	--	220	19	2400	3200	--	--	
05/25/94	36.09	10.00	0.00	26.09	-1.05	14000	--	200	ND	1500	1800	--	--	
08/23/94	36.09	11.43	0.00	24.66	-1.43	19000	--	210	50	2000	2800	--	--	
11/23/94	36.09	10.69	0.00	25.40	0.74	10000	--	220	ND	1000	730	--	--	
02/03/95	36.09	7.49	0.00	28.60	3.20	26000	--	170	ND	2300	3700	--	--	
05/10/95	36.09	7.88	0.00	28.21	-0.39	1300	--	13	1.5	170	230	--	--	
08/02/95	36.09	9.02	0.00	27.07	-1.14	15000	--	200	ND	2200	2000	--	--	
11/02/95	36.09	10.55	0.00	25.54	-1.53	18000	--	190	9.4	2100	2200	72	--	
02/08/96	36.09	7.13	0.00	28.96	3.42	19000	--	150	ND	2100	3000	ND	--	
05/08/96	36.09	7.11	0.00	28.98	0.02	13000	--	130	18	1900	1600	85	--	
08/09/96	36.09	9.07	0.00	27.02	-1.96	11000	--	67	ND	1700	1800	ND	--	
11/07/96	36.09	10.76	0.00	25.33	-1.69	32000	--	160	ND	3300	8400	570	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-7 continued														
02/10/97	36.09	7.22	0.00	28.87	3.54	7100	--	55	ND	ND	620	ND	--	
02/11/97	36.09	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/97	36.09	8.47	0.00	27.62	--	6000	--	74	ND	560	330	250	--	
08/05/97	36.09	10.25	0.00	25.84	-1.78	5000	--	66	ND	420	240	ND	--	
11/04/97	36.09	10.69	0.00	25.40	-0.44	20000	--	67	ND	2300	4300	430	--	
02/12/98	36.09	5.02	0.00	31.07	5.67	5500	--	95	ND	150	110	ND	--	
05/15/98	36.06	6.98	0.00	29.08	-1.99	1300	--	ND	ND	69	64	88	--	
08/12/98	36.06	8.42	0.00	27.64	-1.44	1400	--	12	2.3	67	ND	30	--	
11/12/98	36.06	9.10	0.00	26.96	-0.68	6300	--	63	ND	230	100	ND	--	
03/01/99	36.06	7.14	0.00	28.92	1.96	1000	--	24	ND	23	26	39	--	
05/12/99	36.06	8.07	0.00	27.99	-0.93	4700	--	79	ND	120	210	210	--	
08/11/99	36.06	9.44	0.00	26.62	-1.37	4700	--	61.6	ND	58.2	23.6	187	--	
11/04/99	36.06	10.38	0.00	25.68	-0.94	5980	--	56.3	ND	44.5	21.2	194	--	
02/29/00	36.06	7.06	0.00	29.00	3.32	--	--	--	--	--	--	--	--	
05/08/00	36.06	8.15	0.00	27.91	-1.09	6600	--	80	ND	99.6	66.5	ND	--	Sampled semi-annually
08/08/00	36.06	9.21	0.00	26.85	-1.06	--	--	--	--	--	--	--	--	
11/06/00	36.06	9.77	0.00	26.29	-0.56	6030	--	56.3	ND	156	63.1	281	--	
02/07/01	36.06	9.02	0.00	27.04	0.75	--	--	--	--	--	--	--	--	
05/09/01	36.06	9.38	0.00	26.68	-0.36	7460	--	45	ND	186	94.4	ND	--	
08/24/01	36.06	10.73	0.00	25.33	-1.35	--	--	--	--	--	--	--	--	
11/16/01	36.06	10.97	0.00	25.09	-0.24	8000	--	50	ND<10	61	18	ND<100	--	Sampled semi-annually
02/21/02	36.06	8.60	0.00	27.46	2.37	--	--	--	--	--	--	--	--	
05/10/02	36.06	9.28	0.00	26.78	-0.68	7100	--	ND<5.0	ND<5.0	140	63	ND<50	--	
08/26/02	36.06	10.40	0.00	25.66	-1.12	--	--	--	--	--	--	--	--	Sampled semi-annually

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-7 continued														
11/07/02	36.06	10.95	0.00	25.11	-0.55	--	3400	3.1	ND<0.50	25	7.8	--	ND<2.0	
02/14/03	36.06	8.82	0.00	27.24	2.13	--	--	--	--	--	--	--	--	Sampled semi-annually
05/12/03	36.06	8.46	0.00	27.60	0.36	--	4900	3.7	0.74	130	47	--	ND<2.0	
08/11/03	36.06	10.27	0.00	25.79	-1.81	--	--	--	--	--	--	--	--	Monitored Only
11/13/03	36.06	10.82	0.00	25.24	-0.55	--	20000	10	ND<10	1600	740	--	ND<40	
02/17/04	36.06	10.13	0.00	25.93	0.69	--	--	--	--	--	--	--	--	Monitored Only
05/20/04	36.06	9.60	0.00	26.46	0.53	--	12000	ND<10	ND<10	1000	380	--	ND<10	
08/25/04	36.06	10.85	0.00	25.21	-1.25	--	--	--	--	--	--	--	--	Monitored Only
11/02/04	36.06	10.67	0.00	25.39	0.18	--	12000	ND<10	ND<10	860	280	--	ND<10	
03/17/05	36.06	7.65	0.00	28.41	3.02	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	36.06	7.96	0.00	28.10	-0.31	--	13000	ND<5.0	ND<5.0	840	250	--	ND<5.0	
09/27/05	36.06	9.66	0.00	26.40	-1.70	--	--	--	--	--	--	--	--	Sampled semi-annually
12/20/05	36.06	9.67	0.00	26.39	-0.01	--	19000	2.2	1.2	100	20	--	ND<0.50	
03/10/06	36.06	7.56	0.00	28.50	2.11	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/20/06	36.06	8.07	0.00	27.99	-0.51	--	8300	ND<2.5	ND<2.5	310	80	--	ND<2.5	
09/25/06	36.06	9.27	0.00	26.79	-1.20	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/06	36.06	9.12	0.00	26.94	0.15	--	2500	ND<0.50	ND<0.50	2.3	0.58	--	3.8	
03/29/07	36.06	9.61	0.00	26.45	-0.49	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/26/07	36.06	9.87	0.00	26.19	-0.26	--	7800	1.5	1.2	230	34	--	ND<0.50	
09/26/07	36.06	10.85	0.00	25.21	-0.98	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/07	36.06	10.12	0.00	25.94	0.73	--	7100	ND<2.5	ND<2.5	310	20	--	ND<2.5	
03/25/08	36.06	9.37	0.00	26.69	0.75	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
06/18/08	36.06	9.98	0.00	26.08	-0.61	--	10000	ND<2.5	ND<2.5	420	39	--	ND<2.5	

MW-8 (Screen Interval in feet: 8.0-19.0)

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-8 continued														
05/19/92	--	--	--	--	--	5300	--	28	3.3	2.6	2.1	--	--	
08/20/92	--	--	--	--	--	3500	--	67	11	ND	ND	--	--	
09/16/92	37.14	14.13	0.00	23.01	--	--	--	--	--	--	--	--	--	
10/12/92	37.14	14.51	0.00	22.63	-0.38	--	--	--	--	--	--	--	--	
11/10/92	37.14	14.46	0.00	22.68	0.05	1800	--	20	ND	ND	ND	--	--	
12/10/92	37.14	13.51	0.00	23.63	0.95	--	--	--	--	--	--	--	--	
01/15/93	37.14	10.50	0.00	26.64	3.01	--	--	--	--	--	--	--	--	
02/20/93	37.14	9.50	0.00	27.64	1.00	2200	--	32	ND	42	5	--	--	
03/18/93	37.14	9.89	0.00	27.25	-0.39	--	--	--	--	--	--	--	--	
04/20/93	37.14	9.91	0.00	27.23	-0.02	--	--	--	--	--	--	--	--	
05/21/93	37.14	10.40	0.00	26.74	-0.49	2500	--	44	ND	ND	ND	--	--	
06/22/93	37.14	10.86	0.00	26.28	-0.46	--	--	--	--	--	--	--	--	
07/23/93	37.14	11.29	0.00	25.85	-0.43	--	--	--	--	--	--	--	--	
08/23/93	37.14	11.76	0.00	25.38	-0.47	280	--	49	4.5	ND	ND	--	--	
09/24/93	36.89	12.00	0.00	24.89	-0.49	--	--	--	--	--	--	--	--	
11/23/93	36.89	12.38	0.00	24.51	-0.38	1800	--	ND	3.4	ND	ND	--	--	
02/24/94	36.89	10.44	0.00	26.45	1.94	1200	--	10	2.3	ND	3.2	--	--	
05/25/94	36.89	11.12	0.00	25.77	-0.68	14000	--	29	ND	ND	ND	--	--	
08/23/94	36.89	12.61	0.00	24.28	-1.49	3200	--	46	18	2	7.2	--	--	
11/23/94	36.89	11.98	0.00	24.91	0.63	1700	--	34	ND	ND	3.1	--	--	
02/03/95	36.89	9.16	0.00	27.73	2.82	800	--	6.1	ND	ND	ND	--	--	
05/10/95	36.89	9.35	0.00	27.54	-0.19	1400	--	15	1.5	0.65	0.84	--	--	
08/02/95	36.89	10.40	0.00	26.49	-1.05	690	--	8.3	1.9	ND	ND	--	--	
11/02/95	36.89	11.80	0.00	25.09	-1.40	1200	--	ND	1.9	0.56	ND	6.4	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-8 continued														
02/08/96	36.89	8.98	0.00	27.91	2.82	--	--	--	--	--	--	--	--	
02/14/96	36.89	9.24	0.00	27.65	-0.26	650	--	9	1.2	ND	0.52	ND	--	
05/08/96	36.89	9.46	0.00	27.43	-0.22	1200	--	0.7	35	2.2	3	ND	--	
08/09/96	36.89	10.47	0.00	26.42	-1.01	350	--	ND	12	0.81	0.95	ND	--	
11/07/96	36.89	11.71	0.00	25.18	-1.24	1000	--	23	ND	ND	ND	ND	--	
02/10/97	36.89	8.84	0.00	28.05	2.87	630	--	13	ND	ND	8.1	ND	--	
05/07/97	36.89	10.12	0.00	26.77	-1.28	1200	--	26	3.4	ND	20	20	--	
08/05/97	36.89	11.26	0.00	25.63	-1.14	590	--	9.8	ND	ND	ND	ND	--	
11/04/97	36.89	11.58	0.00	25.31	-0.32	640	--	14	1.9	5.7	11	ND	--	
02/12/98	36.89	7.34	0.00	29.55	4.24	770	--	20	3	ND	ND	ND	--	
05/15/98	36.87	8.67	0.00	28.20	-1.35	840	--	10	ND	ND	3.1	ND	--	
08/12/98	36.87	9.78	0.00	27.09	-1.11	240	--	0.75	ND	ND	ND	ND	--	
11/12/98	36.87	10.62	0.00	26.25	-0.84	300	--	14	2	ND	ND	ND	--	
03/01/99	36.87	9.02	0.00	27.85	1.60	1100	--	22	4.6	2.1	4.9	12	--	
05/12/99	36.87	9.65	0.00	27.22	-0.63	650	--	17	ND	ND	ND	ND	--	
08/11/99	36.87	10.85	0.00	26.02	-1.20	168	--	6.68	ND	0.544	ND	ND	--	
11/04/99	36.87	11.72	0.00	25.15	-0.87	1010	--	15.8	2.28	ND	ND	16.2	--	
02/29/00	36.87	8.25	0.00	28.62	3.47	--	--	--	--	--	--	--	--	Sampled semi-annually
05/08/00	36.87	9.21	0.00	27.66	-0.96	199	--	6.26	ND	ND	ND	ND	--	
08/08/00	36.87	10.35	0.00	26.52	-1.14	--	--	--	--	--	--	--	--	
11/06/00	36.87	10.76	0.00	26.11	-0.41	797	--	ND	ND	ND	ND	ND	--	
02/07/01	36.87	10.16	0.00	26.71	0.60	--	--	--	--	--	--	--	--	
05/09/01	36.87	10.62	0.00	26.25	-0.46	695	--	ND	ND	ND	ND	ND	--	
08/24/01	36.87	11.97	0.00	24.90	-1.35	--	--	--	--	--	--	--	--	Sampled semi-annually

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-8 continued														
11/16/01	36.87	12.27	0.00	24.60	-0.30	1000	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<20	--	
02/21/02	36.87	10.03	0.00	26.84	2.24	--	--	--	--	--	--	--	--	
05/10/02	36.87	10.63	0.00	26.24	-0.60	400	--	ND<0.50	0.78	ND<0.50	ND<0.50	ND<5.0	--	
08/26/02	36.87	11.80	0.00	25.07	-1.17	--	--	--	--	--	--	--	--	
11/07/02	36.87	11.97	0.00	24.90	-0.17	--	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.0	Sampled semi-annually
02/14/03	36.87	9.97	0.00	26.90	2.00	--	--	--	--	--	--	--	--	
05/12/03	36.87	9.58	0.00	27.29	0.39	--	730	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	Sampled semi-annually
08/11/03	36.87	11.33	0.00	25.54	-1.75	--	--	--	--	--	--	--	ND<2.0	
11/13/03	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Monitored Only
02/17/04	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
05/20/04	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
08/25/04	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
11/02/04	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
03/17/05	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
06/13/05	36.87	9.46	0.00	27.41	--	--	430	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	Unable to locate-Paved over
09/27/05	36.87	11.00	0.00	25.87	-1.54	--	--	--	--	--	--	--	--	
12/20/05	36.87	11.09	0.00	25.78	-0.09	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	Sampled semi-annually
03/10/06	36.87	8.73	0.00	28.14	2.36	--	--	--	--	--	--	--	--	
06/20/06	36.87	9.47	0.00	27.40	-0.74	--	360	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	Sampled Q2 and Q4 only
09/25/06	36.87	10.66	0.00	26.21	-1.19	--	--	--	--	--	--	--	--	
12/18/06	36.87	10.24	0.00	26.63	0.42	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	Sampled Q2 and Q4 only
03/29/07	36.87	10.32	0.00	26.55	-0.08	--	--	--	--	--	--	--	--	
06/26/07	36.87	11.15	0.00	25.72	-0.83	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	Sampled Q2 and Q4 only
09/26/07	36.87	12.21	0.00	24.66	-1.06	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-8 continued														
12/18/07	36.87	12.00	0.00	24.87	0.21	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/25/08	36.87	10.43	0.00	26.44	1.57	--	--	--	--	--	--	--	--	
06/18/08	36.87	11.50	0.00	25.37	-1.07	--	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	Sampled Q2 and Q4 only
MW-9 (Screen Interval in feet: 8.0-19.0)														
05/19/92	--	--	--	--	--	8100	--	11	ND	25	5.8	--	--	
08/20/92	--	--	--	--	--	3800	--	37	ND	ND	ND	--	--	
09/16/92	36.92	13.90	0.00	23.02	--	--	--	--	--	--	--	--	--	
10/12/92	36.92	14.28	0.00	22.64	-0.38	--	--	--	--	--	--	--	--	
11/10/92	36.92	14.22	0.00	22.70	0.06	4200	--	ND	ND	21	23	--	--	
12/10/92	36.92	13.40	0.00	23.52	0.82	--	--	--	--	--	--	--	--	
01/15/93	36.92	10.24	0.00	26.68	3.16	--	--	--	--	--	--	--	--	
02/20/93	36.92	9.22	0.00	27.70	1.02	2300	--	47	ND	32	ND	--	--	
03/18/93	36.92	9.55	0.00	27.37	-0.33	--	--	--	--	--	--	--	--	
04/20/93	36.92	9.62	0.00	27.30	-0.07	--	--	--	--	--	--	--	--	
05/21/93	36.92	10.16	0.00	26.76	-0.54	3200	--	32	ND	8.1	ND	--	--	
06/22/93	36.92	10.62	0.00	26.30	-0.46	--	--	--	--	--	--	--	--	
07/23/93	36.92	11.07	0.00	25.85	-0.45	--	--	--	--	--	--	--	--	
08/23/93	36.92	11.54	0.00	25.38	-0.47	3000	--	29	ND	ND	ND	--	--	
09/24/93	36.29	11.18	0.00	25.11	-0.27	--	--	--	--	--	--	--	--	
11/23/93	36.29	11.80	0.00	24.49	-0.62	2500	--	23	2.1	ND	ND	--	--	
02/24/94	36.29	9.74	0.00	26.55	2.06	2900	--	35	ND	ND	ND	--	--	
05/25/94	36.29	10.48	0.00	25.81	-0.74	ND	--	ND	ND	ND	ND	--	--	
08/23/94	36.29	11.99	0.00	24.30	-1.51	2800	--	28	32	ND	ND	--	--	
11/23/94	36.29	11.31	0.00	24.98	0.68	2000	--	24	2.2	2.2	2.5	--	--	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 1991 Through June 2008**  
**76 Station 3292**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-9 continued</b>														
02/03/95	36.29	8.45	0.00	27.84	2.86	2100	--	26	2.5	ND	ND	--	--	
05/10/95	36.29	8.70	0.00	27.59	-0.25	1700	--	0.81	2.2	1	1.4	--	--	
08/02/95	36.29	9.75	0.00	26.54	-1.05	1900	--	26	6.6	ND	3.9	--	--	
11/02/95	36.29	11.16	0.00	25.13	-1.41	1600	--	ND	1.3	ND	ND	11	--	
02/08/96	36.29	8.15	0.00	28.14	3.01	1900	--	ND	ND	ND	ND	ND	--	
05/08/96	36.29	8.75	0.00	27.54	-0.60	1700	--	1.9	22	1.7	2.7	ND	--	
08/09/96	36.29	9.84	0.00	26.45	-1.09	200	--	ND	4.5	ND	0.58	ND	--	
11/07/96	36.29	11.10	0.00	25.19	-1.26	920	--	24	ND	ND	ND	ND	--	
02/10/97	36.29	8.15	0.00	28.14	2.95	580	--	14	2.4	ND	ND	16	--	
05/07/97	36.29	9.45	0.00	26.84	-1.30	810	--	11	3.9	1.7	9.9	13	--	
08/05/97	36.29	10.70	0.00	25.59	-1.25	850	--	21	ND	ND	ND	33	--	
11/04/97	36.29	11.05	0.00	25.24	-0.35	730	--	11	ND	5.1	11	ND	--	
02/12/98	36.29	6.60	0.00	29.69	4.45	820	--	23	3.2	ND	ND	18	--	
05/15/98	36.27	8.01	0.00	28.26	-1.43	390	--	5.5	1.2	ND	13	13	--	
08/12/98	36.27	9.18	0.00	27.09	-1.17	780	--	14	ND	0.52	ND	12	--	
11/12/98	36.27	9.91	0.00	26.36	-0.73	180	--	6.3	ND	ND	0.62	8.1	--	
03/01/99	36.27	8.34	0.00	27.93	1.57	790	--	24	ND	ND	1.7	32	--	
05/12/99	36.27	9.04	0.00	27.23	-0.70	930	--	13	2.2	1.2	1.5	10	--	
08/11/99	36.27	10.25	0.00	26.02	-1.21	1120	--	19.7	ND	ND	ND	ND	--	
11/04/99	36.27	11.10	0.00	25.17	-0.85	756	--	14.2	1.94	ND	ND	22.8	--	
02/29/00	36.27	8.12	0.00	28.15	2.98	955	--	22.9	ND	ND	ND	ND	--	
05/08/00	36.27	9.09	0.00	27.18	-0.97	895	--	ND	ND	ND	ND	ND	--	
08/08/00	36.27	10.08	0.00	26.19	-0.99	630	--	18.2	ND	ND	ND	ND	--	
11/06/00	36.27	10.52	0.00	25.75	-0.44	712	--	ND	ND	ND	ND	ND	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-9 continued														
02/07/01	36.27	9.78	0.00	26.49	0.74	750	--	ND	ND	ND	ND	66	--	
05/09/01	36.27	9.98	0.00	26.29	-0.20	704	--	ND	ND	ND	ND	ND	--	
08/24/01	36.27	11.34	0.00	24.93	-1.36	770	--	ND<1.2	ND<1.2	ND<1.2	ND<1.2	ND<12	--	
11/16/01	36.27	11.63	0.00	24.64	-0.29	540	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	--	
02/21/02	36.27	9.35	0.00	26.92	2.28	380	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
05/10/02	36.27	10.00	0.00	26.27	-0.65	300	--	ND<0.50	0.67	ND<0.50	ND<0.50	ND<5.0	--	
08/26/02	36.27	11.17	0.00	25.10	-1.17	--	680	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/07/02	36.27	11.56	0.00	24.71	-0.39	--	250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
02/14/03	36.27	9.41	0.00	26.86	2.15	--	460	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
05/12/03	36.27	9.22	0.00	27.05	0.19	--	720	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
08/11/03	36.27	11.18	0.00	25.09	-1.96	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/13/03	36.27	11.41	0.00	24.86	-0.23	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
02/17/04	36.27	9.89	0.00	26.38	1.52	--	600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
05/20/04	36.27	11.22	0.00	25.05	-1.33	--	590	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
08/25/04	36.27	11.49	0.00	24.78	-0.27	--	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/02/04	36.27	11.12	0.00	25.15	0.37	--	300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/17/05	36.27	8.87	0.00	27.40	2.25	--	750	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/13/05	36.27	8.92	0.00	27.35	-0.05	--	560	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/27/05	36.27	10.31	0.00	25.96	-1.39	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/20/05	36.27	10.41	0.00	25.86	-0.10	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/10/06	36.27	8.22	0.00	28.05	2.19	--	470	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/20/06	36.27	8.89	0.00	27.38	-0.67	--	360	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/25/06	36.27	9.95	0.00	26.32	-1.06	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/18/06	36.27	9.63	0.00	26.64	0.32	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH-Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-9 continued</b>														
03/29/07	36.27	9.71	0.00	26.56	-0.08	--	190	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
06/26/07	36.27	10.56	0.00	25.71	-0.85	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
09/26/07	36.27	11.65	0.00	24.62	-1.09	--	140	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/18/07	36.27	11.40	0.00	24.87	0.25	--	70	ND<0.50	1.1	ND<0.50	ND<1.0	--	ND<0.50	
03/25/08	36.27	9.73	0.00	26.54	1.67	--	130	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/18/08	36.27	10.90	0.00	25.37	-1.17	--	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>MW-10 (Screen Interval in feet: 8.0-20.0)</b>														
08/20/92	--	--	--	--	--	15000	--	230	ND	1000	350	--	--	
09/16/92	36.26	13.28	0.00	22.98	--	--	--	--	--	--	--	--	--	
10/12/92	36.26	13.67	0.00	22.59	-0.39	--	--	--	--	--	--	--	--	
11/10/92	36.26	13.59	0.00	22.67	0.08	15000	--	300	42	3500	330	--	--	
12/10/92	36.26	12.53	0.00	23.73	1.06	--	--	--	--	--	--	--	--	
01/15/93	36.26	9.60	0.00	26.66	2.93	--	--	--	--	--	--	--	--	
02/20/93	36.26	8.57	0.00	27.69	1.03	17000	--	74	ND	1000	620	--	--	
03/18/93	36.26	9.03	0.00	27.23	-0.46	--	--	--	--	--	--	--	--	
04/20/93	36.26	9.09	0.00	27.17	-0.06	--	--	--	--	--	--	--	--	
05/21/93	36.26	9.63	0.00	26.63	-0.54	23000	--	250	ND	3000	240	--	--	
06/22/93	36.26	10.12	0.00	26.14	-0.49	--	--	--	--	--	--	--	--	
07/23/93	36.26	10.54	0.00	25.72	-0.42	--	--	--	--	--	--	--	--	
08/23/93	36.26	10.99	0.00	25.27	-0.45	20000	--	230	13	3200	140	--	--	
09/24/93	36.04	11.17	0.00	24.87	-0.40	--	--	--	--	--	--	--	--	
11/23/93	36.04	11.67	0.00	24.37	-0.50	18000	--	300	10	2800	110	--	--	
02/24/94	36.04	9.57	0.00	26.47	2.10	15000	--	330	19	2000	83	--	--	
05/25/94	36.04	10.32	0.00	25.72	-0.75	14000	--	240	ND	230	62	--	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-10 continued</b>														
08/23/94	36.04	11.81	0.00	24.23	-1.49	16000	--	250	41	1800	74	--	--	
11/23/94	36.04	11.10	0.00	24.94	0.71	16000	--	260	ND	1600	49	--	--	
02/03/95	36.04	8.32	0.00	27.72	2.78	17000	--	310	ND	1500	93	--	--	
05/10/95	36.04	8.70	0.00	27.34	-0.38	12000	--	260	16	1200	54	--	--	
08/02/95	36.04	9.55	0.00	26.49	-0.85	8900	--	240	ND	780	40	--	--	
11/02/95	36.04	11.03	0.00	25.01	-1.48	9300	--	190	ND	470	1.7	110	--	
02/08/96	36.04	8.05	0.00	27.99	2.98	9700	--	170	ND	440	ND	ND	--	
05/08/96	36.04	8.70	0.00	27.34	-0.65	7100	--	100	ND	240	ND	43	--	
08/09/96	36.04	9.76	0.00	26.28	-1.06	4400	--	59	7.5	110	6.5	73	--	
11/07/96	36.04	10.92	0.00	25.12	-1.16	6300	--	65	ND	110	ND	130	--	
02/10/97	36.04	8.10	0.00	27.94	2.82	6800	--	91	ND	100	ND	210	--	
05/07/97	36.04	9.28	0.00	26.76	-1.18	4800	--	76	ND	50	ND	160	--	
08/05/97	36.04	10.51	0.00	25.53	-1.23	4200	--	52	ND	40	ND	81	--	
11/04/97	36.04	11.02	0.00	25.02	-0.51	4500	--	49	ND	63	ND	84	--	
02/12/98	36.04	6.85	0.00	29.19	4.17	6200	--	98	ND	91	ND	420	--	
05/15/98	36.02	8.05	0.00	27.97	-1.22	7200	--	84	ND	84	ND	260	--	
08/12/98	36.02	9.27	0.00	26.75	-1.22	7500	--	6.9	11	47	ND	130	--	
11/12/98	36.02	10.03	0.00	25.99	-0.76	4200	--	23	ND	24	ND	130	--	
03/01/99	36.02	8.56	0.00	27.46	1.47	5900	--	37	ND	50	26	300	--	
05/12/99	36.02	8.92	0.00	27.10	-0.36	7400	--	37	ND	32	ND	170	--	
08/11/99	36.02	10.10	0.00	25.92	-1.18	5060	--	38.1	ND	12.9	ND	75.5	--	
11/04/99	36.02	11.03	0.00	24.99	-0.93	6190	--	76.7	8.01	13.4	ND	234	--	
02/29/00	36.02	9.67	0.00	26.35	1.36	7120	--	27.8	ND	24.7	ND	208	--	
05/08/00	36.02	10.54	0.00	25.48	-0.87	5830	--	51.7	10.6	24.7	24.8	142	--	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-10 continued														
08/08/00	36.02	10.92	0.00	25.10	-0.38	5010	--	50.6	ND	13.9	ND	113	--	
11/06/00	36.02	11.34	0.00	24.68	-0.42	6260	--	47.9	ND	12.5	ND	118	--	
02/07/01	36.02	10.75	0.00	25.27	0.59	4800	--	56	10	ND	ND	780	--	
05/09/01	36.02	9.84	0.00	26.18	0.91	6810	--	52.4	ND	ND	ND	161	--	
08/24/01	36.02	11.16	0.00	24.86	-1.32	5600	--	56	ND<10	ND<10	ND<10	ND<100	--	
11/16/01	36.02	11.38	0.00	24.64	-0.22	5600	--	49	ND<10	ND<10	ND<10	190	--	
02/21/02	36.02	9.20	0.00	26.82	2.18	5000	--	38	ND<5.0	8.5	ND<5.0	140	--	
05/10/02	36.02	9.87	0.00	26.15	-0.67	5300	--	57	6.3	8.2	ND<5.0	ND<50	--	
08/26/02	36.02	11.02	0.00	25.00	-1.15	--	7000	ND<5.0	ND<5.0	5.4	ND<10	--	ND<20	
11/07/02	36.02	11.32	0.00	24.70	-0.30	--	3500	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<10	
02/14/03	36.02	9.36	0.00	26.66	1.96	--	5200	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	
05/12/03	36.02	9.12	0.00	26.90	0.24	--	4300	2.6	0.56	2.9	ND<1.0	--	4.8	
08/11/03	36.02	11.25	0.00	24.77	-2.13	--	3100	1.9	ND<0.50	1.0	1.0	--	4.0	
11/13/03	36.02	11.20	0.00	24.82	0.05	--	7300	ND<25	ND<25	ND<25	ND<50	--	ND<100	
02/17/04	36.02	10.95	0.00	25.07	0.25	--	7100	4.1	ND<2.5	3.8	ND<5.0	--	ND<10	
05/20/04	36.02	10.00	0.00	26.02	0.95	--	7300	3.0	ND<2.5	2.8	ND<5.0	--	ND<2.5	
08/25/04	36.02	11.24	0.00	24.78	-1.24	--	6900	2.7	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	
11/02/04	36.02	10.95	0.00	25.07	0.29	--	6100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	
03/17/05	36.02	8.75	0.00	27.27	2.20	--	6700	2.4	ND<0.50	1.0	ND<1.0	--	3.4	
06/13/05	36.02	8.71	0.00	27.31	0.04	--	7500	2.8	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	
09/27/05	36.02	10.08	0.00	25.94	-1.37	--	4300	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<5.0	
12/20/05	36.02	10.12	0.00	25.90	-0.04	--	3700	1.4	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/10/06	36.02	7.91	0.00	28.11	2.21	--	4100	3.7	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/20/06	36.02	8.81	0.00	27.21	-0.90	--	4100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	

Table 2  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-10 continued</b>														
09/25/06	36.02	9.94	0.00	26.08	-1.13	--	2800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	ND<1.0	
12/18/06	36.02	9.42	0.00	26.60	0.52	--	4000	1.4	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
03/29/07	36.02	9.47	0.00	26.55	-0.05	--	4300	1.2	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
06/26/07	36.02	10.25	0.00	25.77	-0.78	--	4600	0.94	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
09/26/07	36.02	11.43	0.00	24.59	-1.18	--	3100	1.1	ND<1.0	ND<1.0	ND<1.0	--	ND<1.0	
12/18/07	36.02	11.20	0.00	24.82	0.23	--	2500	1.0	1.1	ND<0.50	1.3	--	ND<0.50	
03/25/08	36.02	9.25	0.00	26.77	1.95	--	3100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	
06/18/08	36.02	10.77	0.00	25.25	-1.52	--	3700	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	
<b>MW-11 (Screen Interval in feet: 7.0-19.0)</b>														
08/20/92	--	--	--	--	--	4600	--	62	ND	ND	54	--	--	
09/16/92	35.83	12.93	0.00	22.90	--	--	--	--	--	--	--	--	--	
10/12/92	35.83	13.30	0.00	22.53	-0.37	--	--	--	--	--	--	--	--	
11/10/92	35.83	13.20	0.00	22.63	0.10	5800	--	130	ND	260	42	--	--	
12/10/92	35.83	12.24	0.00	23.59	0.96	--	--	--	--	--	--	--	--	
01/15/93	35.83	9.23	0.00	26.60	3.01	--	--	--	--	--	--	--	--	
02/20/93	35.83	8.20	0.00	27.63	1.03	18000	--	76	ND	1000	630	--	--	
03/18/93	35.83	8.77	0.00	27.06	-0.57	--	--	--	--	--	--	--	--	
04/20/93	35.83	8.86	0.00	26.97	-0.09	--	--	--	--	--	--	--	--	
05/21/93	35.83	9.40	0.00	26.43	-0.54	7100	--	64	ND	340	120	--	--	
06/22/93	35.83	9.87	0.00	25.96	-0.47	--	--	--	--	--	--	--	--	
07/23/93	35.83	10.29	0.00	25.54	-0.42	--	--	--	--	--	--	--	--	
08/23/93	35.83	10.73	0.00	25.10	-0.44	5400	--	68	ND	230	43	--	--	
09/24/93	35.50	10.83	0.00	24.67	-0.43	--	--	--	--	--	--	--	--	
11/23/93	35.50	11.28	0.00	24.22	-0.45	3400	--	105	ND	120	43	--	--	

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 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-11 continued														
02/24/94	35.50	9.20	0.00	26.30	2.08	4600	--	170	ND	140	36	--	--	
05/25/94	35.50	9.94	0.00	25.56	-0.74	1400	--	49	ND	26	ND	--	--	
08/23/94	35.50	11.39	0.00	24.11	-1.45	7300	--	250	13	150	42	--	--	
11/23/94	35.50	10.67	0.00	24.83	0.72	5800	--	250	10	120	22	--	--	
02/03/95	35.50	8.02	0.00	27.48	2.65	4400	--	110	ND	150	37	--	--	
05/10/95	35.50	8.36	0.00	27.14	-0.34	4200	--	120	ND	170	38	--	--	
08/02/95	35.50	9.31	0.00	26.19	-0.95	4200	--	110	ND	110	22	--	--	
11/02/95	35.50	10.85	0.00	24.65	-1.54	6100	--	150	ND	78	6.8	6200	--	
02/08/96	35.50	7.76	0.00	27.74	3.09	--	--	--	--	--	--	--	--	
02/14/96	35.50	8.18	0.00	27.32	-0.42	3100	--	60	ND	98	ND	4000	--	
05/08/96	35.50	8.50	0.00	27.00	-0.32	3500	--	120	ND	160	ND	6400	--	
08/09/96	35.50	9.46	0.00	26.04	-0.96	1100	--	42	ND	15	ND	4300	--	
11/07/96	35.50	10.58	0.00	24.92	-1.12	2900	--	57	ND	13	ND	3400	--	
02/10/97	35.50	7.88	0.00	27.62	2.70	600	--	9.5	ND	ND	ND	3100	--	
05/07/97	35.50	9.07	0.00	26.43	-1.19	1900	--	45	ND	31	ND	2400	--	
08/05/97	35.50	10.23	0.00	25.27	-1.16	2100	--	35	ND	24	ND	1800	--	
11/04/97	35.50	10.51	0.00	24.99	-0.28	98	--	1.6	ND	ND	ND	ND	--	
02/12/98	35.50	6.59	0.00	28.91	3.92	670	--	12	ND	ND	ND	1400	--	
05/15/98	35.50	7.73	0.00	27.77	-1.14	1200	--	7.9	ND	30	ND	1600	--	
08/12/98	35.50	8.85	0.00	26.65	-1.12	1600	--	ND	ND	ND	ND	2000	--	
11/12/98	35.50	9.52	0.00	25.98	-0.67	1700	--	9.3	ND	ND	ND	1700	--	
03/01/99	35.50	8.00	0.00	27.50	1.52	530	--	4.9	ND	ND	ND	870	--	
05/12/99	35.50	8.64	0.00	26.86	-0.64	900	--	6.6	ND	ND	ND	840	--	
08/11/99	35.50	9.92	0.00	25.58	-1.28	1660	--	5.52	ND	ND	ND	764	--	

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 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-11 continued														
11/04/99	35.50	10.88	0.00	24.62	-0.96	2600	--	8.71	ND	2.76	ND	1490	--	
02/29/00	35.50	7.56	0.00	27.94	3.32	420	--	ND	ND	ND	ND	1010	--	
05/08/00	35.50	8.50	0.00	27.00	-0.94	513	--	3.56	ND	1.11	ND	1320	--	
08/08/00	35.50	9.39	0.00	26.11	-0.89	960	--	10.0	1.28	ND	ND	1600	--	
11/06/00	35.50	9.81	0.00	25.69	-0.42	3000	--	17.7	ND	ND	ND	1280	1360	
02/07/01	35.50	9.16	0.00	26.34	0.65	1600	--	ND	ND	ND	ND	590	--	
05/09/01	35.50	9.51	0.00	25.99	-0.35	1010	--	11.4	ND	1.24	ND	586	--	
08/24/01	35.50	--	--	--	--	--	--	--	--	--	--	--	870	
08/29/01	35.50	10.78	0.00	24.72	--	3100	--	23	ND<5.0	ND<5.0	ND<5.0	840	870	
11/16/01	35.50	10.95	0.00	24.55	-0.17	1000	--	9.2	ND<2.0	ND<2.0	ND<2.0	600	--	
02/21/02	35.50	8.85	0.00	26.65	2.10	1100	--	7.4	ND<2.5	ND<2.5	ND<2.5	270	--	
05/10/02	35.50	9.51	0.00	25.99	-0.66	910	--	7.4	1.4	2.8	ND<12	330	270	
08/26/02	35.50	10.62	0.00	24.88	-1.11	--	1900	ND<0.50	ND<0.50	0.87	ND<1.0	--	170	
11/07/02	35.50	10.77	0.00	24.73	-0.15	--	550	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	330	
02/14/03	35.50	8.97	0.00	26.53	1.80	--	2600	1.8	0.51	1.7	ND<1.0	--	ND<2.0	
05/12/03	35.50	8.90	0.00	26.60	0.07	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	290	
08/11/03	35.50	11.04	0.00	24.46	-2.14	--	930	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	320	
11/13/03	35.50	10.79	0.00	24.71	0.25	--	1300	ND<2.5	ND<2.5	5.0	ND<5.0	--	300	
02/17/04	35.50	9.19	0.00	26.31	1.60	--	830	ND<2.5	ND<2.5	3.8	ND<5.0	--	170	
05/20/04	35.50	9.81	0.00	25.69	-0.62	--	930	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	230	
08/25/04	35.50	10.90	0.00	24.60	-1.09	--	1100	ND<1.0	ND<1.0	2.1	ND<2.0	--	210	
11/02/04	35.50	10.47	0.00	25.03	0.43	--	850	ND<1.0	ND<1.0	1.4	ND<2.0	--	180	
03/17/05	35.50	8.22	0.00	27.28	2.25	--	1500	0.63	ND<0.50	2.9	ND<1.0	--	120	
06/13/05	35.50	8.48	0.00	27.02	-0.26	--	1100	ND<0.50	ND<0.50	3.5	ND<1.0	--	120	



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 May 1991 Through June 2008  
 76 Station 3292

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-11 continued</b>														
09/27/05	35.50	9.88	0.00	25.62	-1.40	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	110	
12/20/05	35.50	9.96	0.00	25.54	-0.08	--	290	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	92	
03/10/06	35.50	7.65	0.00	27.85	2.31	--	620	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	140	
06/20/06	35.50	8.63	0.00	26.87	-0.98	--	680	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	88	
09/25/06	35.50	9.64	0.00	25.86	-1.01	--	180	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	65	
12/18/06	35.50	9.10	0.00	26.40	0.54	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	48	
03/29/07	35.50	9.31	0.00	26.19	-0.21	--	810	ND<0.50	ND<0.50	1.0	ND<0.50	--	47	
06/26/07	35.50	10.08	0.00	25.42	-0.77	--	510	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	37	
09/26/07	35.50	11.00	0.00	24.50	-0.92	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	39	
12/18/07	35.50	10.74	0.00	24.76	0.26	--	ND<50	ND<0.50	0.64	ND<0.50	ND<1.0	--	23	
03/25/08	35.50	9.29	0.00	26.21	1.45	--	320	ND<0.50	0.84	ND<0.50	1.2	--	31	
06/18/08	35.50	10.78	0.00	24.72	-1.49	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	28	

**APPENDIX C**  
Boring Logs

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102	<b>Boring &amp; Casing Diameter</b> 9"                      2"	<b>Logged By</b> W.W.
<b>Project Name</b> Unocal 15008 E. 14th San L	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 4/24/91
<b>Boring No.</b> MW1	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with sand and silt, gravel to 4" diameter, moist, stiff, brown.
6/11/12		5	ML/ MH	Clayey silt, with fine-grained sand, trace gravel to 1/2" diameter, trace caliche, very stiff, moist, very dark grayish brown.
4/5/6		10	CL/ CH	Clay, with silt, root holes common, a 2" sandy clay lens observed at 9-1/2', moist, stiff, olive to olive gray.
5/6/9	▽			Clay, trace silt, sand and caliche, root holes common, moist to very moist, light olive brown and dark yellowish brown.
3/2/4		15		Clay, as above, sheen present, firm, gray and olive brown mottled.
			MH	Silt, saturated, sheen present, firm, dark greenish gray.
			CL/ CH	Clay, trace sand and caliche, porous, moist, stiff, gray and brown mottled.
6/7/9		20		Clayey silt, trace sand, very moist, stiff to very stiff, olive gray.
			MH	

TOTAL DEPTH: 20.5'

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102	<b>Boring &amp; Casing Diameter</b> 9"                      2"	<b>Logged By</b> W.W.
<b>Project Name Unocal</b> 15008 E. 14th San L	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 4/24/91
<b>Boring No.</b> MW2	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, with cobbles to 12" diameter, moist, stiff, gray to greenish gray.
			CH	Silty clay, trace sand, moist, stiff, black.
3/4/5		5	ML/ MH	Clayey silt with fine-grained sand, trace caliche, moist, stiff, dark brown to very dark grayish brown.
				Clayey silt, trace fine-grained sand, porous, moist, stiff, olive gray.
4/5/6		10	CL	Clay, with silt, trace fine-grained sand, trace caliche, gray staining around roots, moist, olive brown mottled with dark grayish brown.
3/4/5	▽			Silty clay, saturated, trace caliche nodules to 3/8" diameter, stiff, olive brown and olive gray mottled with gray staining.
3/4/6		15	MH	Silty clay, as above, olive gray and dark yellowish brown.
				Clayey silt, trace caliche, saturated, free product present, stiff, olive gray and dark yellowish brown.
4/5/8			CL/ CH	Clay, trace very fine sand, trace caliche, porous, very moist, stiff, dark gray and very dark grayish brown mottled.
		20		<b>TOTAL DEPTH: 19.5'</b>

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102	<b>Boring &amp; Casing Diameter</b> 9"                      2"	<b>Logged By</b> W.W.
<b>Project Name Unocal</b> 15008 E. 14th San L	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 4/23/91
<b>Boring No.</b> MW3	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, trace sand, gravel to 3-1/2" diameter, firm, dark brown.
			CL/CH	Silty clay, trace sand, firm, very dark gray.
7/9/13		5	ML	Clayey silt, trace gap graded sand, trace gravel to 1/2" diameter, moist, very stiff, dark gray to dark greenish gray.
			ML/MH to CL/CH	Clayey silt to silty clay, porous, caliche common, stiff, greenish gray.
4/4/5		10		Clayey silt to silty clay, trace fine-grained sand, very moist, porous, trace caliche, firm greenish gray.
			SC	Clayey sand, trace gravel to 1/2" dia. saturated, loose, greenish gray.
2/3/2	▽	15	ML/MH	Clayey silt, trace sand, very moist to saturated, firm, greenish gray.
			CL/CH	Clay, with fine-grained sand, trace silt, caliche common, porous, very moist, dark gray and dark greenish gray.
4/6/7		20		

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102	<b>Boring &amp; Casing Diameter</b> 9"                      2"	<b>Logged By</b> W.W.
<b>Project Name</b> Unocal 15008 E. 14th San L	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 4/23/91
<b>Boring No.</b> MW3	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI

<b>Penetration blows/6"</b>	<b>G. W. level</b>	<b>Depth (feet) Samples</b>	<b>Strati- graphy USCS</b>	<b>Description</b>
6/8/11			CL/ CH	Clay, trace fine-grained sand, trace caliche, porous, moist, very stiff, very dark gray.
				<b>TOTAL DEPTH: 22.5'</b>

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102		<b>Boring &amp; Casing Diameter</b> 9"                      2"		<b>Logged By</b> W.W.
<b>Project Name Unocal</b> 15008 E. 14th San L		<b>Well Cover Elevation</b>		<b>Date Drilled</b> 4/23/91
<b>Boring No.</b> MW4		<b>Drilling Method</b>	<b>Hollow-stem Auger</b>	<b>Drilling Company</b> EGI
<b>Penetration blows/6"</b>	<b>G. W. level</b>	<b>Depth (feet) Samples</b>	<b>Strati- graphy USCS</b>	<b>Description</b>
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt and sand, gravel to 3-1/2" diameter, moist, firm, brown.
			CH	Silty clay, with fine-grained sand, porous, moist, stiff to very stiff, very dark gray.
7/9/7		5	ML/ MH	Clayey silt, with fine-grained sand, porous, trace angular gravel to 1/2" diameter, moist, stiff, dark brown.
				Sandy silt, trace clay, trace organic matter, very moist to saturated, stiff, brown to light olive brown.
4/5/7		10	CL/ CH	Clay, trace sand and silt, porous, caliche common, moist, stiff, brown and light olive brown mottled.
				Clay, as above, except greenish gray.
3/5/6	▽	13	SC	Clayey sand with gravel to 1/2" diameter, saturated, medium dense, greenish gray.
		14		
		15	ML/ MH	Clayey silt, trace fine-grained sand, porous, very moist to saturated, stiff, light olive gray.
			CL/ CH	Clay, trace silt, trace fine-grained sand, saturated, stiff, moist, very dark gray.
3/6/8		20	MH	Clayey silt, trace sand and caliche, very moist, stiff, greenish gray.
				TOTAL DEPTH: 20.5'

**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102	<b>Boring &amp; Casing Diameter</b> 9"                      2"	<b>Logged By</b> W.W.
<b>Project Name Unocal</b> 15008 E. 14th San L	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 4/23/91
<b>Boring No.</b> MW5	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI


Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, trace sand, moist, gravel to 3" diameter, firm, dark brown.
			CL/ CH	Silty clay, trace sand, moist, firm, trace rootlets, very dark gray.
7/9/13		5	ML/ MH	Clayey silt, trace sand and trace gravel to 1/2" diameter, moist, very stiff, brown with slight mottling of yellowish brown.
4/4/5		10	CL/ CH	Clay, with silt, trace sand, porous, caliche nodules to 3/8" diameter, moist, olive gray.
2/2/3	<u>initially</u>	15	ML/ MH to CL/ CH	Clayey silt to silty clay, pores locally contain free product, very moist to saturated, firm, olive gray to greenish gray.
4/5/		20	CL/ CH	Silty clay, trace sand, very moist to saturated, porous, trace caliche, stiff, dark gray to olive gray to 20-1/4 feet.



**B O R I N G   L O G**

<b>Project No.</b> KEI-P91-0102		<b>Boring &amp; Casing Diameter</b> 9"                      2"		<b>Logged By</b> W.W.
<b>Project Name Unocal</b> 15008 E. 14th San L		<b>Well Cover Elevation</b>		<b>Date Drilled</b> 4/23/91
<b>Boring No.</b> MW5		<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> EGI	
<b>Penetration blows/6"</b>	<b>G. W. level</b>	<b>Depth (feet) Samples</b>	<b>Strati- graphy USCS</b>	<b>Description</b>
/7 6/6/11			CL/ CH	Clay, trace very fine-grained sand, slightly moist, trace caliche, very stiff, very dark gray with slight dark greenish gray mottling.
		23		
		25		
		30		
		35		
		40		
				<b>TOTAL DEPTH: 22.5'</b>


# BORING LOG

Project No. KEI-P91-0102		Boring & Casing Diameter 9"                      2"		Logged By <i>JGG</i> D.L. <i>EG 1633</i>	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro		Well Cover Elevation		Date Drilled 5-5-92	
Boring No. MW7		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling	
Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
NO BLOW COUNT DATA - SAMPLES PUSHED           Very poor recovery at 7.5 feet.		0		Concrete slab over sand and gravel base.	
		5	ML/CL	Silt, clayey silt, and silty clay in pockets, with minor sand and gravel, soft to firm, moist, yellowish brown to black (fill and disturbed native soil).	
		10	CL/SM	Pocketed clay, silt, and sand, soft, moist (fill).	
		10	CH	Silty clay, stiff, moist, olive brown and dark grayish brown mottled, very dark gray discolored root holes, occasionally wet inside root holes.	
		12.5		Silty clay as above except olive brown.	
		13.5	ML	Silt, trace very fine-grained sand, firm, wet, olive gray.	
		15	MH	Clayey silt, firm to stiff, very moist, dark olive gray, root holes common.	
		16.5	ML	Sandy silt, trace clay, sand is very fine-grained, firm to stiff, wet, dark olive gray.	
		19.5	CH	Clay with silt, trace very fine-grained sand, stiff, moist, very dark grayish brown and dark gray mottled. Lenses of grayish brown clayey silt below 19.5 feet.	
		21.5		Clay, very stiff, moist, black, trace caliche.	
-----TOTAL DEPTH: 21.5'-----					

# BORING LOG

Project No. KEI--91-0102		Boring & Casing Diameter 9"                      2"		Logged By W.W.                      JGG EG 1633	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro		Well Cover Elevation		Date Drilled 5/6/92	
Boring No. MW8		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling	
Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		2 inches of asphalt pavement and 4 inches of concrete pavement over sand and gravel base.	
			CL	Silty clay, minor gravel, moist, grayish green.	
			ML	Clayey silt, estimated at 25% clay, 5% sand and gravel to 1/2 inches in diameter, stiff, moist, very dark grayish brown.	
7/9/13		5	CL	Clay, estimated at 10-15% fine sand and 5% subrounded gravel to 3/4 inches in diameter, trace silt, very stiff, moist, brown to dark yellowish brown.	
4/7/19		10		Clay, stiff to very stiff, moist, light olive brown, root pores with decomposed rootlets common.	
6/7/15	▽ A ▽		GC	Clayey gravel with well graded sand and well rounded gravel to 3/4 inches in diameter, moist, medium dense.	
			ML	Clayey silt, estimated at 5% fine-grained sand, very moist, olive gray.	
2/2/3			SC	Clayey sand with silt, estimated at 30% clay and 10-15% silt sand, well graded, saturated, greenish gray.	
		15	CL	Clay, trace silt and sand, moist, firm, olive gray and light olive brown mottled, trace root pores.	
			ML	Clayey silt, saturated, firm, greenish gray.	
3/4/6			SM	Silty sand, estimated at 25% silt, sand is well sorted, fine grained, saturated, olive gray and greenish gray mottled,	
4/5/7			CL/CH	Clay, high plasticity, trace silt, moist, stiff, gray and brown mottled, saturated root pores.	
		20	CL	Sandy clay with silt, very moist, olive gray.	
			TOTAL DEPTH: 19.0'		

## BORING LOG

Project No. KEI-P91-0102		Boring & Casing Diameter 9"                      2"		Logged By <i>JGG</i> W.W. <i>EG 1633</i>	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro		Well Cover Elevation		Date Drilled 5/6/92	
Boring No. MW9		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling	
Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		2 inches of asphalt over 4 inches of concrete pavement.	
			CL	Silty clay with fine sand, estimated at 15% fine-grained sand, trace gravel, yellowish brown.	
				As above except dark grayish brown.	
				Silty clay, estimated 20% silt, stiff, moist, very dark gray.	
7/15/15		5		Silty clay, estimated 15-20% silt and 5% sand, minor gravel, very stiff, brown.	
				Clay, estimated at 5-10% silt, trace sand and caliche, very stiff, light olive brown and brownish gray, root pores common.	
7/9/9		10		Clay, estimated at 5-10% silt, trace sand and caliche, stiff, very moist to saturated, grayish brown to light olive brown, root pores common.	
				Clay as above, color change to gray and greenish gray.	
7/7/6				Silty clay, estimated at 15% silt, stiff, saturated, greenish gray and light olive brown mottled, root pores common.	
		15		Silty clay, estimated at 15-20% silt, trace sand, saturated, stiff, greenish gray and grayish brown mottled.	
4/5/6				Clay, high plasticity, trace fine sand, stiff, moist, mottled brown and dark gray, trace root pores.	
			CL/CH		
4/6/8					
		20		TOTAL DEPTH 19'	

## BORING LOG

<b>Project No.</b> KEI-P91-0102	<b>Boring Diameter</b> 9" <b>Casing Diameter</b> 2"	<b>Logged By</b> JGG D.L. <i>LEG 1633</i>
<b>Project Name</b> Unocal S/S #3292 15008 E. 14th, San Leandro	<b>Well Cover Elevation</b>	<b>Date Drilled</b> 8/13/92
<b>Boring No.</b> MW10	<b>Drilling Method</b> Hollow-stem Auger	<b>Drilling Company</b> Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		Concrete slab.	
NO BLOW COUNT DATA - SAMPLES PUSHED			SC	Sand and gravel mixed with black silty clay (fill and disturbed native soil).	
				Silty clay with trace sand and gravel, very stiff, moist, very dark brown (10YR 2/1) and black (10YR 1/1), mottled.	
	5			Clayey sand with trace gravel to 3/4 inch in diameter, sand is fine to coarse-grained, medium dense, moist, dark brown (10YR 3/3), with iron-oxide stained root holes.	
				ML	Silt with trace fine-grained sand, stiff, moist, dark greenish gray (5GY 4/1).
			10	CL	Silty clay, stiff, moist, dark gray (5Y 4/1), olive brown (2.5YR 4/4) below 10.5 feet with dark greenish gray (5GY 4/1) discolored root holes.
				MH	Clayey silt, stiff, moist, olive gray (5Y 4/2).
				CL	Silty clay, as at 11 feet.
				MH	Clayey silt, stiff, moist, olive gray (5Y 4/2).
				SM	Silty sand with trace clay, sand is fine-grained, medium dense, wet, dark greenish gray (5GY 4/1).
			15	CH	Silty clay, stiff, moist, olive gray (5Y 4/2) and very dark grayish brown (10YR 3/2), mottled.
				ML	Silt and sandy silt, stiff, very moist to wet, dark greenish gray (5Y 4/1), sand is very fine to fine-grained.
				CH	Silty clay, stiff, moist, olive gray (5Y 4/1) with minor iron oxide staining.
			CH	Clay with silt and trace sand, stiff, moist, very dark brown (10YR 2/2) and very dark gray (10YR 3/1), mottled, minor caliche.	
		20		TOTAL DEPTH 20'	

## BORING LOG

Project No. KEI-P91-0102	Boring Diameter 9"	Logged By <i>JGG</i> D.L. <i>CEG 1633</i>
	Casing Diameter 2"	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro	Well Cover Elevation	Date Drilled 8/13/92
Boring No. MW11	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		Concrete slab.	
NO BLOW COUNT DATA - SAMPLES PUSHED		1		Sand and gravel mixed with black silty clay: fill and disturbed native soil.	
		3	CL	Silty clay with trace sand and gravel, very stiff, moist, black (10YR 2/1).	
		5	SC	Clayey sand with trace silt, sand is fine to coarse-grained, medium dense, moist, dark brown (10YR 3/3).	
		10	CH	Silty clay, stiff, moist, dark olive gray (5Y 4/2), olive gray (5Y 4/2) below 10 feet, with root holes, root holes are discolored, dark greenish gray below (5GY 4/1) below 10 feet.	
		12.5	MH	Clayey silt with trace fine-grained sand, stiff, moist to very moist, olive gray (SY 4/2), grading to dark greenish gray (5GY 4/1) below 12.5 feet with root holes.	
		15	ML	Silt with sand, sand is very fine-grained, stiff, very moist, dark greenish gray (5GY 4/1).	
		16	SP	Poorly graded sand, fine-grained, trace silt, medium dense, saturated, dark greenish gray (5GY 4/1).	
		17	CH	Silty clay, stiff, moist, dark greenish gray (5GY 4/1).	
		18	CH	Clay with silt and trace sand, stiff, moist, very dark brown (10YR 2/2) and very dark gray (10YR 3/1), mottled, with trace caliche.	
		19	MH	Clayey silt, stiff, moist olive gray (SY 4/2).	
		20	CL	Silty clay, stiff, moist, dark greenish gray (5GY 4/1).	
			21		TOTAL DEPTH 20'

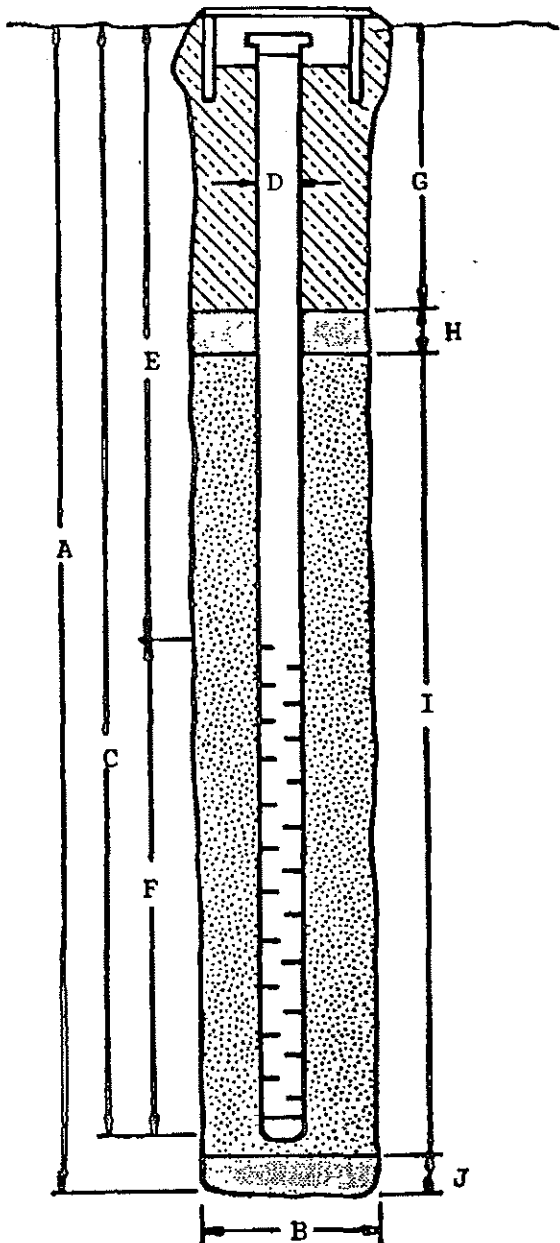
**W E L L   C O M P L E T I O N   D I A G R A M**

PROJECT NAME: Unocal 15008 E. 14th San Leandro BORING/WELL NO. MW1

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_

Flush-mounted Well Cover



A. Total Depth: 20.5'

B. Boring Diameter\*: 9"

Drilling Method: Hollow Stem

Auger

C. Casing Length: 19'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 7'

F. Perforated Length: 12'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 14'

Pack Material: RMC Lonestar Sand

Size: #2/16

J. Bottom Seal: 1.5'

Seal Material: Bentonite

\*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

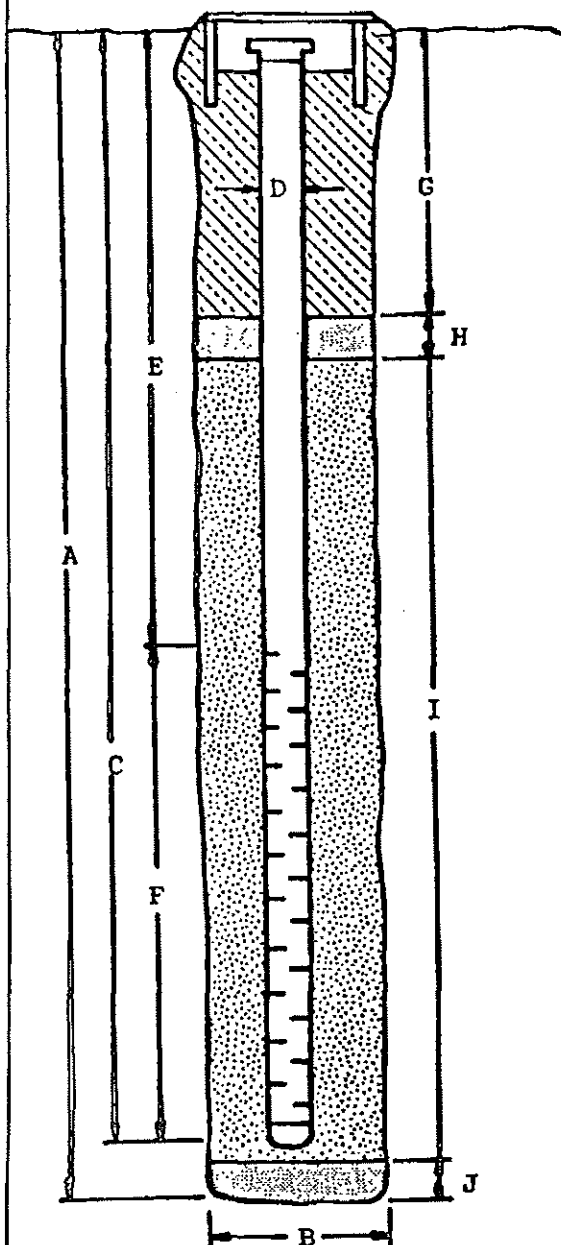
## W E L L   C O M P L E T I O N   D I A G R A M

PROJECT NAME: Unocal 15008 E. 14th San Leandro      BORING/WELL NO. MW2

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_

Flush-mounted Well Cover



A. Total Depth: 19.5'

B. Boring Diameter\*: 9"

Drilling Method: Hollow Stem  
Auger

C. Casing Length: 19.5'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 7'

F. Perforated Length: \_\_\_\_\_

Machined  
Perforation Type: Slot

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 14.5'

Pack Material: RMC Lonestar  
Sand

Size: #2/16

J. Bottom Seal: None

Seal Material: N/A

\*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.



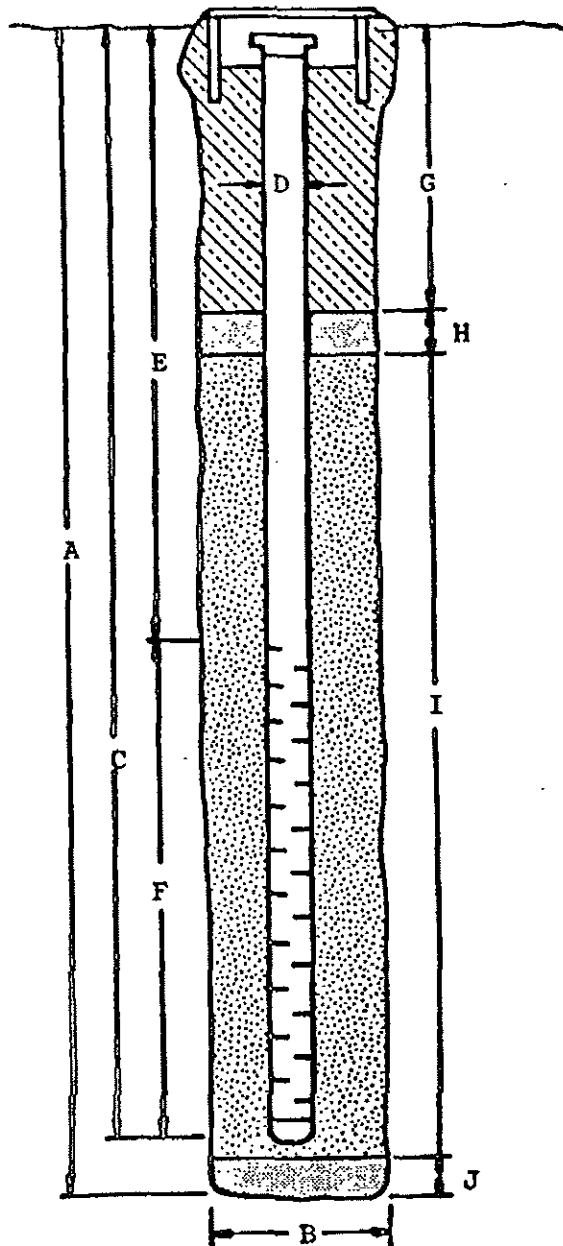
**W E L L   C O M P L E T I O N   D I A G R A M**

PROJECT NAME: Unocal 15008 E. 14th San Leandro BORING/WELL NO. MW3

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_

Flush-mounted Well Cover



A. Total Depth: 22.5'

B. Boring Diameter\*: 9"

Drilling Method: Hollow Stem  
Auger

C. Casing Length: 22.5'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 7'

F. Perforated Length: 15.5'

Perforation Type: Machined  
Slot

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 17.5'

Pack Material: RMC Lonestar  
Sand  
Size: #2/16

J. Bottom Seal: None

Seal Material: N/A

\*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

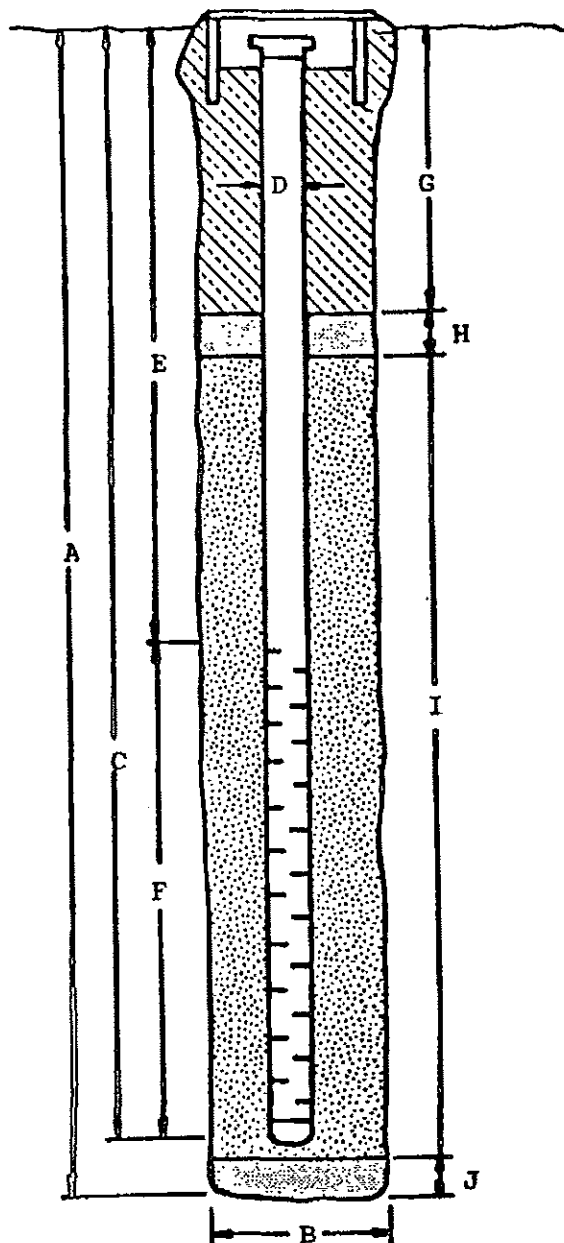
**W E L L   C O M P L E T I O N   D I A G R A M**

PROJECT NAME: Unocal 15008 E. 14th San Leandro BORING/WELL NO. MW4

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_

Flush-mounted Well Cover



A. Total Depth: 20.5'

B. Boring Diameter\*: 9"

Drilling Method: Hollow Stem  
Auger

C. Casing Length: 19.5'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"  
ID = 2.067"

E. Depth to Perforations: 7'

F. Perforated Length: 12.5'

Perforation Type: Machined  
Slot  
Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 15.5'

Pack Material: RMC Lonestar  
Sand  
Size: #2/16

J. Bottom Seal: None

Seal Material: N/A

\*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

**W E L L C O M P L E T I O N D I A G R A M**

PROJECT NAME: Unocal 15008 E. 14th San Leandro BORING/WELL NO. MW5

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_

Flush-mounted Well Cover

A. Total Depth: 22.5'

B. Boring Diameter\*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 22.5'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"  
ID = 2.067"

E. Depth to Perforations: 7'

F. Perforated Length: 15.5'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 3'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

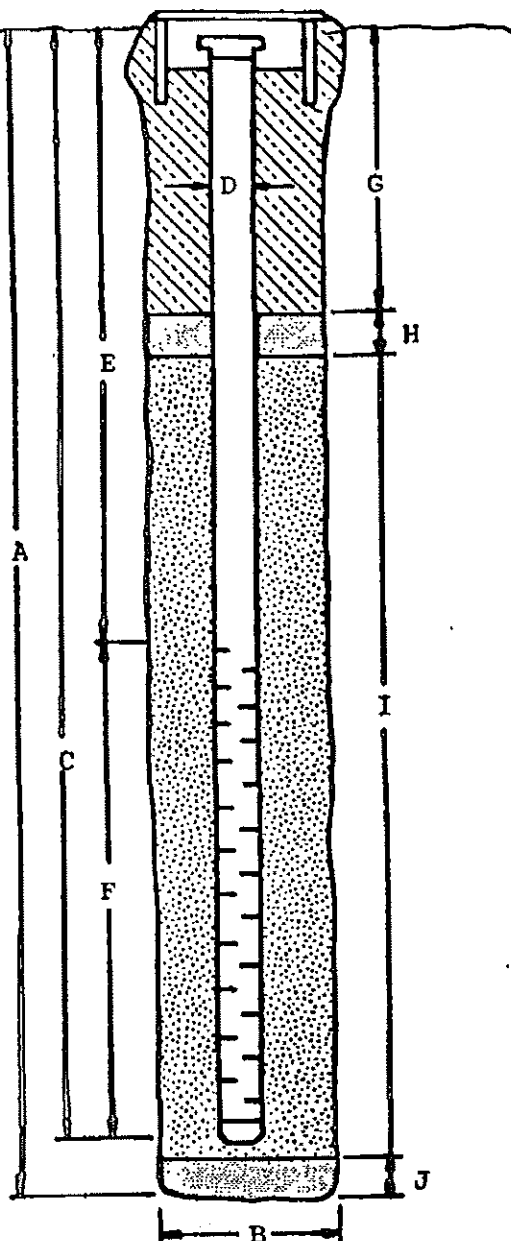
I. Gravel Pack: 17.5'

Pack Material: RMC Lonestar Sand

Size: #2/16

J. Bottom Seal: None

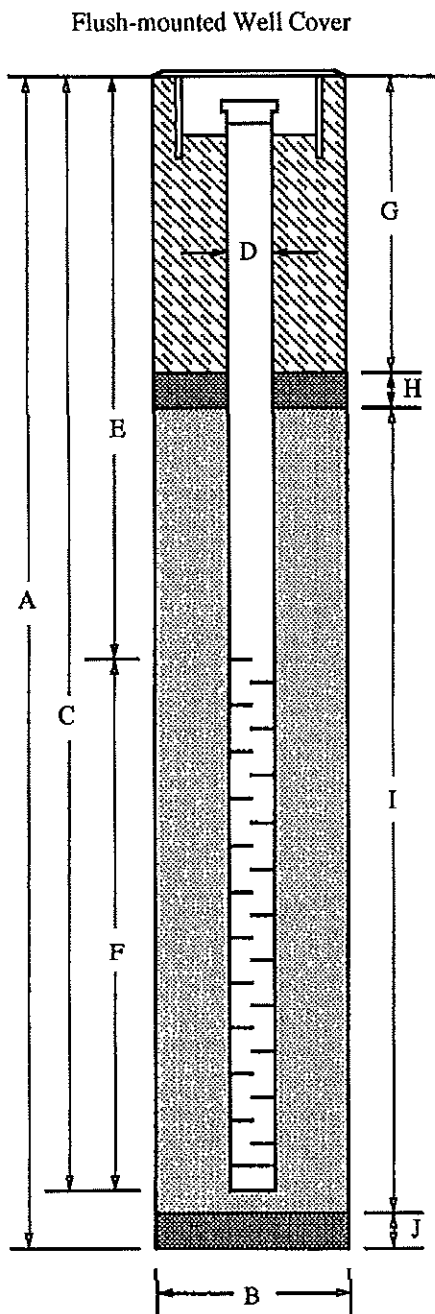
Seal Material: N/A



\*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW6  
 PROJECT NUMBER: KEI-P91-0102  
 WELL PERMIT NO.: ACFC & WCD 92201



- A. Total Depth : 20'
- B. Boring Diameter\* : 9"
- Drilling Method: Hollow Stem Auger
- C. Casing Length: 20'
- Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"  
ID = 2.067"
- E. Depth to Perforations: 8'
- F. Perforated Length: 12'
- Perforation Type: Machined Slot
- Perforation Size: 0.010"
- G. Surface Seal: 4'
- Seal Material: Neat Cement
- H. Seal: 2'
- Seal Material: Bentonite
- I. Filter Pack: 14'
- Pack Material: RMC Lonestar Sand
- Size: #2/12
- J. Bottom Seal: None
- Seal Material: N/A

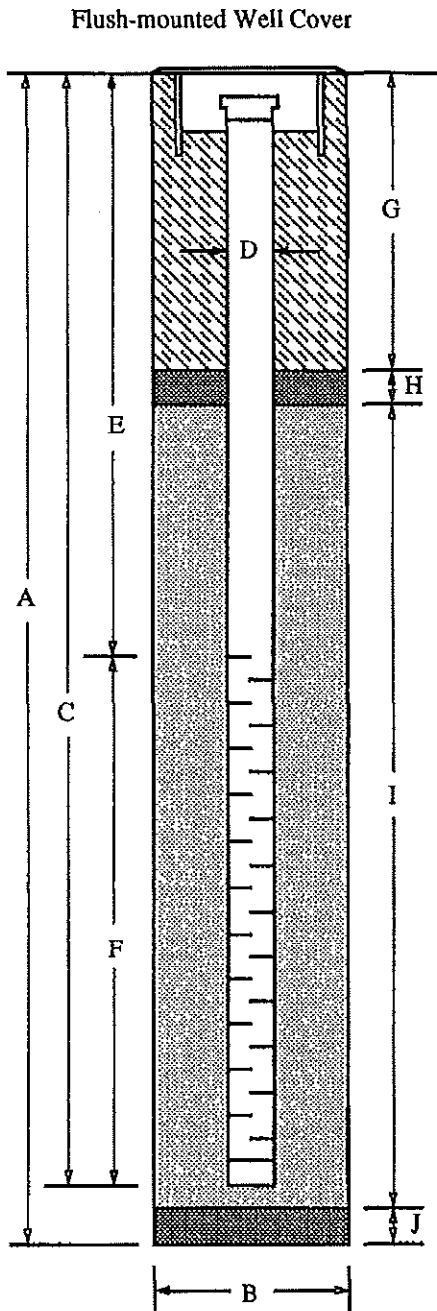
\* Boring diameter can vary from 8 1/4" to 9" depending on bit wear.

## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW7

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: ACF & WCD 92201



- A. Total Depth : 21.5'
- B. Boring Diameter\* : 9"  
Drilling Method: Hollow Stem Auger
- C. Casing Length: 21.5'  
Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"  
ID = 2.067"
- E. Depth to Perforations: 11'
- F. Perforated Length: 10.5'  
Perforation Type: Machined Slot  
Perforation Size: 0.010
- G. Surface Seal: 8'  
Seal Material: Neat Cement
- H. Seal: 2'  
Seal Material: Bentonite
- I. Filter Pack: 11.5'  
Pack Material: RMC Lonestar Sand  
Size: #2/12
- J. Bottom Seal: None  
Seal Material: N/A

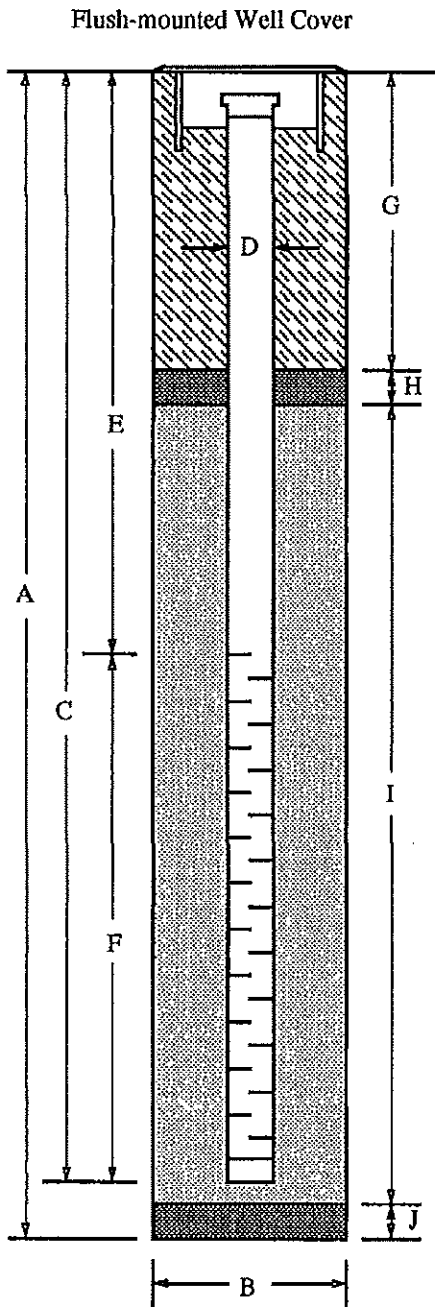
\* Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW8

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: ACFC & WCD 92201



- A. Total Depth : 20'
- B. Boring Diameter\* : 9"
- Drilling Method: Hollow Stem Auger
- C. Casing Length: 19"
- Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"  
ID = 2.067"
- E. Depth to Perforations: 8'
- F. Perforated Length: 11'
- Perforation Type: Machined Slot
- Perforation Size: 0.010"
- G. Surface Seal: 4'
- Seal Material: Neat Cement
- H. Seal: 2'
- Seal Material: Bentonite
- I. Filter Pack: 13'
- Pack Material: RMC Lonestar Sand
- Size: #2/12
- J. Bottom Seal: 1'
- Seal Material: Benton chips.

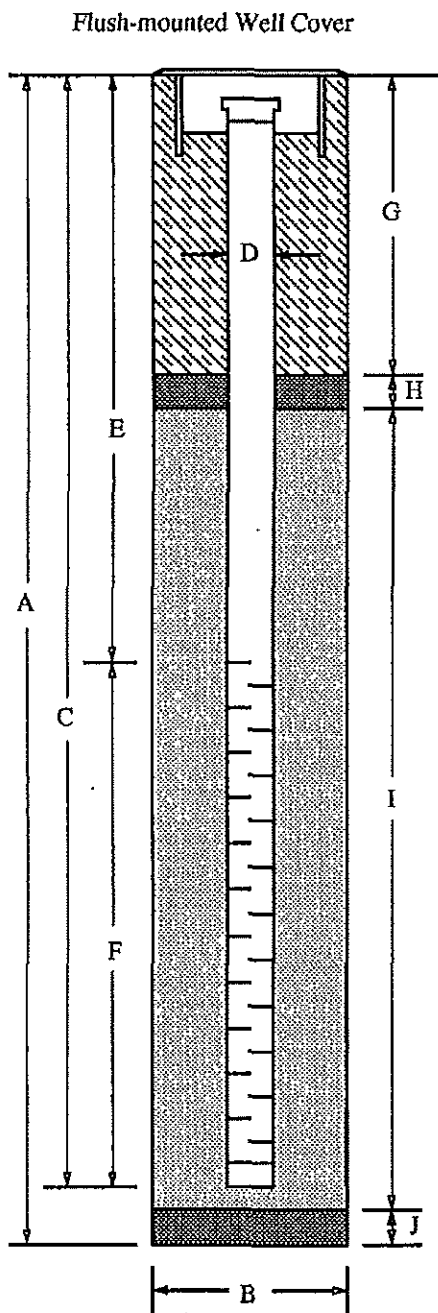
\* Boring diameter can vary from 8 1/4" to 9" depending on bit wear.

## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW9

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: ACFC & WCD 92201



- A. Total Depth : 19'
- B. Boring Diameter\* : 9"
- Drilling Method: Hollow Stem Auger
- C. Casing Length: 19"
- Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"
- ID = 2.067"
- E. Depth to Perforations: 8'
- F. Perforated Length: 11'
- Perforation Type: Machined Slot
- Perforation Size: 0.010"
- G. Surface Seal: 4'
- Seal Material: Neat Cement
- H. Seal: 2'
- Seal Material: Bentonite
- I. Filter Pack: 13'
- Pack Material: RMC Lonestar Sand
- Size: #2/12
- J. Bottom Seal: None
- Seal Material: N/A

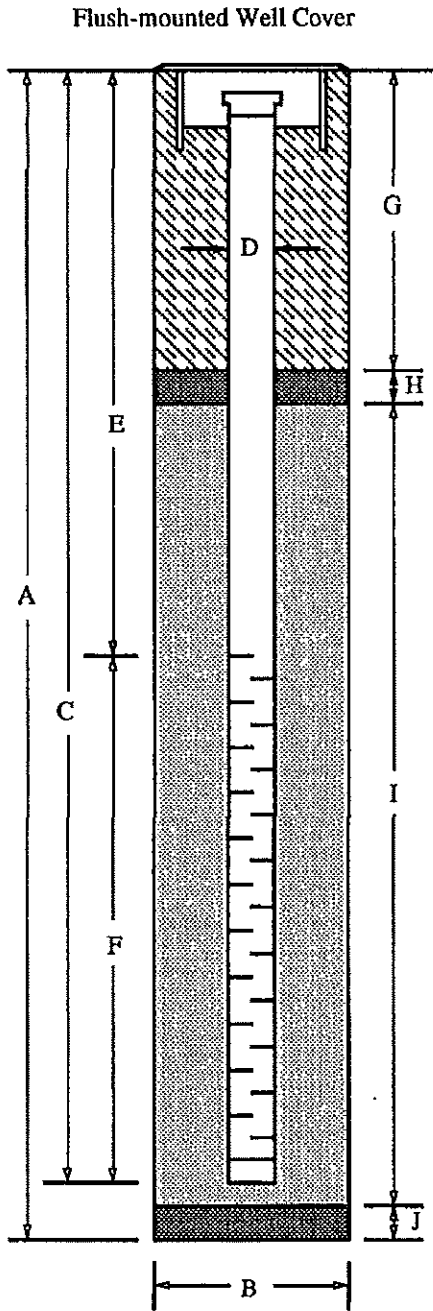
\* Boring diameter can vary from 8 1/4" to 9" depending on bit wear.

## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW10

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_



- A. Total Depth : 20'
- B. Boring Diameter: 8"  
Drilling Method: Hollow Stem Auger
- C. Casing Length: 20'  
Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"  
ID = 2.067"
- E. Depth to Perforations: 8'
- F. Perforated Length: 12'  
Perforation Type: Machined Slot  
Perforation Size: 0.010"
- G. Surface Seal: 4'  
Seal Material: Neat Cement
- H. Seal: 2'  
Seal Material: Bentonite
- I. Filter Pack: 14'  
Pack Material: RMC Lonestar Sand  
Size: #2/12
- J. Bottom Seal: None  
Seal Material: N/A

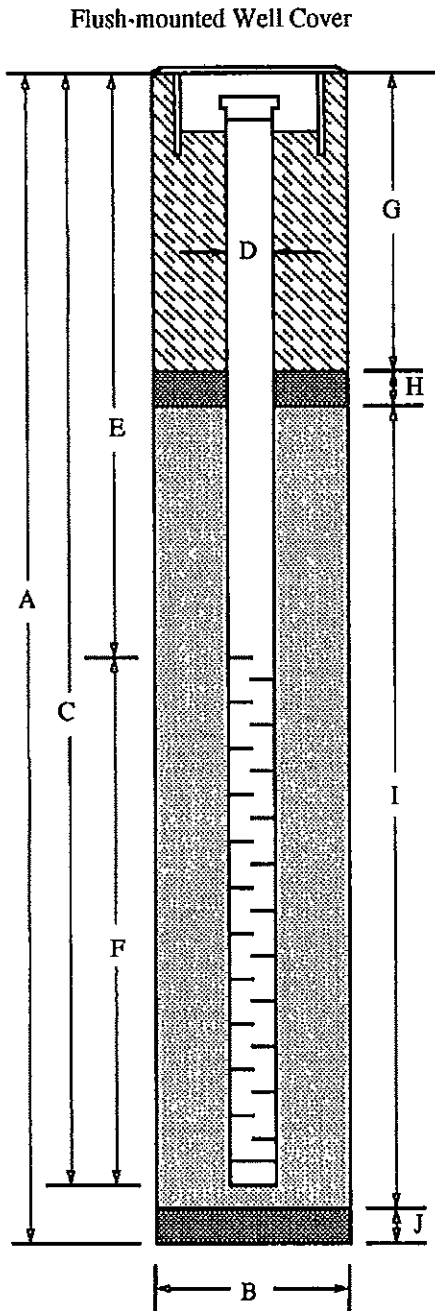


## WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal S/S #3292, 15008 E. 14th, San Leandro WELL NO. MW11

PROJECT NUMBER: KEI-P91-0102

WELL PERMIT NO.: \_\_\_\_\_



- A. Total Depth : 20'
- B. Boring Diameter: 8"  
Drilling Method: Hollow Stem Auger
- C. Casing Length: 19'  
Material: Schedule 40 PVC
- D. Casing Diameter: OD = 2.375"  
ID = 2.067"
- E. Depth to Perforations: 7'
- F. Perforated Length: 12'  
Perforation Type: Machined Slot  
Perforation Size: 0.010"
- G. Surface Seal: 3'  
Seal Material: Neat Cement
- H. Seal: 2'  
Seal Material: Bentonite
- I. Filter Pack: 14'  
Pack Material: RMC Lonestar Sand  
Size: #2/12
- J. Bottom Seal: 1'  
Seal Material: Bentonite

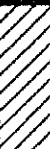


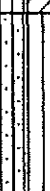
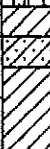



# Gettler-Ryan, Inc.

# Log of Boring EB-1

PROJECT: <i>Tosco 76 Facility #3292</i>	LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>
GR PROJECT NO.: <i>140071.02</i>	SURFACE ELEVATION: <i>ft. MSL</i>
DATE STARTED: <i>05/07/98</i>	WL (ft. bgs): <i>8.5</i> DATE: <i>05/07/98</i> TIME: <i>12:45</i>
DATE FINISHED: <i>05/07/98</i>	WL (ft. bgs):    DATE:    TIME:
DRILLING METHOD: <i>2 in. GeoProbe</i>	TOTAL DEPTH: <i>12.0 Feet</i>
DRILLING COMPANY: <i>Fisch Environmental</i>	GEOLOGIST: <i>Barbara Sieminski</i>

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						GW	GRAVEL WITH SAND (GW) - dark yellowish brown (10YR 4/4), moist; 70% angular fine to coarse gravel, 25% fine to coarse sand, 5% clay.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
						CL	CLAY (CL) - very dark brown (10YR 3/3), moist, medium plasticity; 95% clay, 5% fine sand.	
5	0		EBI-5			ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
			EBI-6.5			ML/SM	SANDY SILT (ML/SM) - dark brown (10YR 4/3), moist; 50% silt, 40% fine to coarse sand, 10% clay.	
			EBI-7.5			ML/SM	↓ Becomes saturated at 8.5 feet.	
			EBI-9.5			CL	CLAY (CL) - dark gray (5Y 4/1), saturated, medium plasticity; 95% clay, 5% fine to coarse sand; carbonate nodules.	
10	0.6						Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

10<sup>-1</sup> - 10<sup>-2</sup>

Gettler-Ryan, Inc.					Log of Boring EB-2			
PROJECT: <i>Tosco 76 Facility #3292</i>					LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>			
GR PROJECT NO.: <i>140071.02</i>					SURFACE ELEVATION: <i>ft. MSL</i>			
DATE STARTED: <i>05/07/98</i>					WL (ft. bgs): <i>7.9</i>	DATE: <i>05/07/98</i>	TIME: <i>10:45</i>	
DATE FINISHED: <i>05/07/98</i>					WL (ft. bgs):	DATE:	TIME:	
DRILLING METHOD: <i>2 in. GeoProbe</i>					TOTAL DEPTH: <i>12.0 Feet</i>			
DRILLING COMPANY: <i>Fisch Environmental</i>					GEOLOGIST: <i>Barbara Sieminski</i>			
DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	SANDY CLAY (CL) - very dark grayish brown (10YR 3/2), moist, low plasticity; 70% clay, 30% fine to coarse sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
						CL	CLAY (CL) - very dark brown (10YR 2/2), moist, medium plasticity; 95% clay, 5% fine sand.	
5	0					ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
	0					SM/ML	SILTY SAND (SM) - dark brown (10YR 4/3), moist; 55% fine sand, 35% silt, 10% clay.	
	0		EB2-7.5				Color changes to olive gray (5Y 5/2), becomes saturated at 7.9 feet.	
1.8						CL	SANDY CLAY (CL) - olive gray (5Y 5/2), saturated, low plasticity; 70% clay, 30% fine sand.	
10						SC	CLAYEY SAND (SC) - olive gray (5Y 5/2), saturated; 60% fine sand, 40% clay.	
	9.8					CL	CALY (CL) - dark grayish brown (2.5Y 4/2) mottled gray (2.5Y 4/0), saturated, medium plasticity; 95% clay, 5% fine sand.	
							Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

# Gettler-Ryan, Inc.

# Log of Boring EB-3

PROJECT: *Tosco 76 Facility #3292*

LOCATION: *15008 East 14th Street, San Leandro, CA*

GR PROJECT NO.: *140071.02*

SURFACE ELEVATION: *ft. MSL*

DATE STARTED: *05/07/98*

WL (ft. bgs): *7.65* DATE: *05/07/98* TIME: *13:45*

DATE FINISHED: *05/07/98*




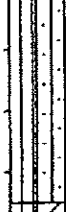


WL (ft. bgs): DATE: TIME:

DRILLING METHOD: *2 in. GeoProbe*

TOTAL DEPTH: *12.0 Feet*

DRILLING COMPANY: *Fisch Environmental*




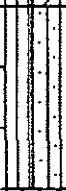

GEOLOGIST: *Barbara Sieminski*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	GRAVELLY CLAY (CL) - very dark grayish brown (10YR 3/2), moist, low plasticity; 50% clay, 40% well rounded fine gravel, 10% fine to coarse sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
						CL	CLAY (CL) - very dark brown (10YR 3/3), moist, medium plasticity; 95% clay, 5% fine sand.	
						ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
5	0		EB3-7			ML/SM	SANDY SILT (ML/SM) - light olive brown (2.5Y 5/4) mottled strong brown (7.5YR 4/6), moist; 45% silt, 45% fine to coarse sand, 10% clay.	
							∇ Becomes saturated at 7.65 feet.	
						ML-CL	CLAYEY SILT WITH SAND (ML-CL) - dark yellowish brown (10YR 4/3), saturated, low plasticity; 40% silt, 40% clay, 20% fine sand.	
10	0.3					CL	CLAY (CL) - dark gray (5Y 4/1), saturated, medium plasticity; 95% clay, 5% fine to coarse sand.	
							Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

# Gettler-Ryan, Inc.

# Log of Boring EB-4

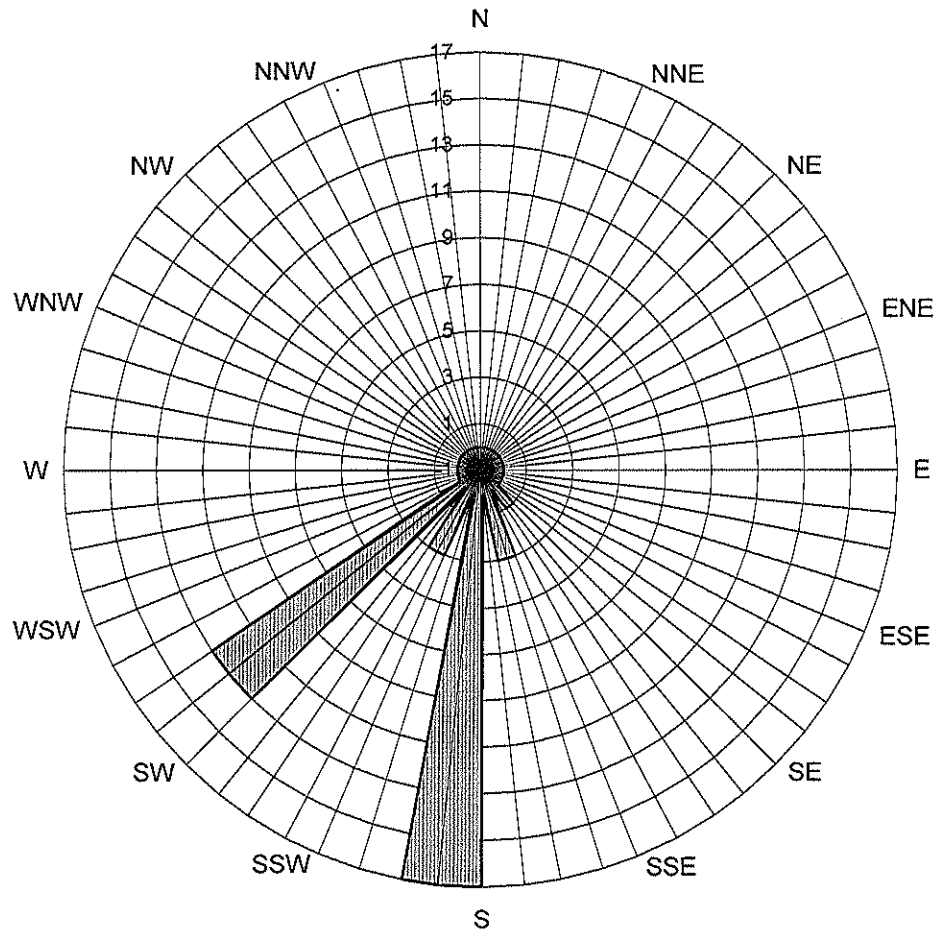
PROJECT: <i>Tosco 76 Facility #3292</i>	LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>
GR PROJECT NO.: <i>140071.02</i>	SURFACE ELEVATION: <i>ft. MSL</i>
DATE STARTED: <i>05/07/98</i>	WL (ft. bgs): <i>8.15</i> DATE: <i>05/07/98</i> TIME: <i>14:40</i>
DATE FINISHED: <i>05/07/98</i>	WL (ft. bgs):    DATE:    TIME:
DRILLING METHOD: <i>2 in. GeoProbe</i>	TOTAL DEPTH: <i>12.0 Feet</i>
DRILLING COMPANY: <i>Fisch Environmental</i>	GEOLOGIST: <i>Barbara Sieminski</i>

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	CLAY (CL) - very dark brown (10YR 2/2), damp, low plasticity; 70% clay, 20% silt, 10% fine sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
5	0		EB4-5.5			ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), damp, low plasticity; 50% silt, 40% clay, 10% fine sand.	
	0					ML/SM *	SANDY SILT (ML/SM) - dark brown (10YR 5/3), saturated, medium plasticity; 45% silt, 45% fine sand, 10% clay.	
10	0.8					CL	CLAY (CL) - dark grayish brown (2.5Y 4/2), saturated, medium plasticity; 90% clay, 10% fine sand.  Color changes to olive gray (5Y 5/2), sand decreases to 5% at 11 feet.	
15							Bottom of boring at 12 feet.	
20							(* = not applicable - boring advanced using direct-push technology)	

## **APPENDIX D**

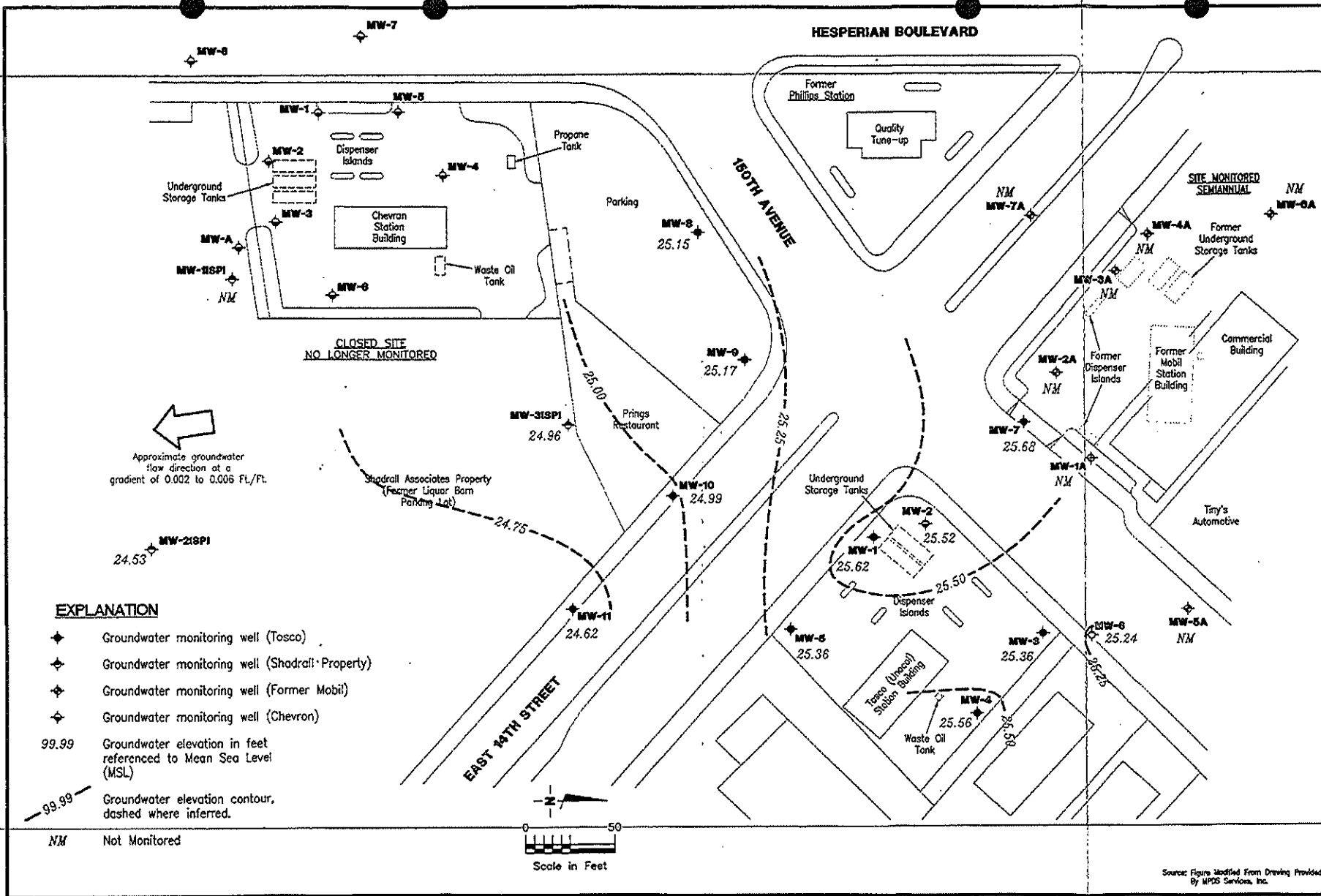
Groundwater Flow Rose Diagram and Historic Maps

**Groundwater Flow Direction Rose Diagram**  
**ConocoPhillips Site No. 3292**  
15008 E. 14th Stree, San Leandro, California



▣ Groundwater Flow Direction

Legend  
Concentric Circles represent  
Quarterly Monitoring Events  
Third Quarter 1998 through Second  
Quarter 2008  
37 Data Points Shown

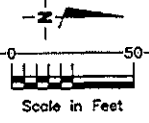


Approximate groundwater flow direction at a gradient of 0.002 to 0.006 FL/FT.

CLOSED SITE  
NO LONGER MONITORED

**EXPLANATION**

- ◆ Groundwater monitoring well (Tosco)
  - ◆ Groundwater monitoring well (Shadrall Property)
  - ◆ Groundwater monitoring well (Former Mobil)
  - ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referred to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- NM Not Monitored



PAUSE

POTENTIOMETRIC MAP  
Tosco (Unocal) Service Station No. 3292  
15008 East 14th Street  
San Leandro, California

**Gottler & Ryan Inc.**  
6717 Sierra Ct, Suite 1  
Dublin, CA 94568  
(925) 951-7555

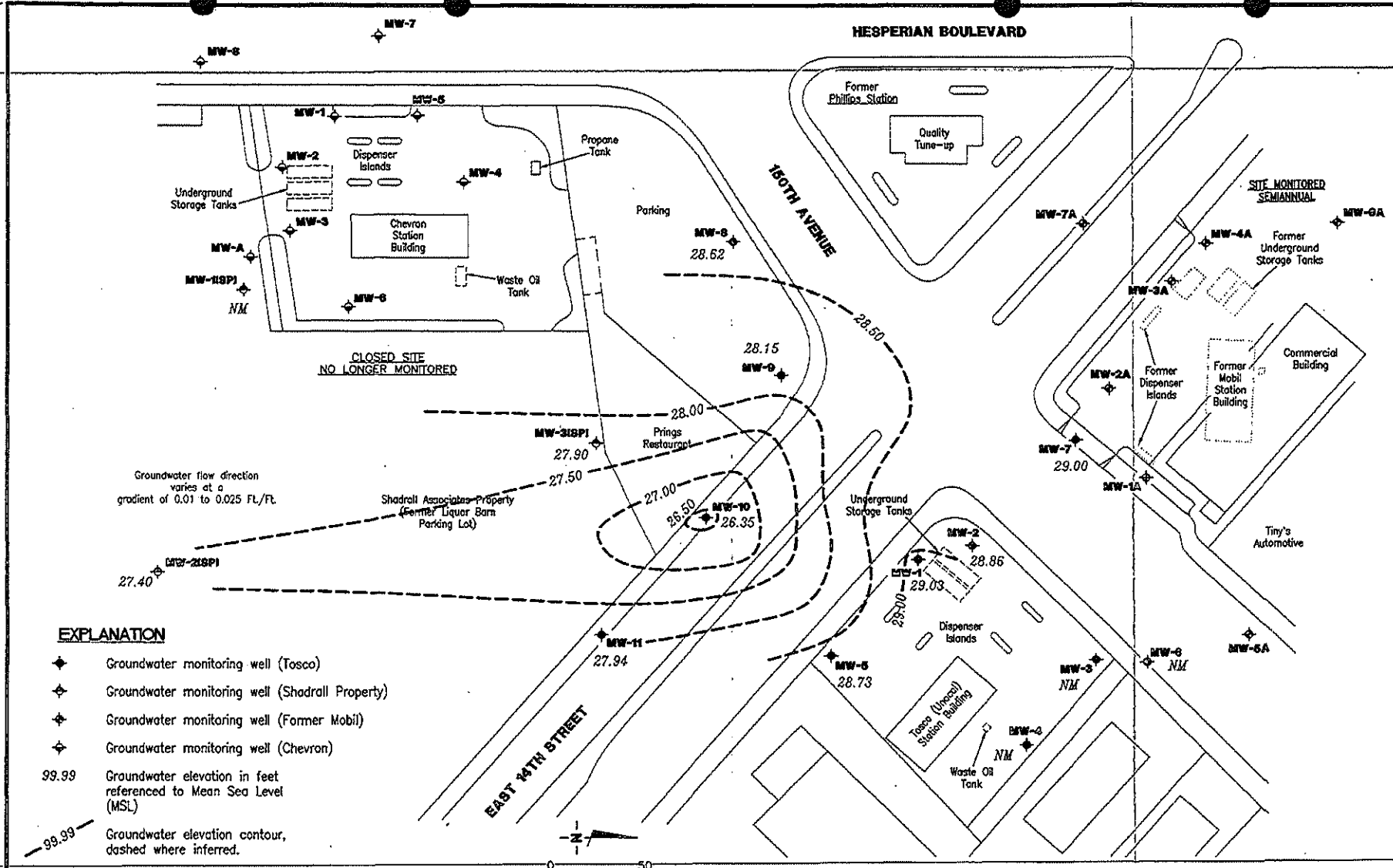
DATE REVISION DATE  
November 4, 1999

Source: Figure Modified From Drawing Provided By MPDS Services, Inc.



JOB NUMBER  
180105





**EXPLANATION**

- ◆ Groundwater monitoring well (Tosco)
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- - - 99.99 Groundwater elevation contour, dashed where inferred.
- NM Not Monitored

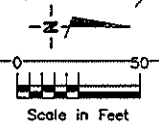


FIGURE 1

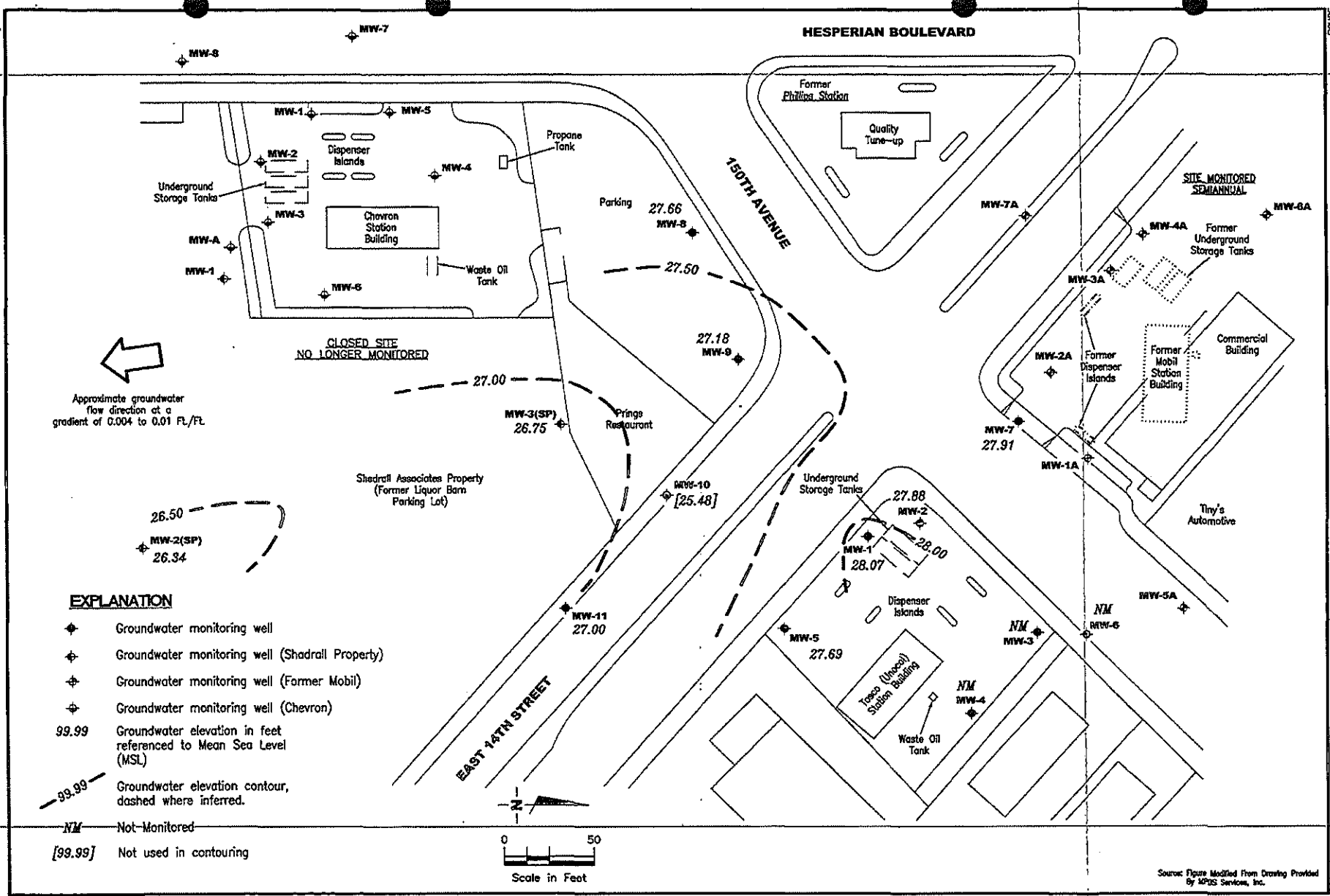
POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station No. 3292  
 15008 East 14th Street  
 San Leandro, California

**Gottler - Ryan Inc.**  
 8712 Sierra Ct. Suite J (925) 551-7555  
 Dublin, CA 94568

REVIEWED BY  
 JOB NUMBER 180105

DATE February 29, 2000  
 REVISED DATE

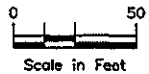
Source: Figure Modified From Drawing Provided By MPDS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.004 to 0.01 FL/FL

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- NM Not Monitored
- [99.99] Not used in contouring



Source: Figure Modified From Drawing Provided by M2S Services, Inc.

FIGURE 1

DATE: May 8, 2000

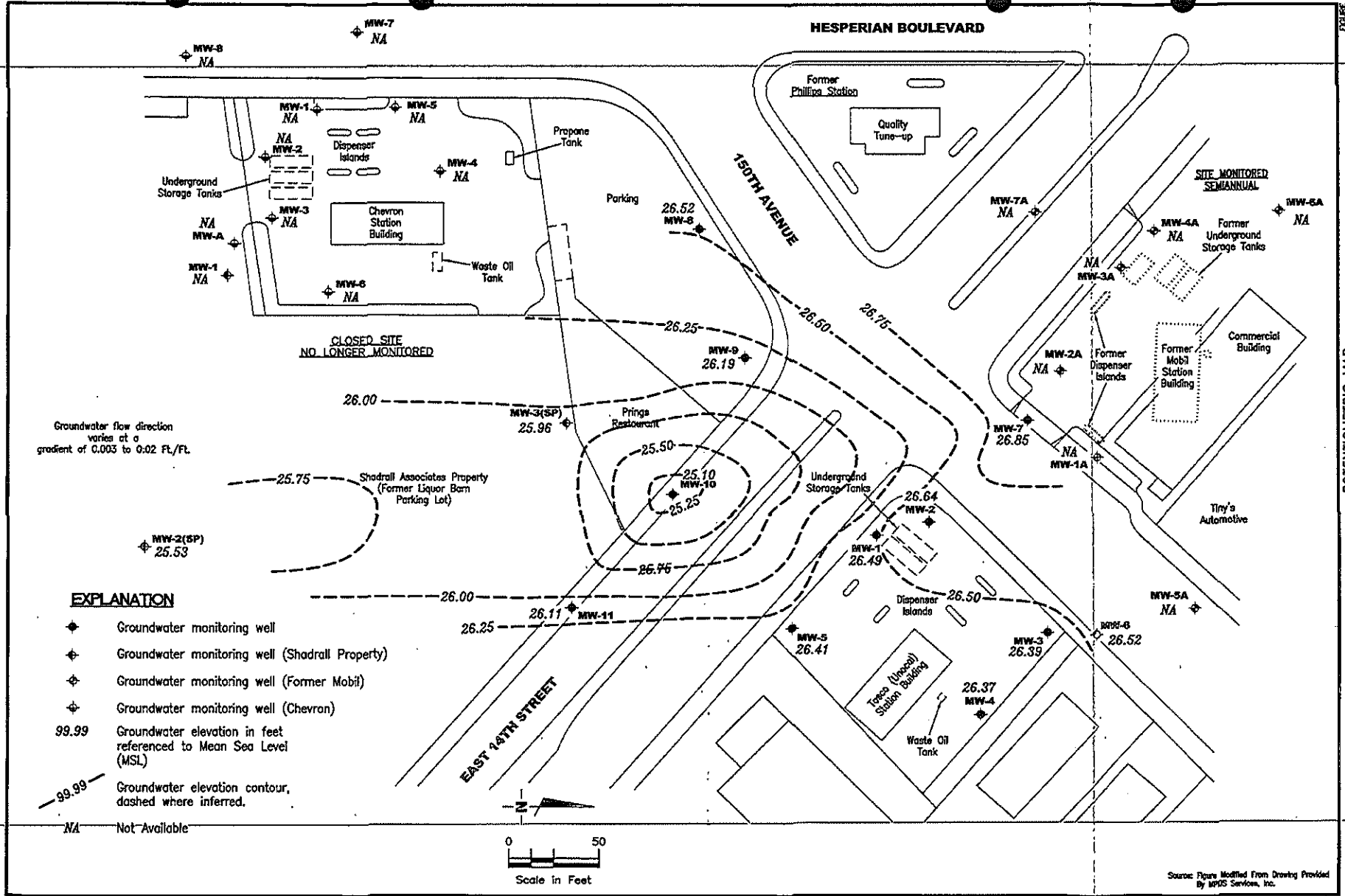
REVIEWED BY: [Signature]

JOB NUMBER: 180105

FILE NAME: P:\web\Tosco\180105\180105.dwg | Layout | Job: 180105

Gertler - Ryan Inc.  
 8747 Sierra Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California



Groundwater flow direction varies at a gradient of 0.003 to 0.02 Ft./Ft.

CLOSED SITE  
NO LONGER MONITORED

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- NA Not Available

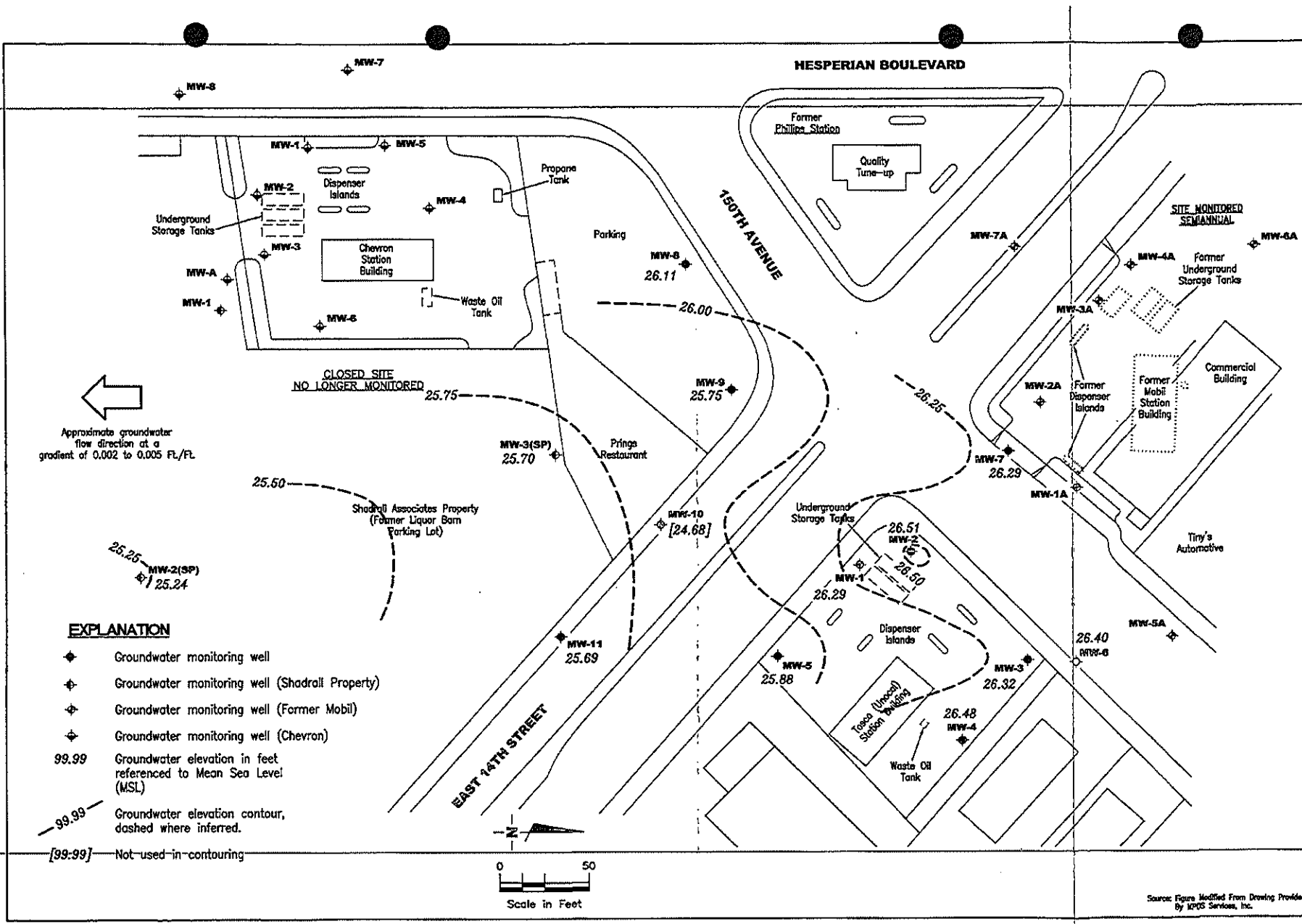


Source: Data Modified From Drawing Provided By MGS Services, Inc.

**POTENTIOMETRIC MAP**  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**Gettler - Ryan Inc.**  
 8743 Santa Cl. Suite J  
 Dublin, CA 94568  
 (925) 951-7655

DATE August 8, 2000  
 REVISIONS BY  
 JOB NUMBER 180105  
 FILE NAME P:\MGS\15008\15008-00-3292.DWG | Layout (R) P013



Approximate groundwater flow direction at a gradient of 0.002 to 0.005 Ft./Ft.

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referred to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- [99.99] Not used in contouring

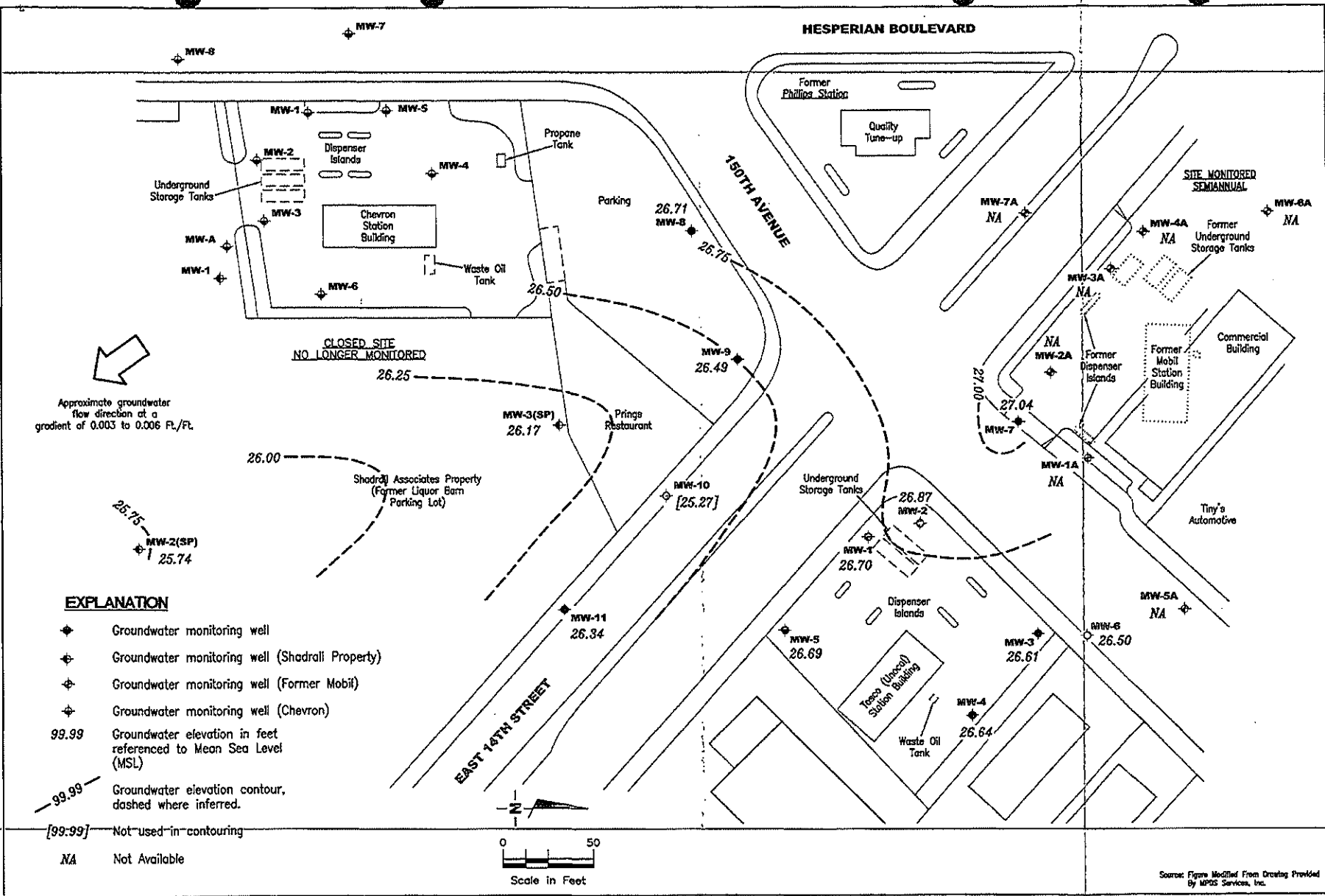
POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**Gottler - Ryan Inc.**  
 8717 Sierra Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

JOB NUMBER  
 180105  
 FILE NAME: P:\Unocal\Tosco\3292\3292.dwg | Layout: 606.rvt

DATE November 6, 2000  
 REVISION DATE

Source: Figure Modified From Drawing Provided By KPOS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.003 to 0.006 Ft./Ft.

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referred to Mean Sea Level (MSL)
- 99.99- Groundwater elevation contour, dashed where inferred.
- [99:99] Not used in contouring
- NA Not Available



FIGURE

1

POTENTIOMETRIC MAP  
Tosco (Unocal) Service Station #3292

15008 East 14th Street  
San Leandro, California

DATE February 7, 2001  
REVISED DATE

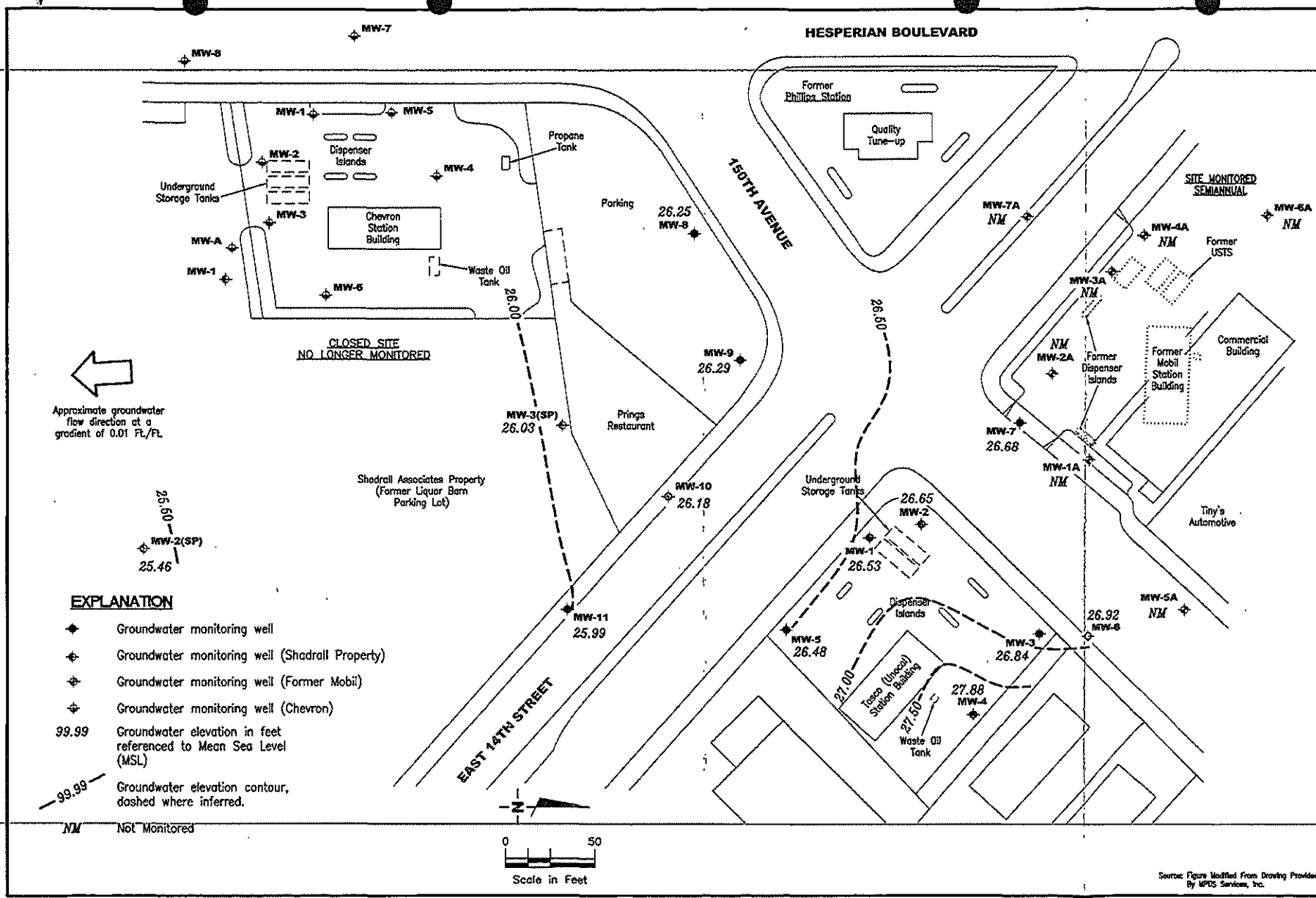
**GETTLER - RYAN INC.**  
6717 Shreve Ct., Suite J  
Dubai, CA 94568  
(925) 851-7555

REVISIONS BY



180105  
8/13/01

Source: Figure Modified From Drawing Provided By MPOS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.01 Ft./Ft.

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referred to Mean Sea Level (MSL)
- 99.99 Groundwater elevation contour, dashed where inferred.
- NM Not Monitored

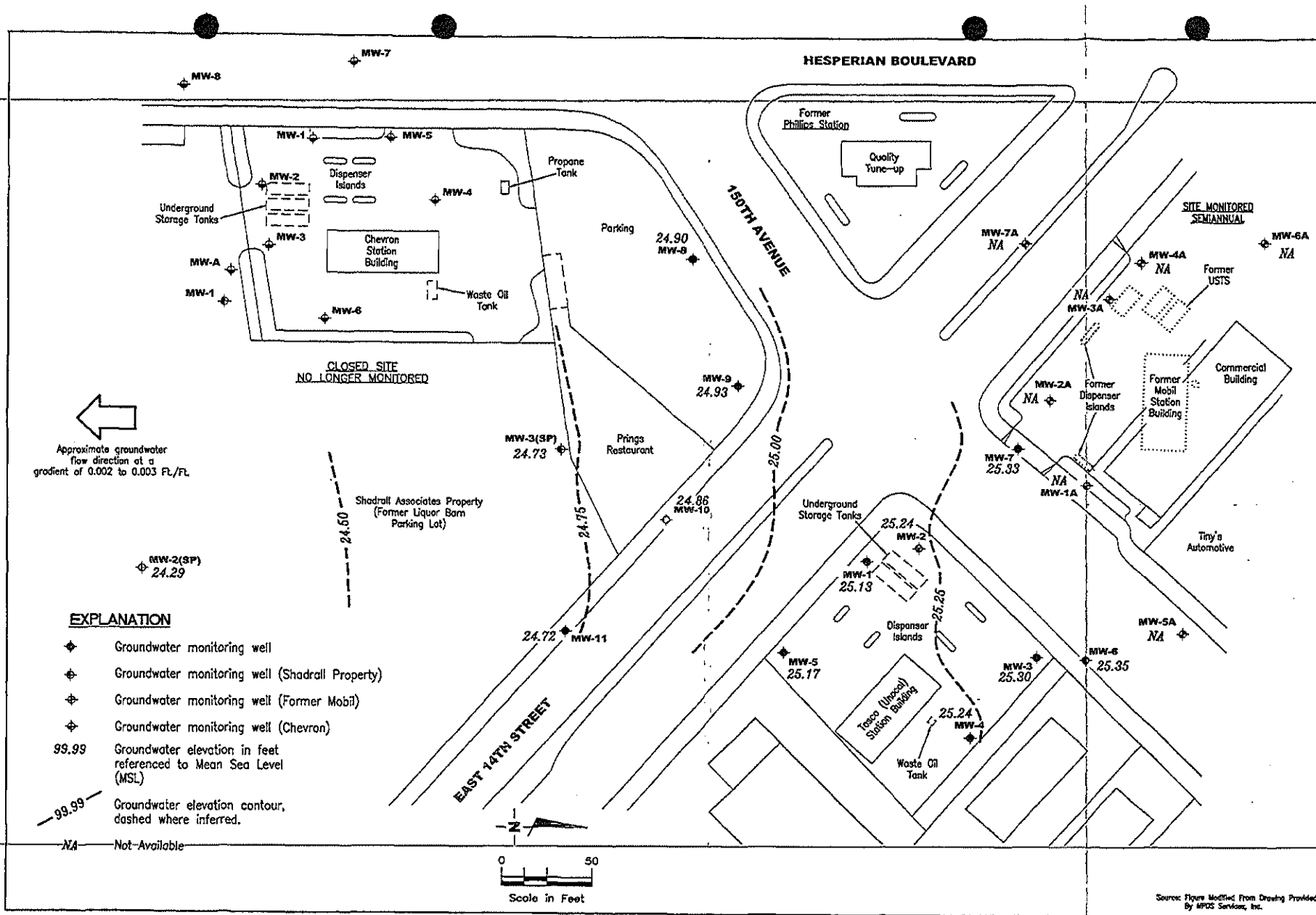


FIGURE 1

POTENTIOMETRIC MAP  
 Tesco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

GETTLER - RYAN INC.  
 5747 Serra Ct., Suite J  
 Dublin, CA 94568  
 (925) 951-7555

JOB NUMBER 180105  
 DATE May 9, 2001  
 REVIEWED BY  
 PREPARED BY [unreadable]  
 SOURCE: Figure Modified From Drawing Provided By MPDS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.002 to 0.003 FL/FL.

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- NA Not Available



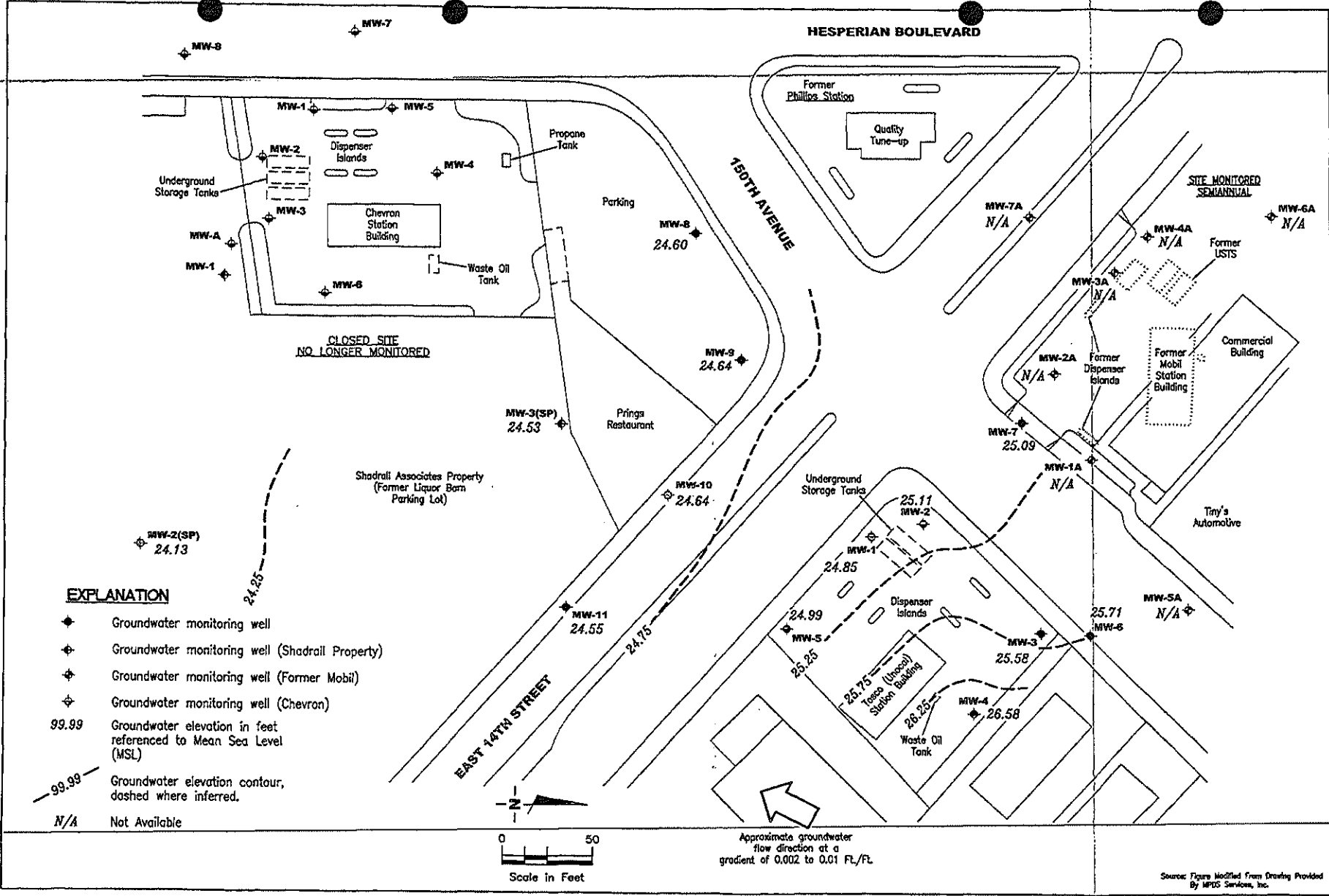
FIGURE 1

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 1747 Sierra Ct., Suite J  
 Walnut, CA 94696  
 (925) 951-7555

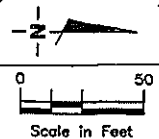
JOB NUMBER 180105  
 DATE August 24, 2001  
 REVISIONS DATE

Source: Figure Modified From Drawing Provided By MPCS Services, Inc.



**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrail Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 - Groundwater elevation contour, dashed where inferred.
- N/A Not Available



Approximate groundwater flow direction at a gradient of 0.002 to 0.01 Ft./Ft.

Source: Figure Modified from Drawing Provided By MPDS Services, Inc.

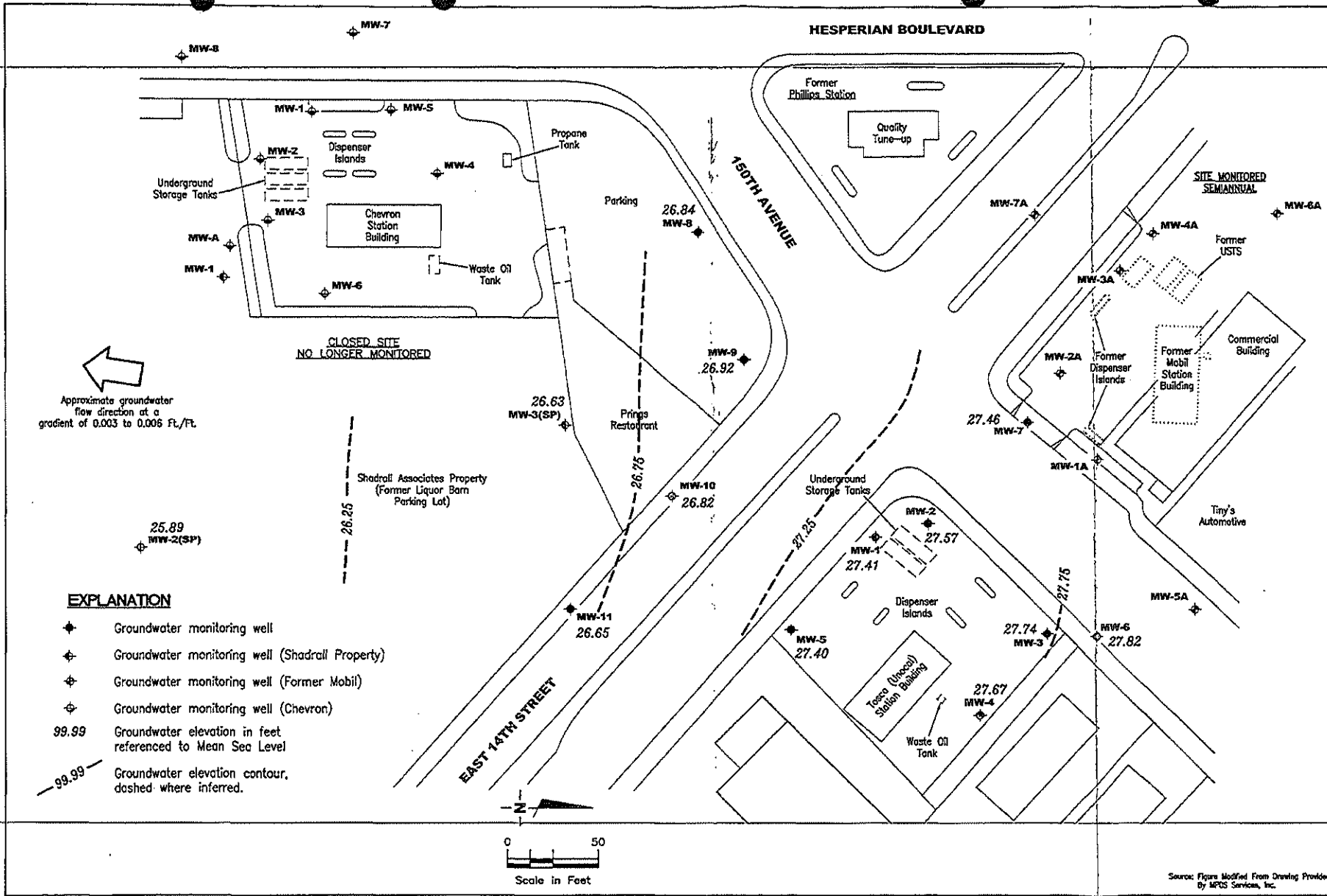
FIGURE 1

**POTENTIOMETRIC MAP**  
 Tosco (Unocal) Service Station #3292  
 1500B East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 6717 Santa Ct., Suite 1  
 Dublin, CA 94568  
 (925) 551-7555

JOB NUMBER: 180105  
 FILE NAME: P:\180105\180105.dwg  
 REVIEWED BY: [Signature]  
 DATE: November 16, 2001  
 REVISED DATE: [Blank]





**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrill Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)

- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - - - Groundwater elevation contour, dashed where inferred.

FIGURE 1

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

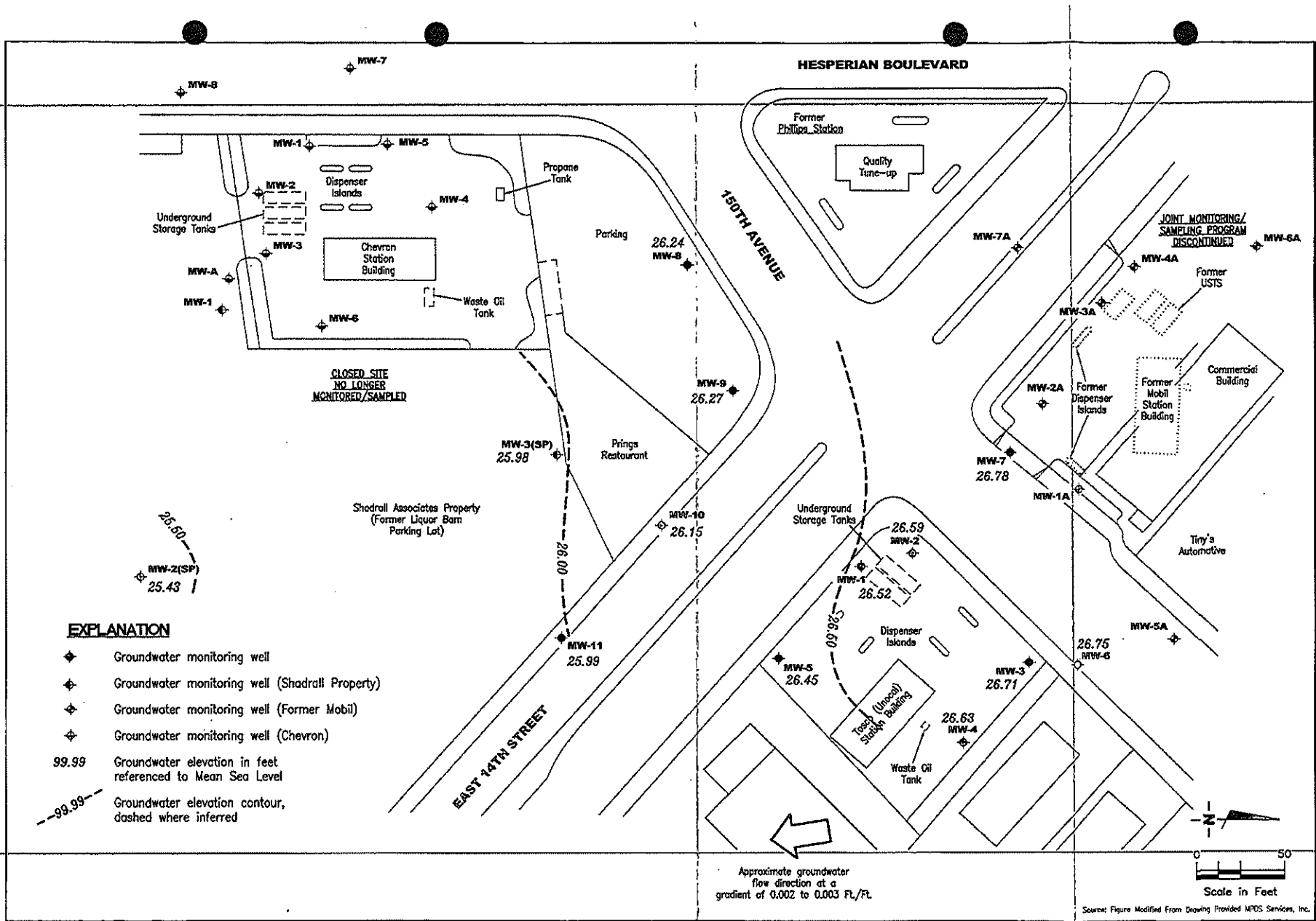
DATE February 21, 2002  
 REVISION DATE

**GETTLER - RYAN INC.**  
 5717 Santa Clara Street  
 Dublin, CA 94568  
 (925) 551-7555

JOB NUMBER 180105  
 REVIEWED BY

Source: Figures Modified From Drawing Provided By MFC Services, Inc.

FILE NAME: P:\Users\180105\180105\180105.dwg | Layout: 180105.rvt



**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - 99.99 - - - Groundwater elevation contour, dashed where inferred

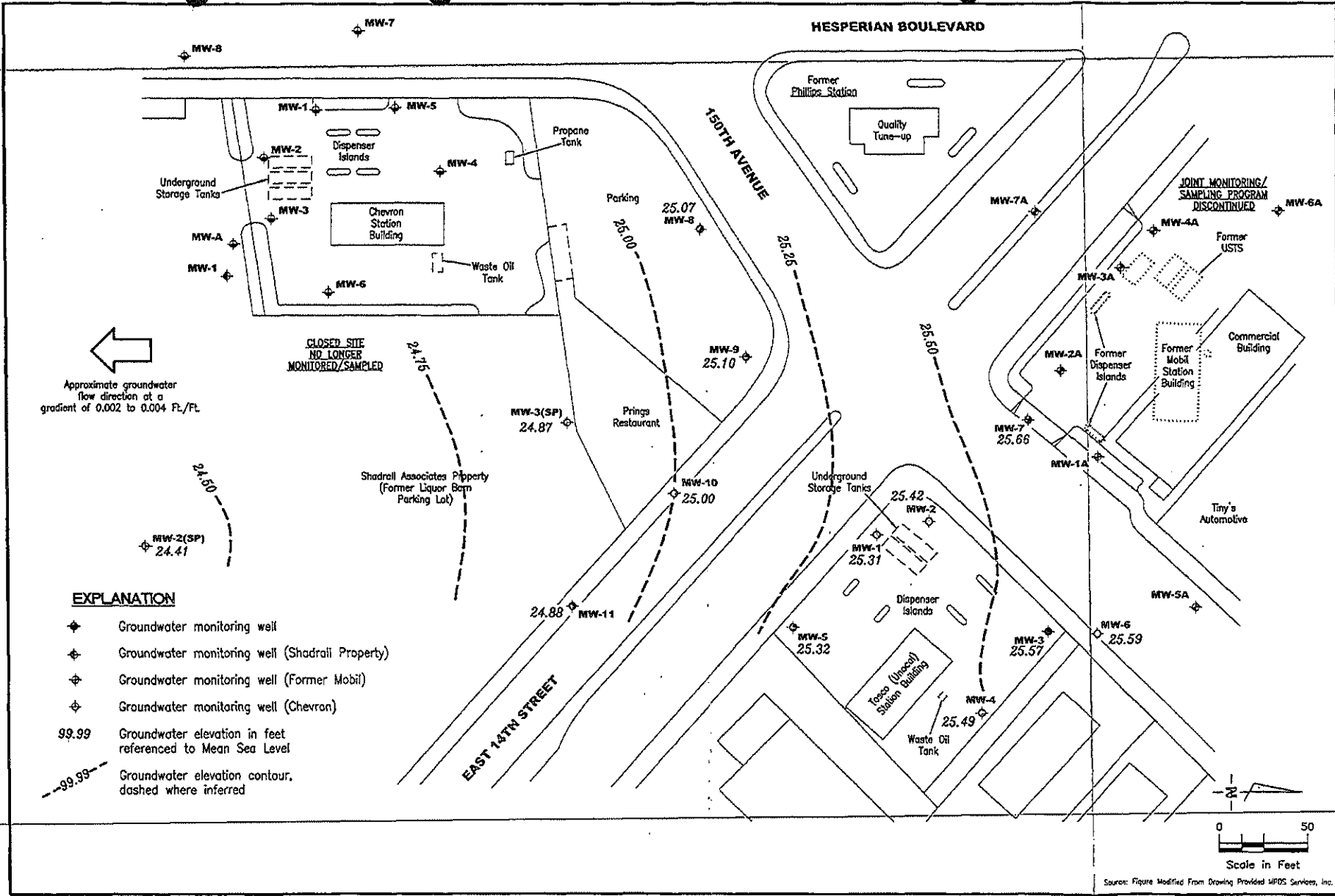
FIGURE 1

**POTENTIOMETRIC MAP**  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 6777 Serra Ct, Suite J  
 Dublin, CA 94568 (925) 851-7555

DATE: May 10, 2002  
 REVISIONS: NONE  
 JOB NUMBER: 180105  
 FILE NAME: P:\Projects\180105\180105.dwg | Layer: 10x Plot

Source: Figure Modified From Drawing Provided MPOS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.002 to 0.004 Ft./Ft.

CLOSED SITE NO LONGER MONITORED/SAMPLED

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrail Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - 99.99 - - - Groundwater elevation contour, dashed where inferred

FIGURE 1

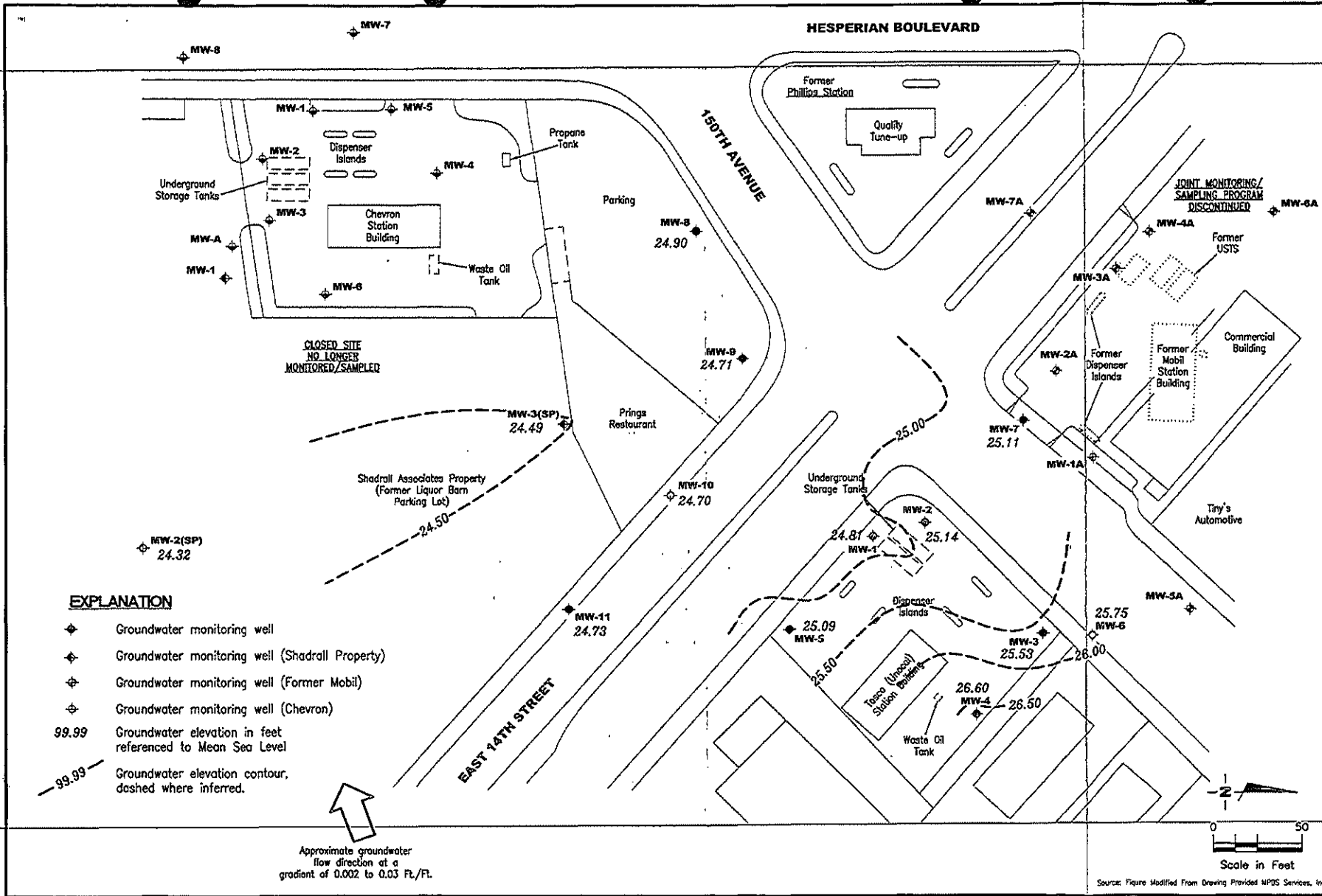
POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #5292  
 1500B East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 8717 Shore Ct., Suite J  
 Dublin, CA 94568  
 (925) 551-7555

DATE August 26, 2002  
 REVISION DATE

REVIEWED BY  
 JOB NUMBER 180105  
 FILE NAME: P:\RR\180105-180105.dwg | Layout: 180105.dwg

Source: Figure Modified From Drawing Provided MPOS Services, Inc.



**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- 99.99 - Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.002 to 0.03 Ft./Ft.

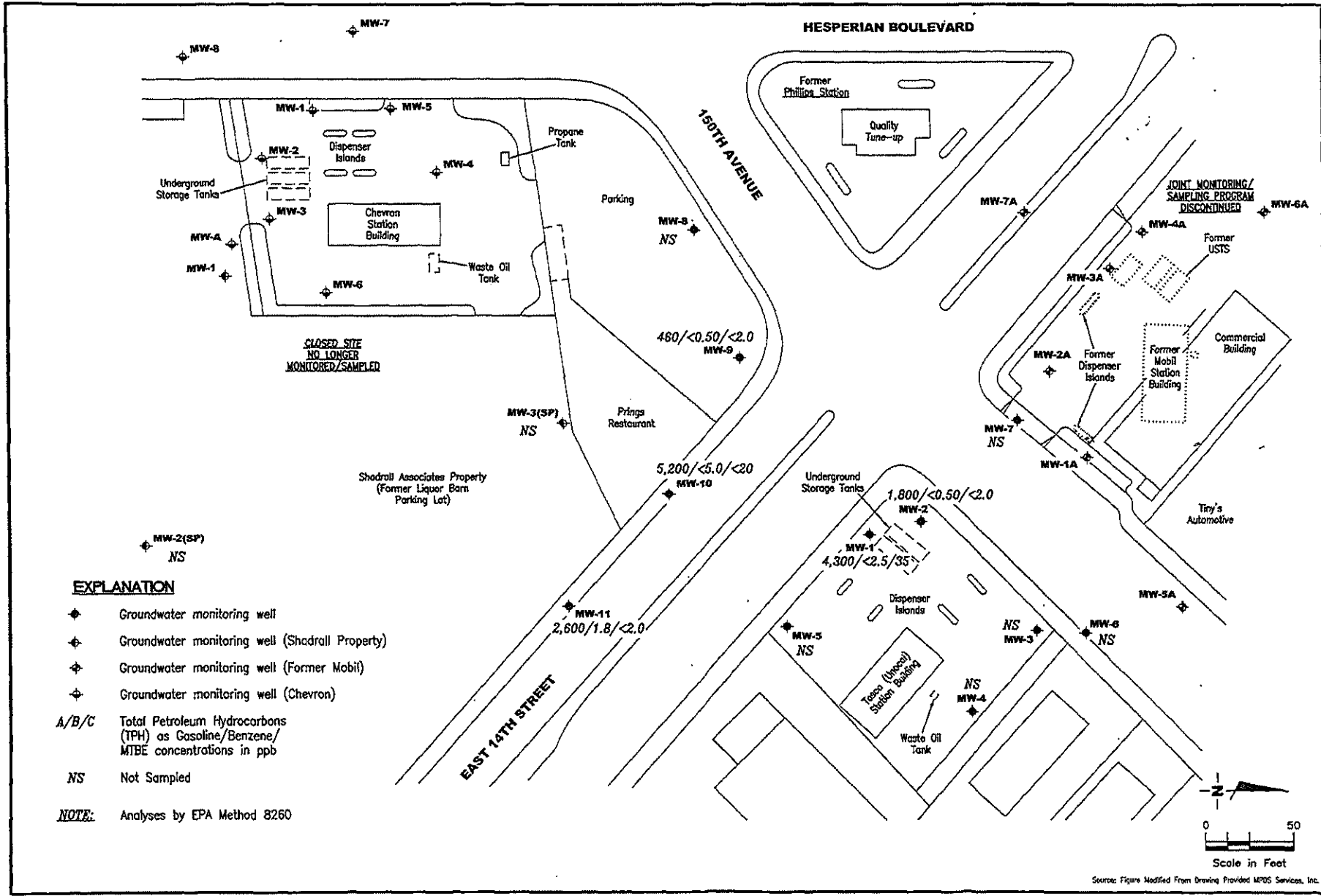
FIGURE 1

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 8747 Sorensen Circle, Suite 1  
 Dublin, CA 94568 (925) 551-7555

REVIEWED BY: 180105  
 DATE: November 7, 2002  
 REVISED DATE:

Source: Figure Modified From Drawing Provided MPDS Services, Inc.



FIGURE

2

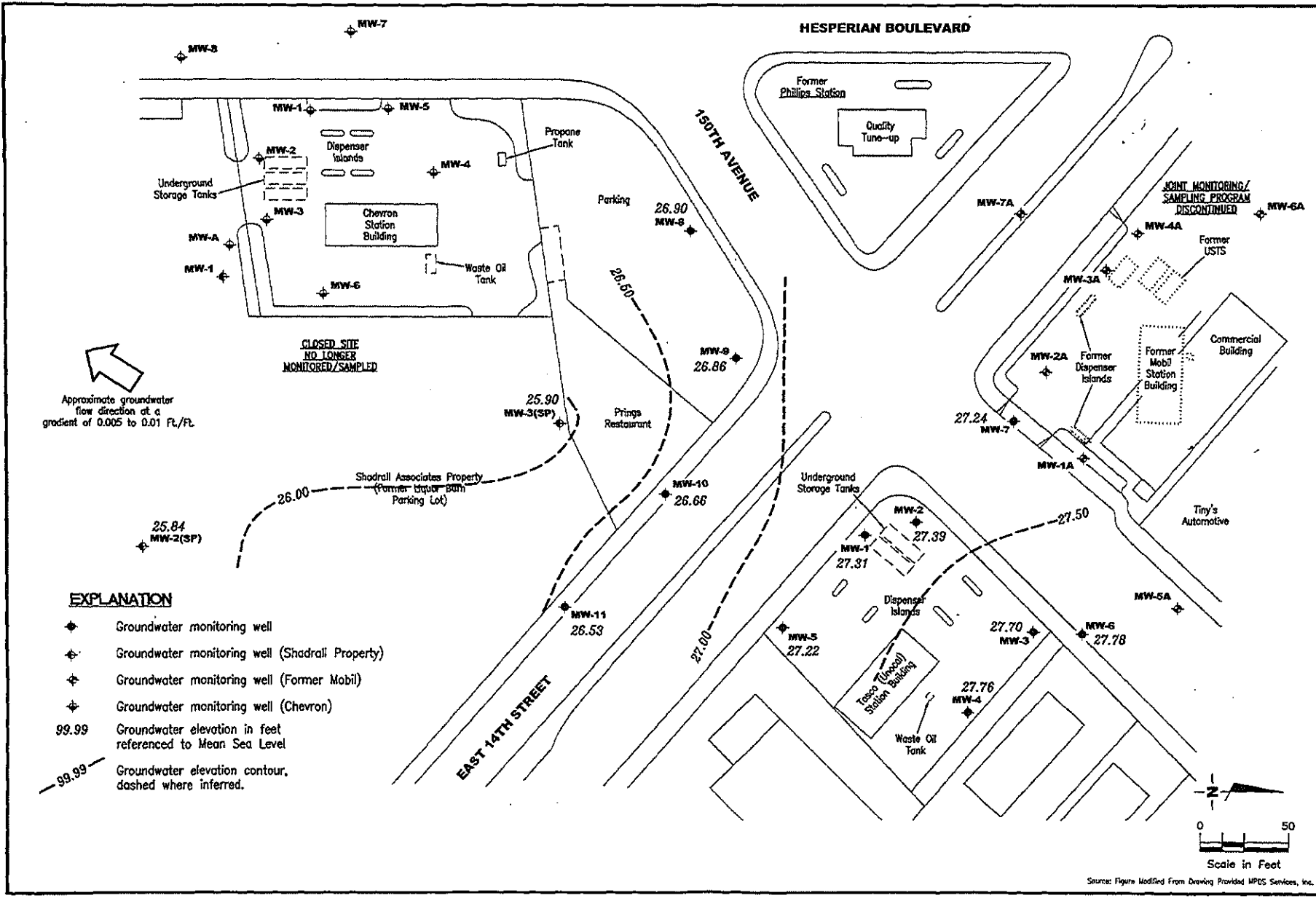
**CONCENTRATION MAP**  
 Tosco (Unocal) Service Station #3292  
 1500B East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 8717 Santa Ct. Suite J  
 Dublin, CA 94568  
 (925) 551-7555

DATE: February 14, 2003  
 REVISED DATE:

REVIEWED BY:  
 JOB NUMBER: 180105  
 FILE NAME: P:\WORK\155200\_3292\03-1012.DWG | 1500B.03A.dwg

Source: Figure Modified From Drawing Provided MPOS Services, Inc.



Approximate groundwater flow direction at a gradient of 0.005 to 0.01 FL/FL.

**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrali Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referred to Mean Sea Level
- 99.99 - Groundwater elevation contour, dashed where inferred.

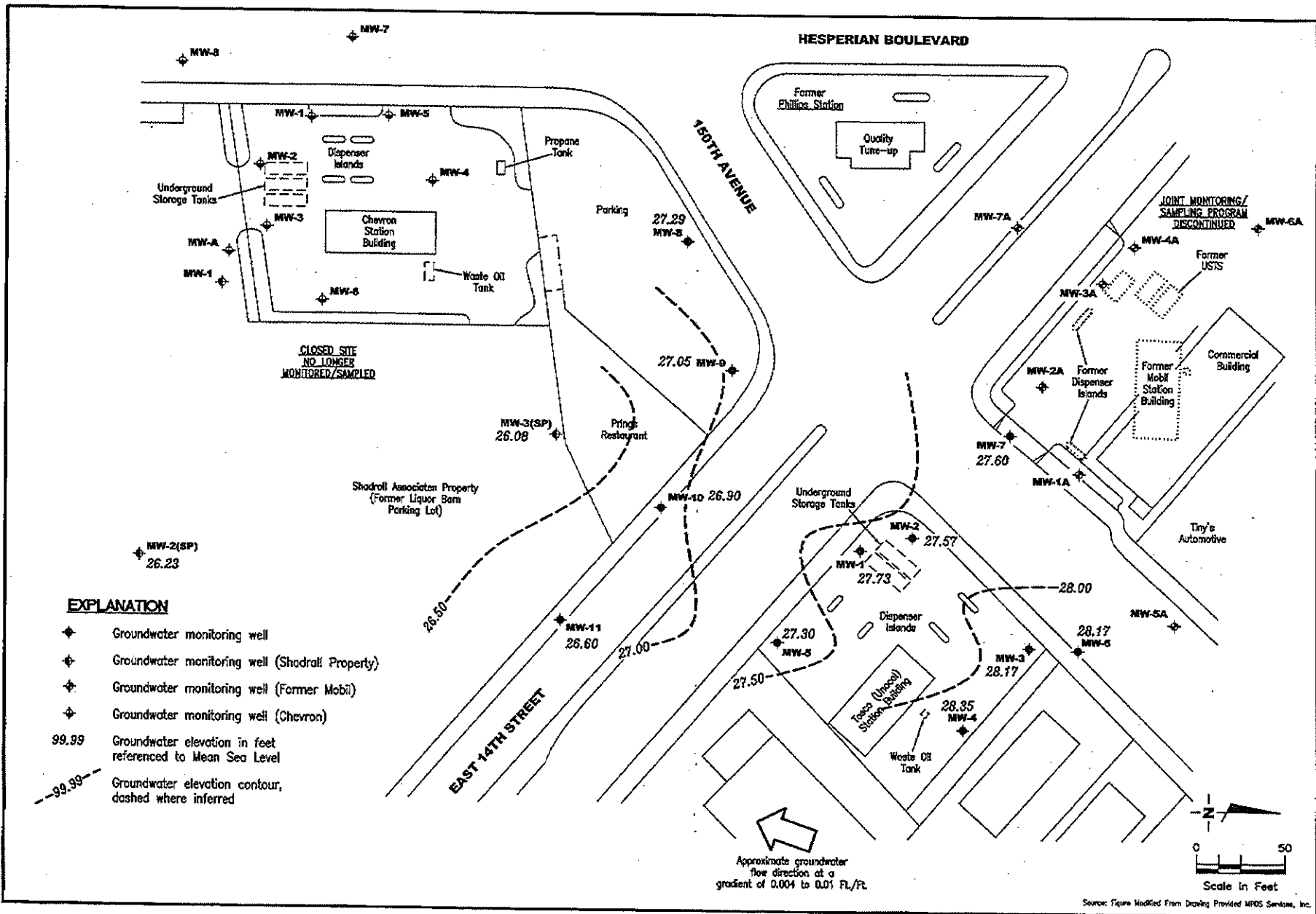
FIGURE 1

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 8747 Sapiro Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

REVISIONS BY: FEBRUARY 14, 2003  
 DUE DATE: FEBRUARY 14, 2003  
 REVISED DATE: FEBRUARY 14, 2003

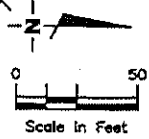
Source: Figure Modified From Drawing Provided MPDS Services, Inc.



**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shodrali Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - 39.99 - - - Groundwater elevation contour, dashed where inferred

Approximate groundwater flow direction at a gradient of 0.004 to 0.01 FL/ft.



Source: Figure Modified From Drawing Provided MPDS Services, Inc.

FIGURE

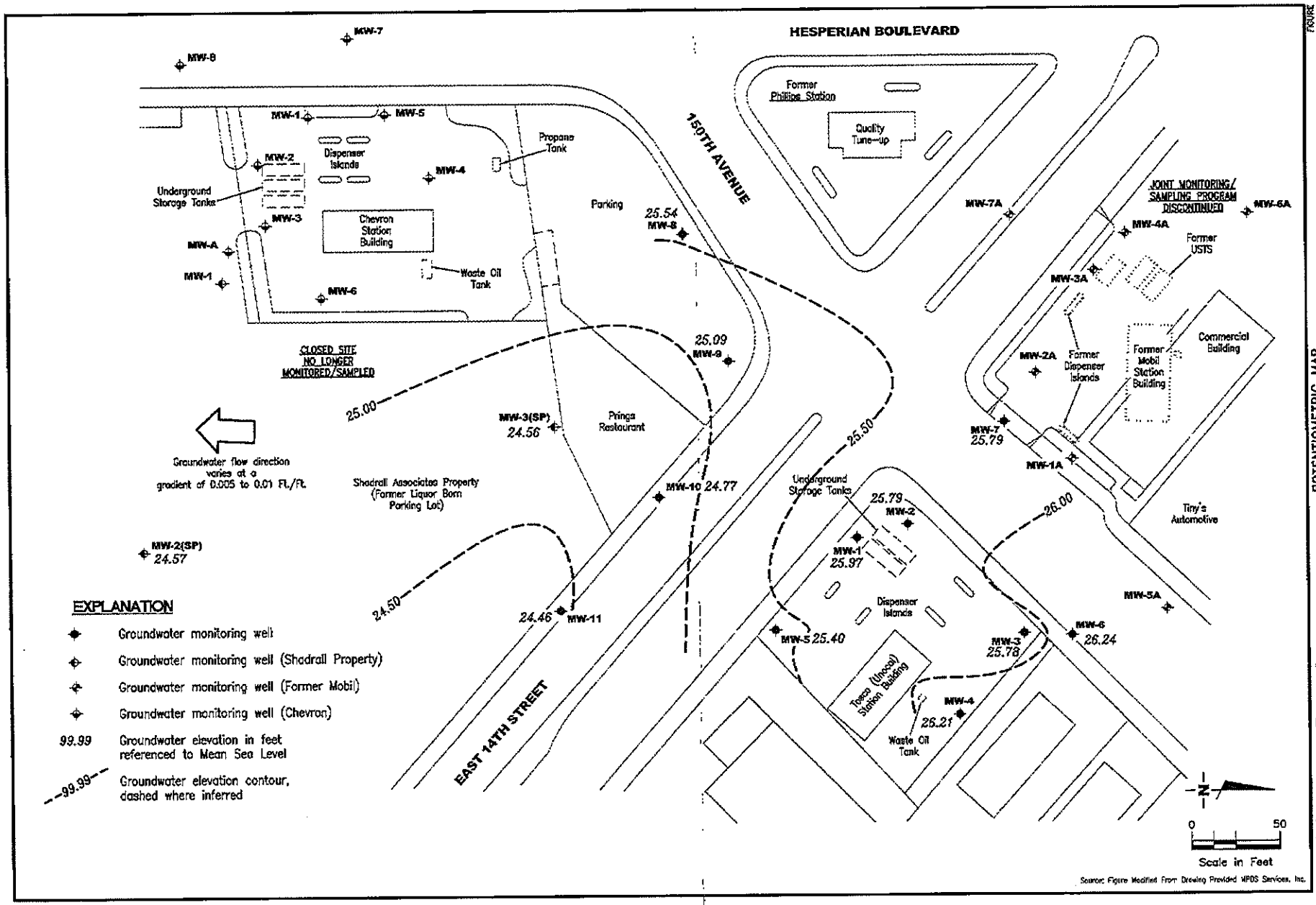
1

POTENTIOMETRIC MAP  
 Tosco (Unocal) Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**GETTLER - RYAN INC.**  
 6747 Sierra Ct., Suite J  
 Dublin, CA 94568  
 (925) 931-7335

DATE: May 12, 2003  
 REVISED DATE:

JOB NUMBER: 180105  
 FILE NAME: P:\DRAWING\000000\PLPS-0885\987\03-987.dwg | Lyrpad, Text Plot



**EXPLANATION**

- ◆ Groundwater monitoring well
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - 99.99 Groundwater elevation contour, dashed where inferred

Groundwater flow direction varies at a gradient of 0.005 to 0.01 FL/FL

CLOSED SITE  
NO LONGER  
MONITORED/SAMPLED

Shadrall Associates Property  
(Former Liquor Barn  
Parking Lot)

Source: Figure Modified From Drawing Provided: MPDS Services, Inc.

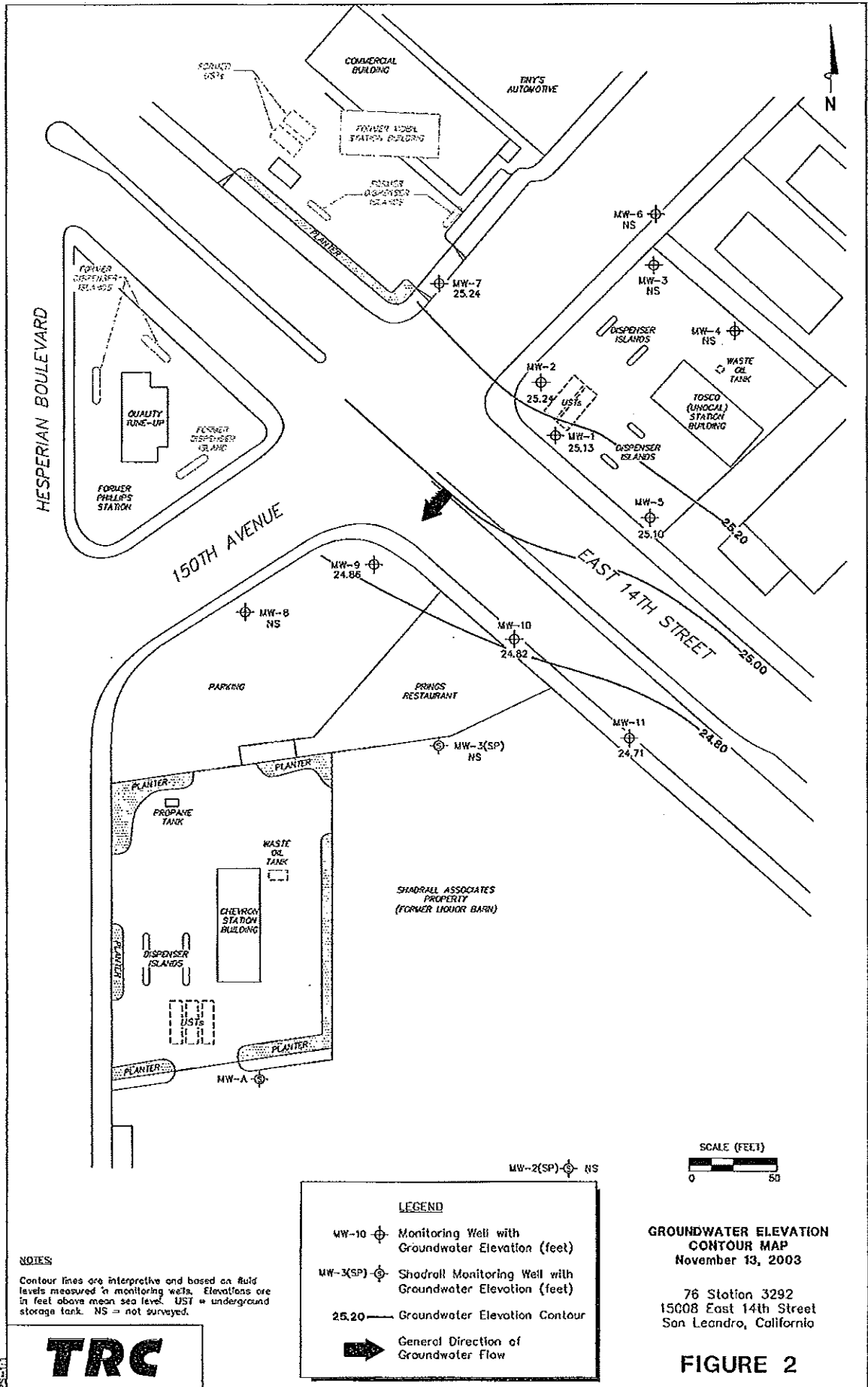
POTENTIOMETRIC MAP

Tosco (Unocal) Service Station #3292  
15008 East 14th Street  
San Leandro, California

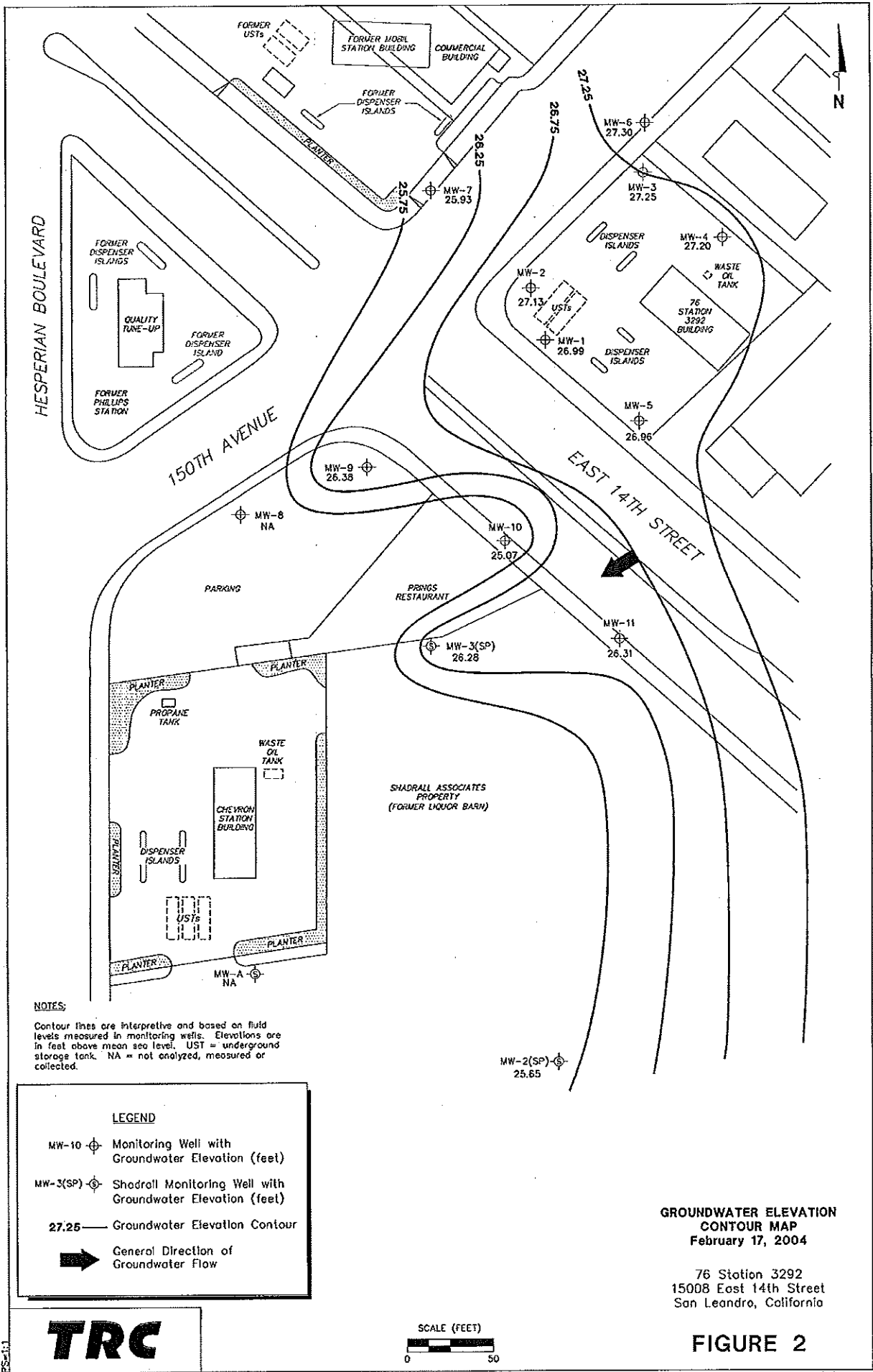
**GETTLER · RYAN INC.**  
6717 Sierra Ct., Suite J  
Dublin, CA 94568 (925) 511-7855

DATE August 11, 2003  
REVISED DATE  
JOB NUMBER 180105  
FILE NAME P:\ADMIN\GARY\2003\180105\180105.dwg





**TRC**



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank. NA = not analyzed, measured or collected.

**LEGEND**

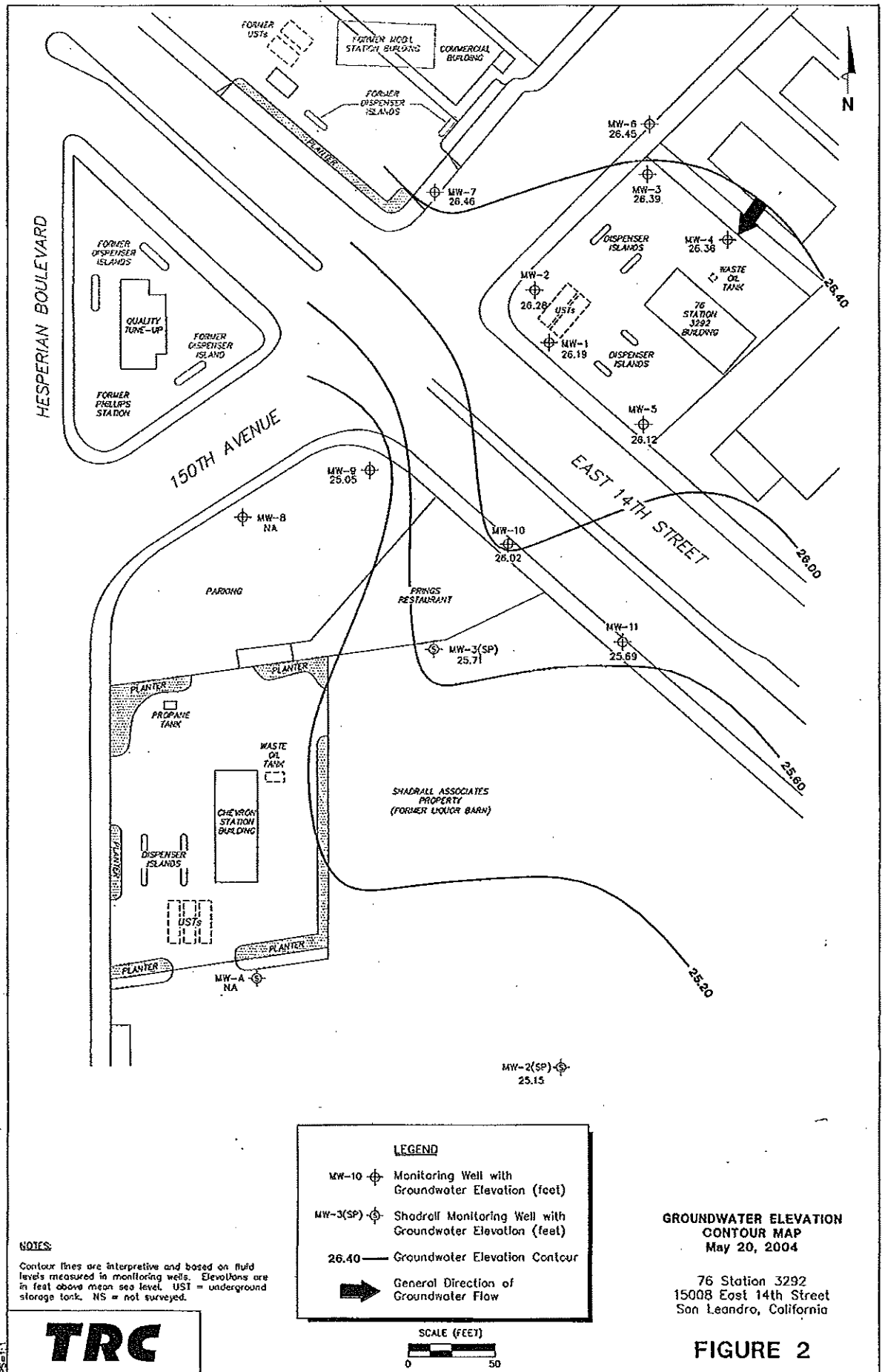
- MW-10 Monitoring Well with Groundwater Elevation (feet)
- MW-3(SP) Shodroll Monitoring Well with Groundwater Elevation (feet)
- 27.25 Groundwater Elevation Contour
- General Direction of Groundwater Flow

**GROUNDWATER ELEVATION CONTOUR MAP**  
February 17, 2004

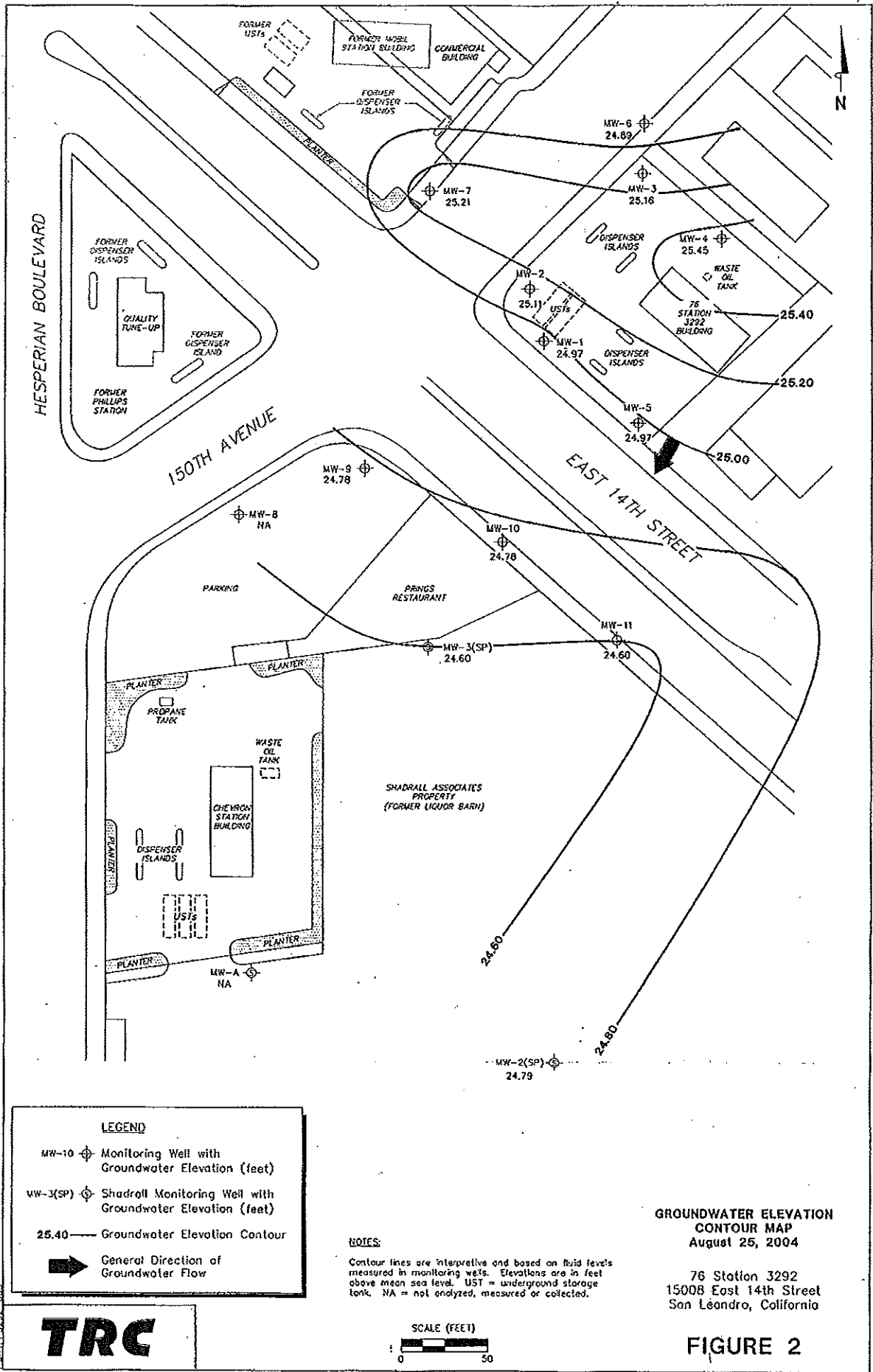
76 Station 3292  
15008 East 14th Street  
San Leandro, California



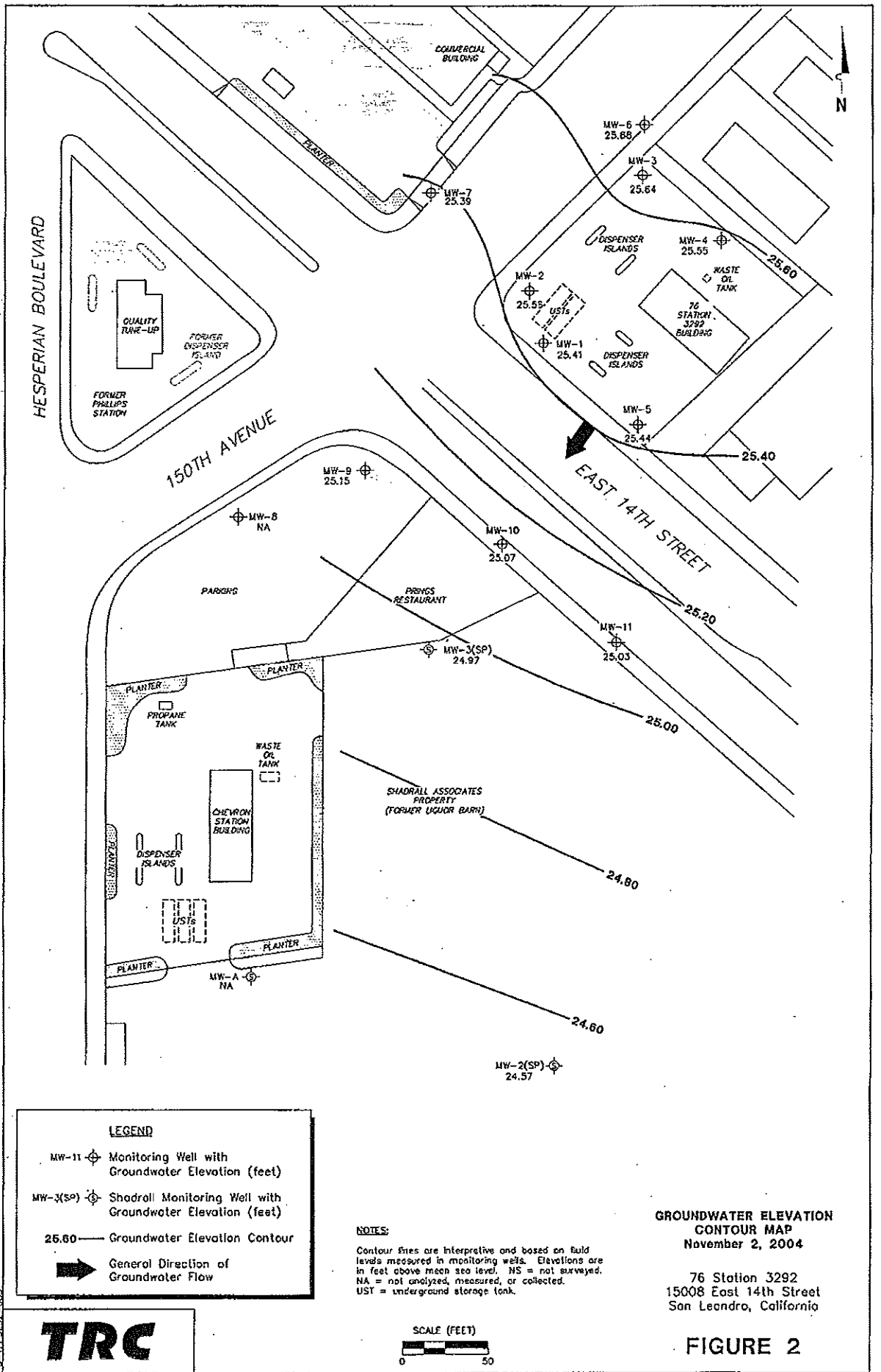
**FIGURE 2**

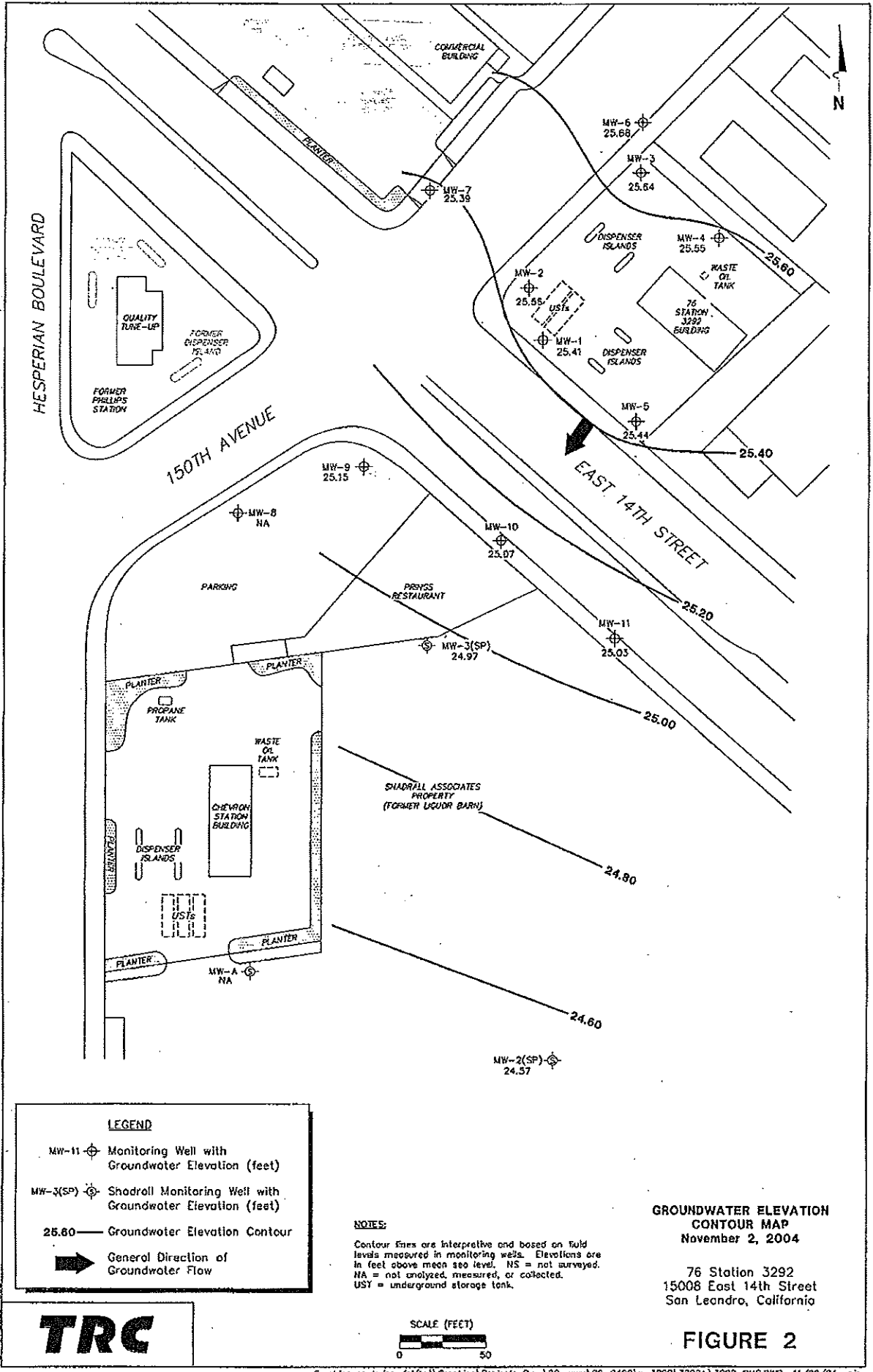


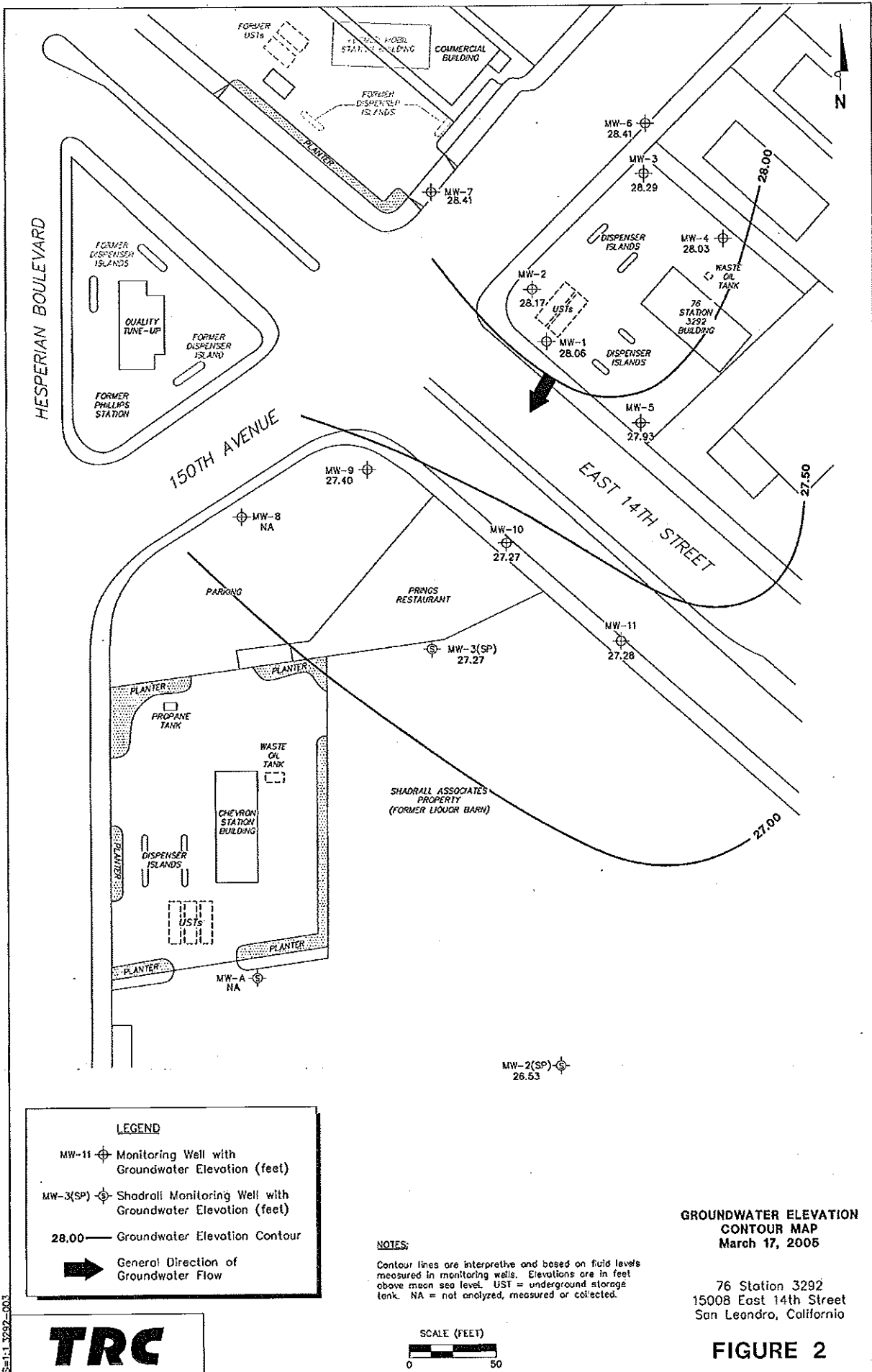
**TRC**



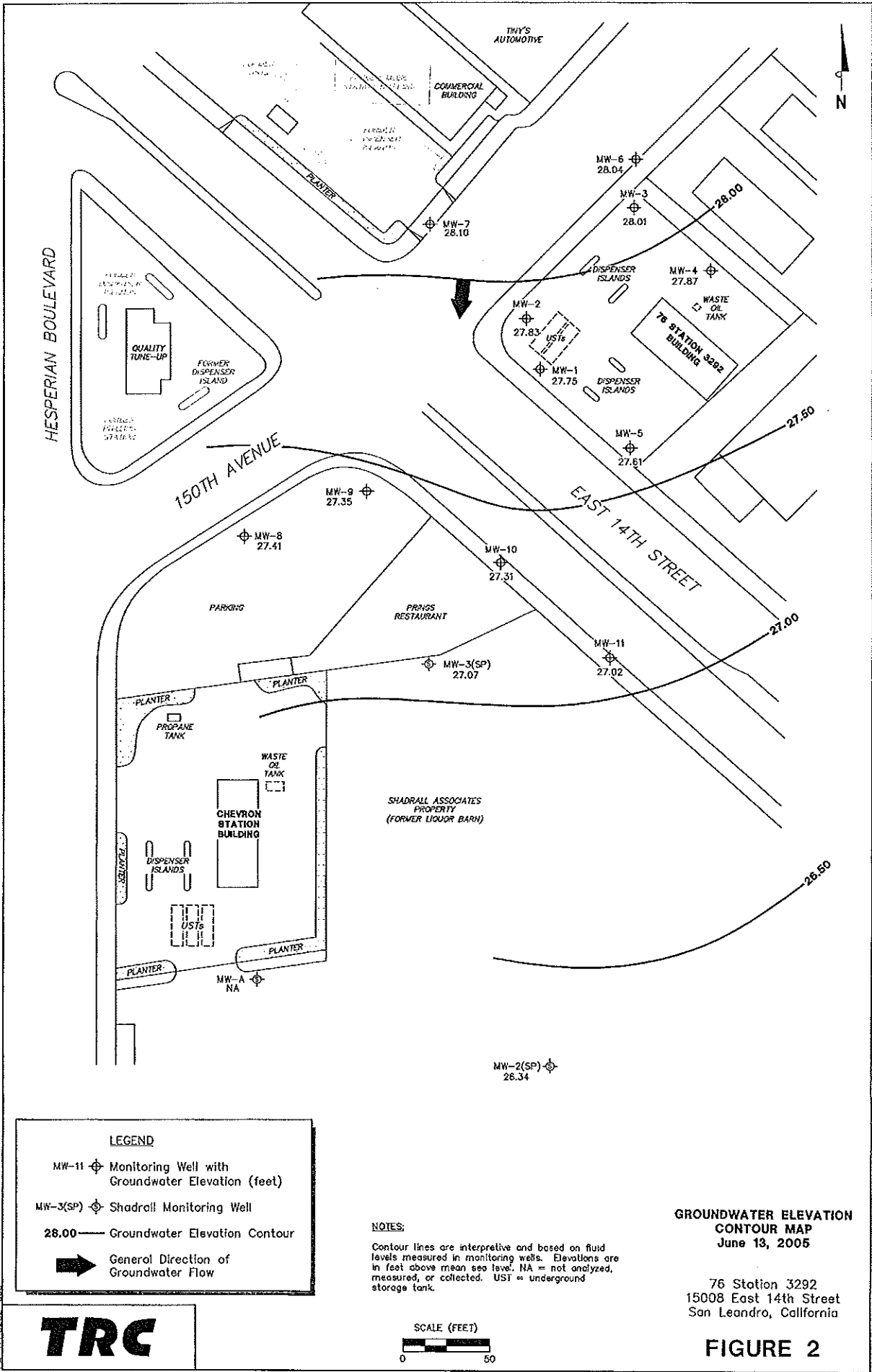
PS-111-3292-003







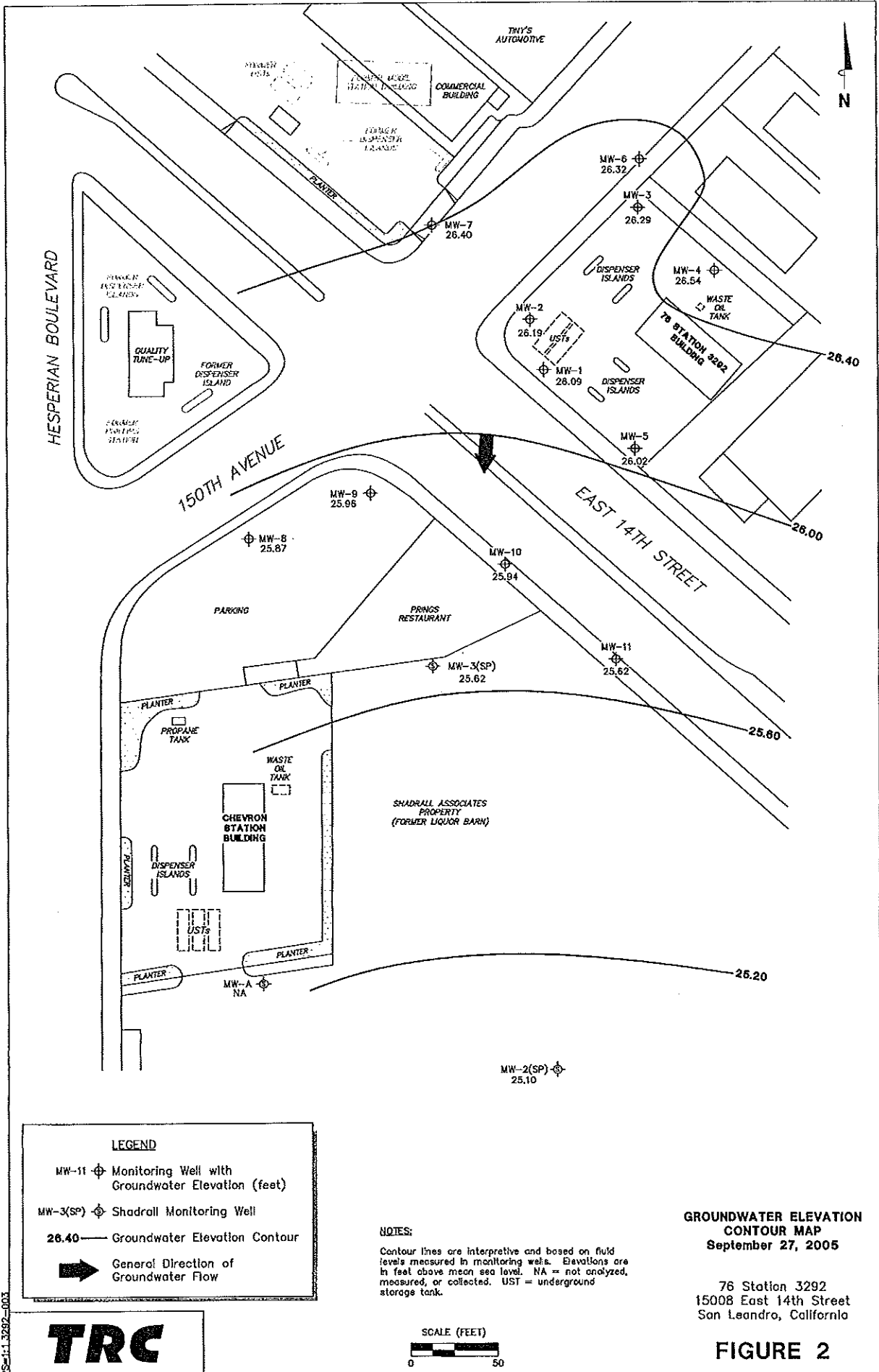
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PS-11-3292-003

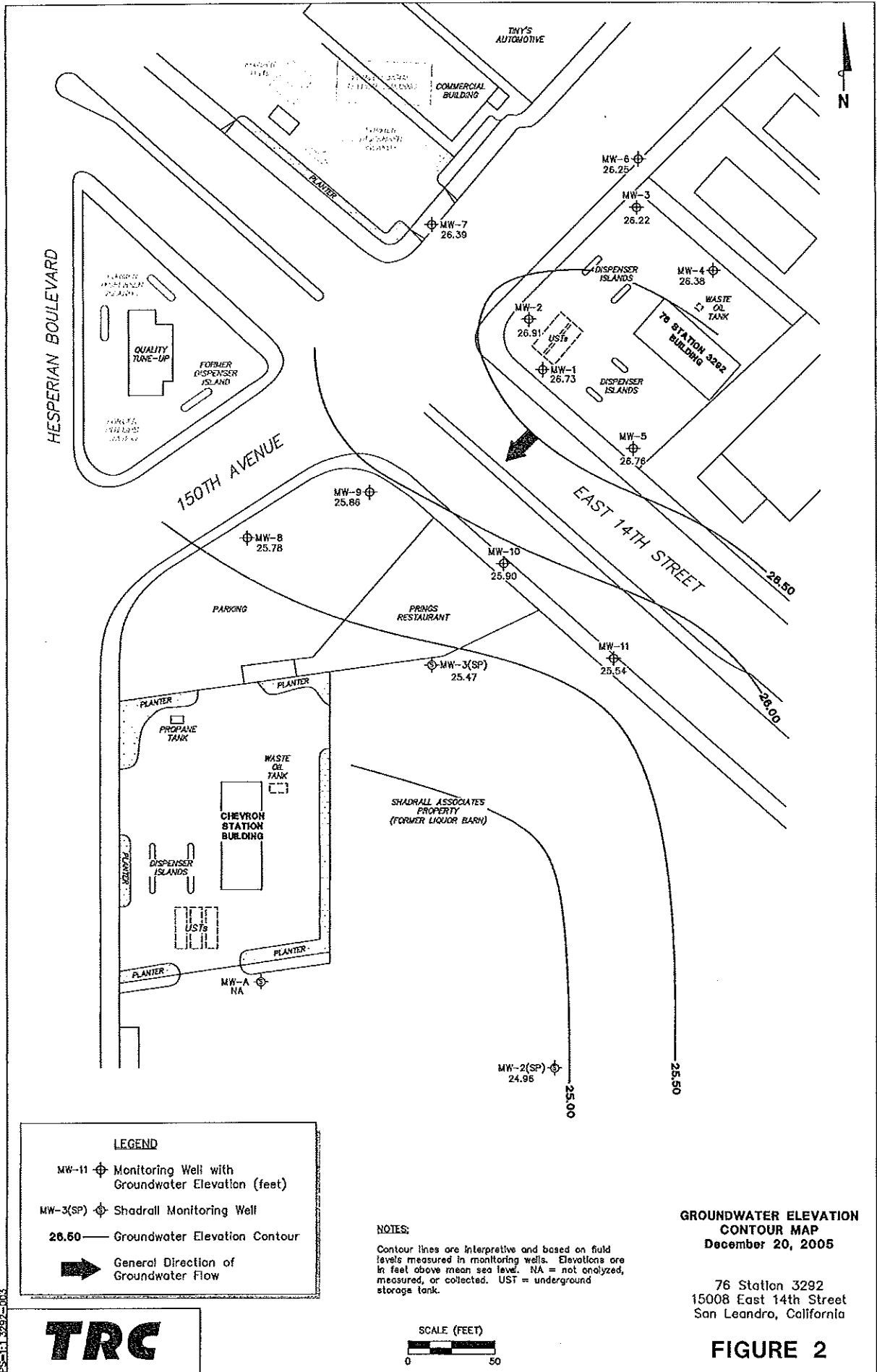




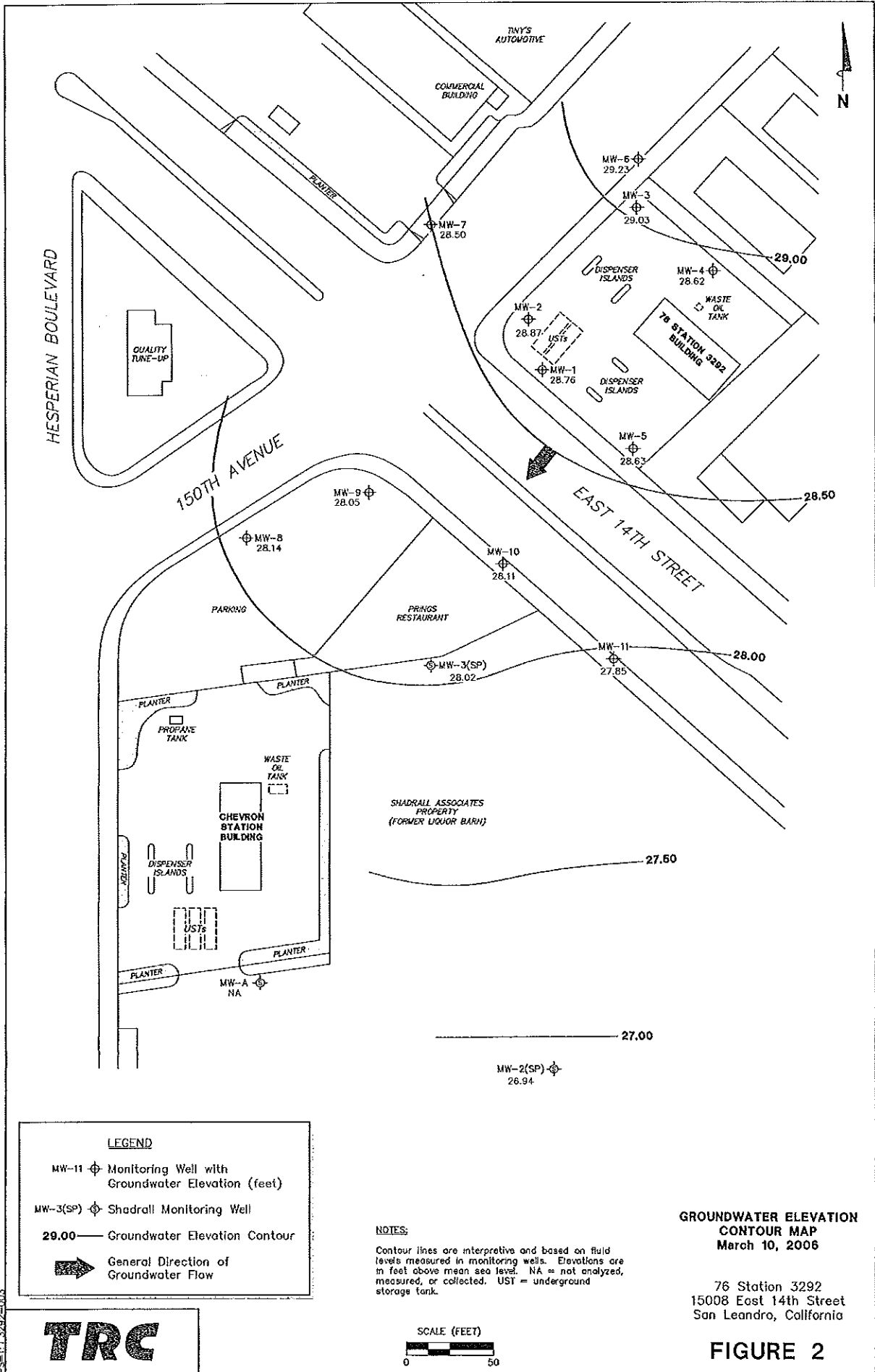


PS-11-3292-003

**TRC**

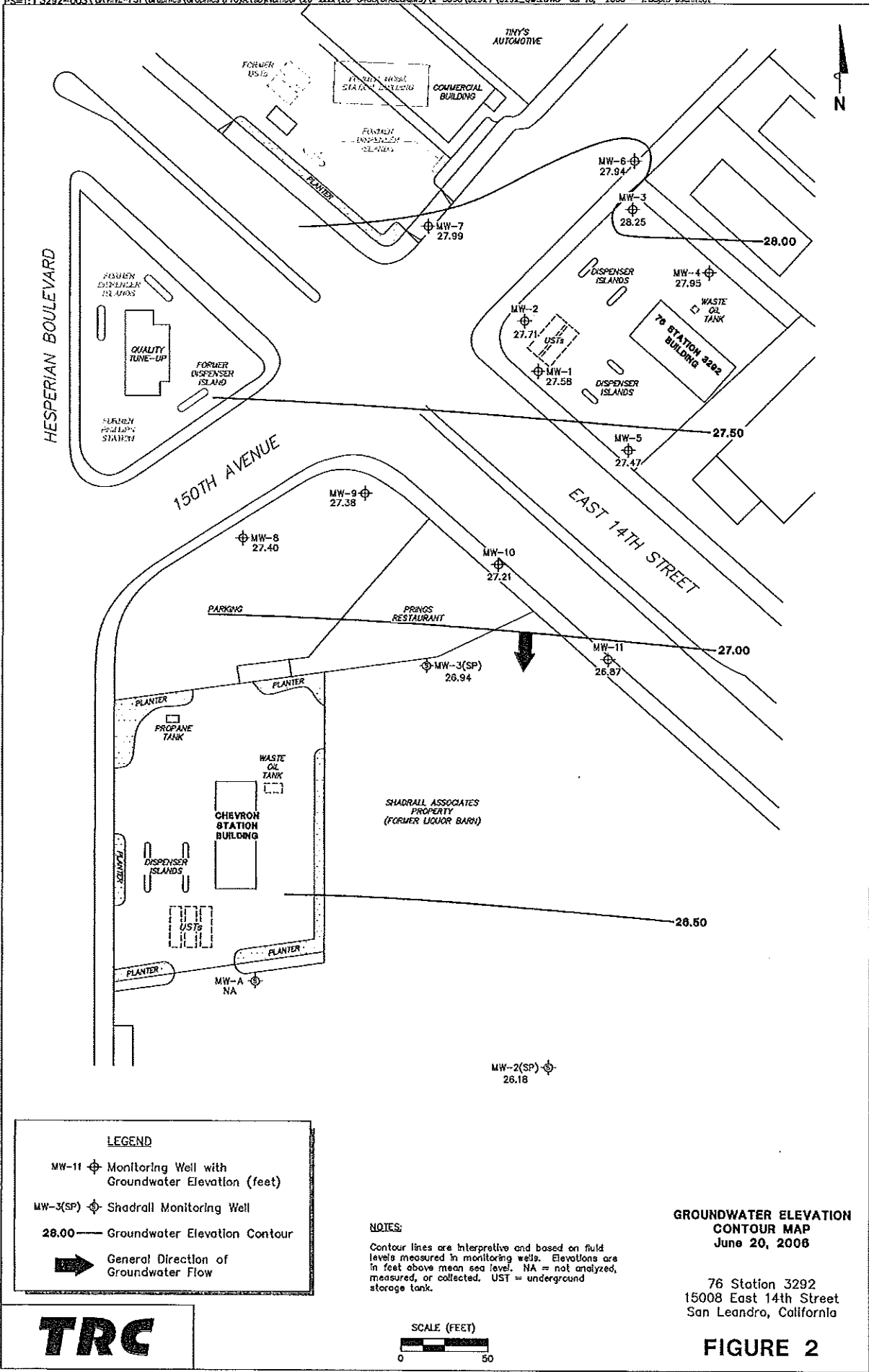


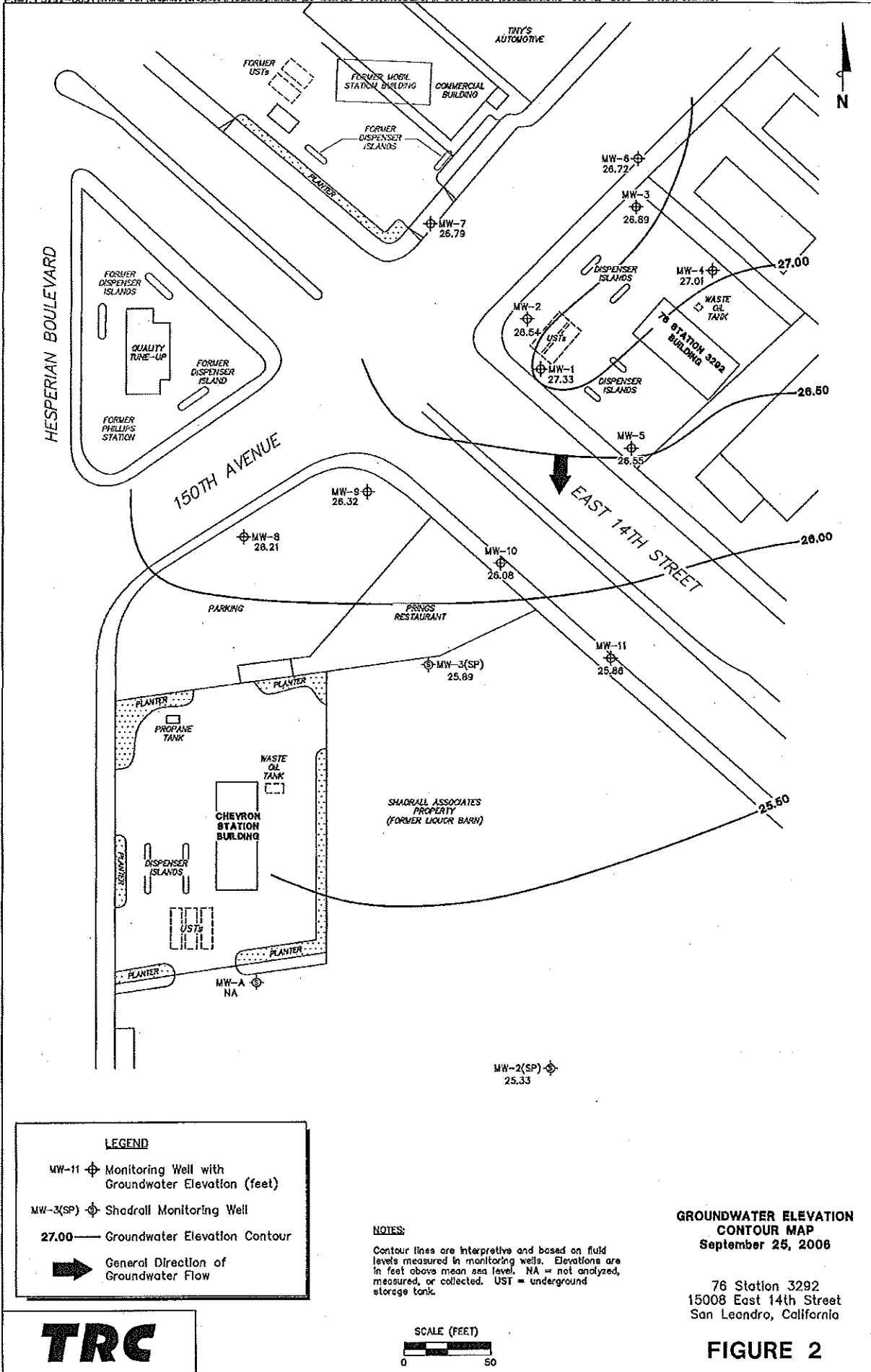
PS-11-1 3292-003

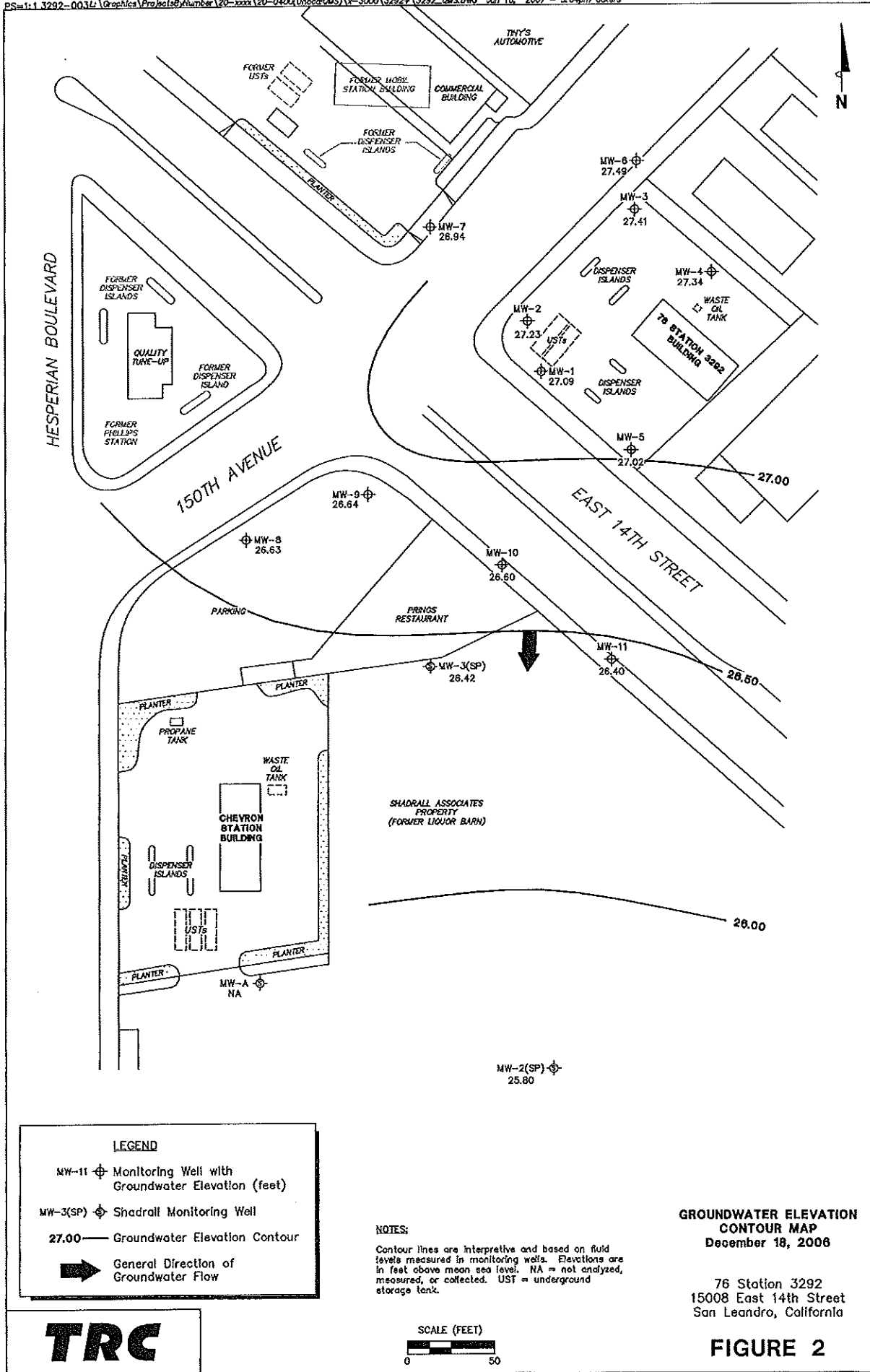


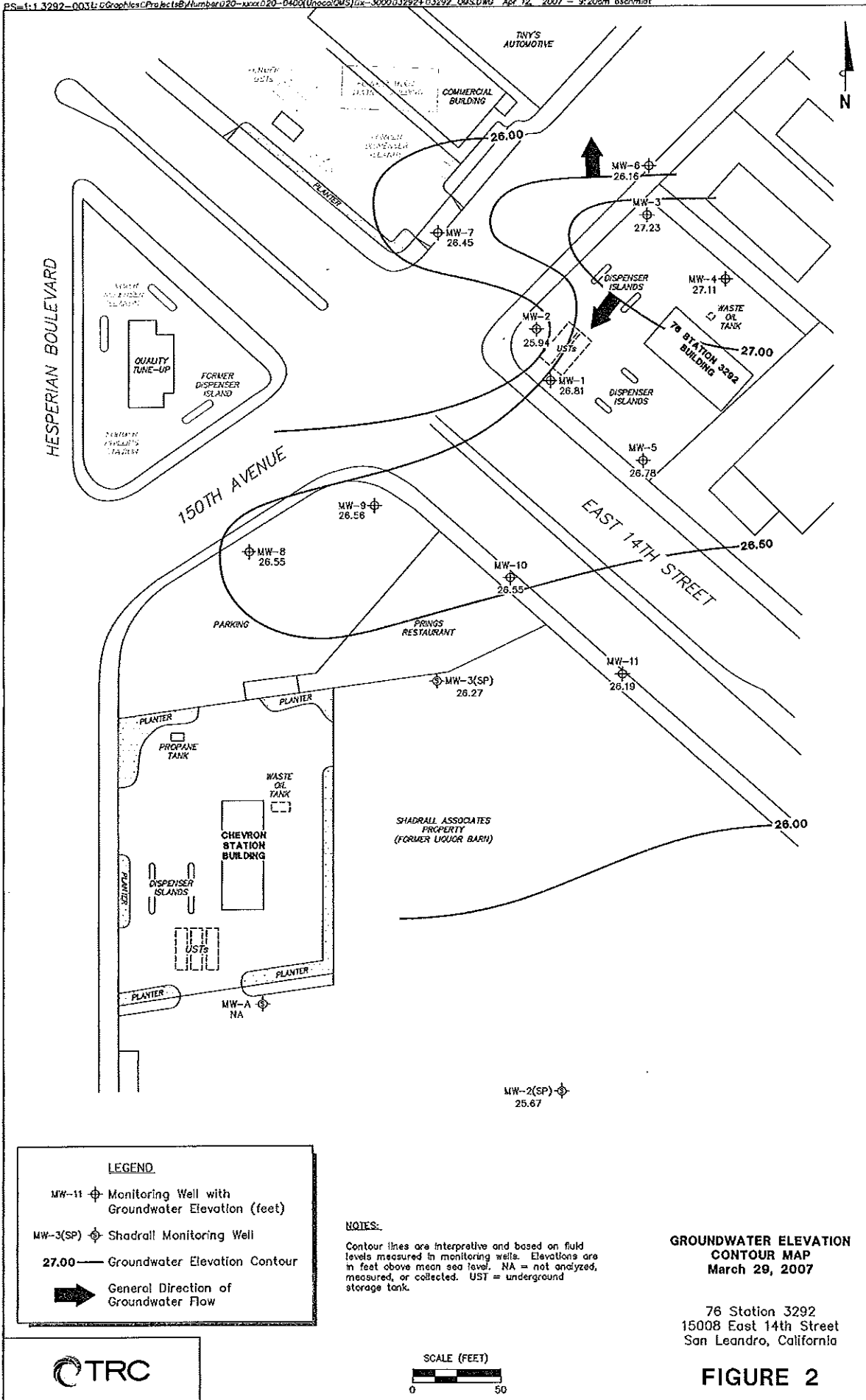
PS-11\_3292-003





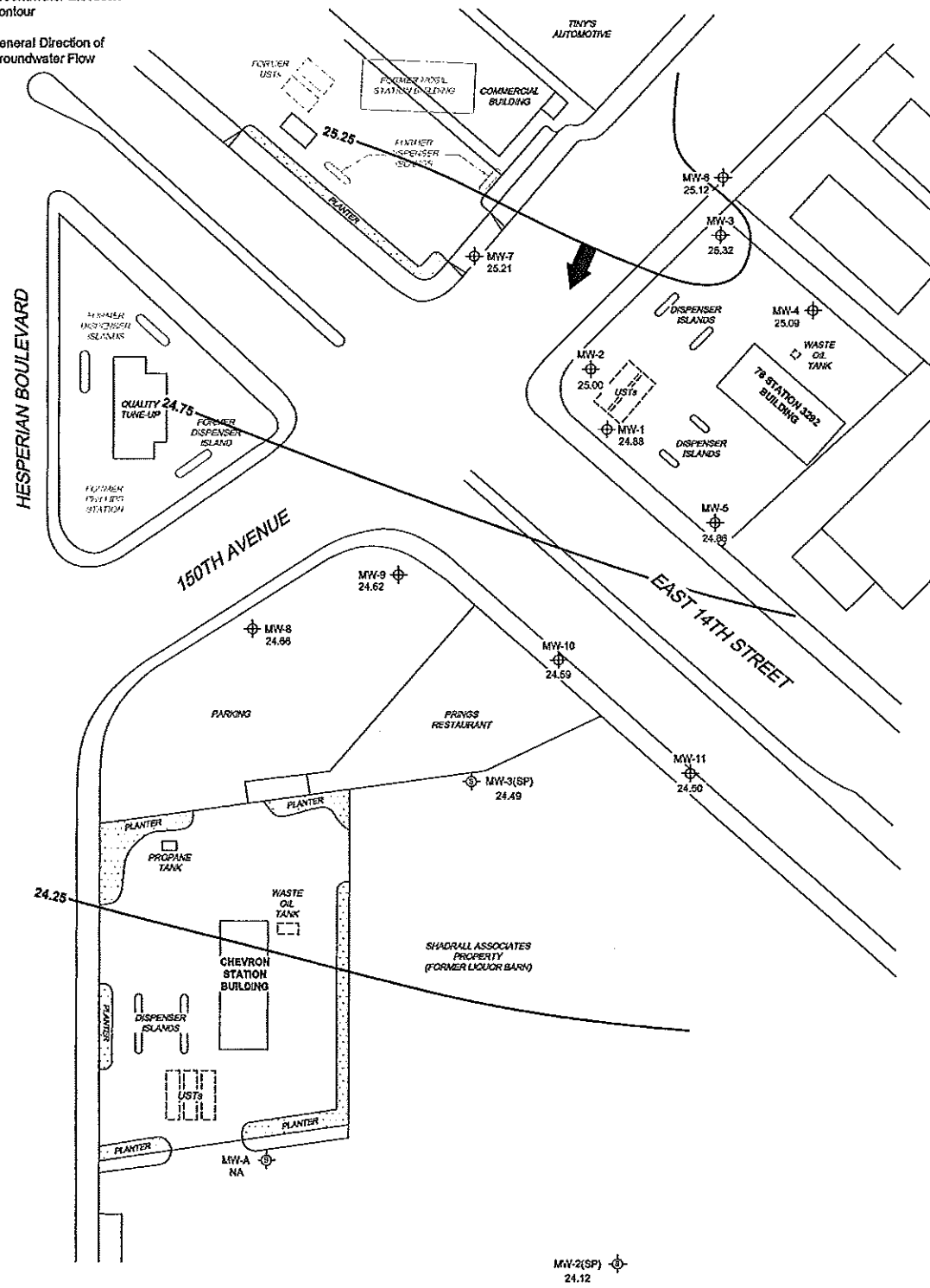






**LEGEND**

- MW-11 Monitoring Well with Groundwater Elevation (feet)
- MW-3(SP) Shadrell Monitoring Well
- 25.25 Groundwater Elevation Contour
- General Direction of Groundwater Flow



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NA = not analyzed, measured, or collected. UST = underground storage tank.



PROJECT: 126703  
 FACILITY:  
 78 STATION 3292  
 15008 EAST 14TH STREET  
 SAN LEANDRO, CALIFORNIA

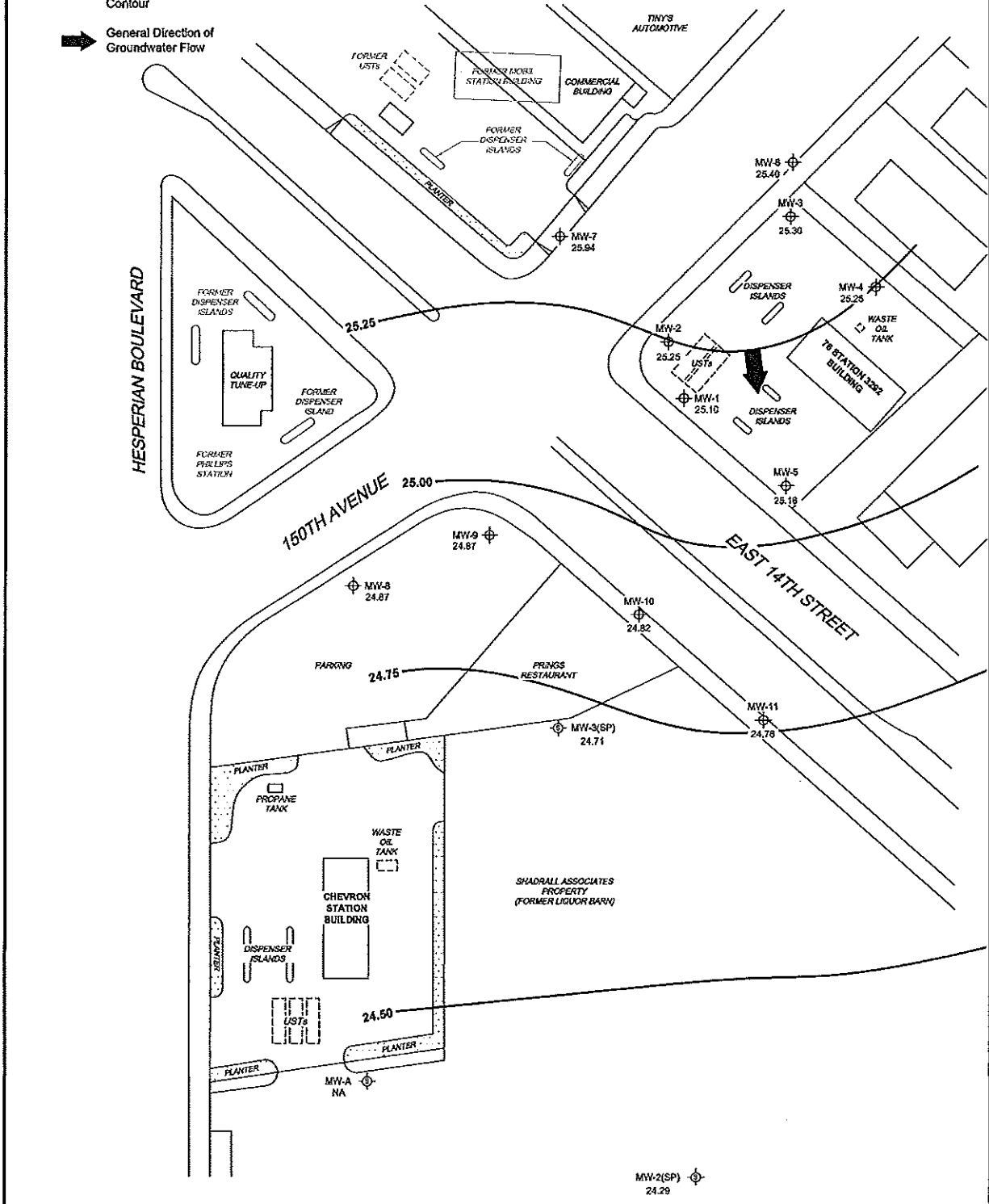
**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 September 26, 2007

**FIGURE 2**



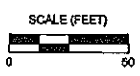
**LEGEND**

- MW-11 Monitoring Well with Groundwater Elevation (feet)
- MW-3(SP) Shadral Monitoring Well
- 25.25 Groundwater Elevation Contour
- General Direction of Groundwater Flow



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NA = not analyzed, measured, or collected. UST = underground storage tank.







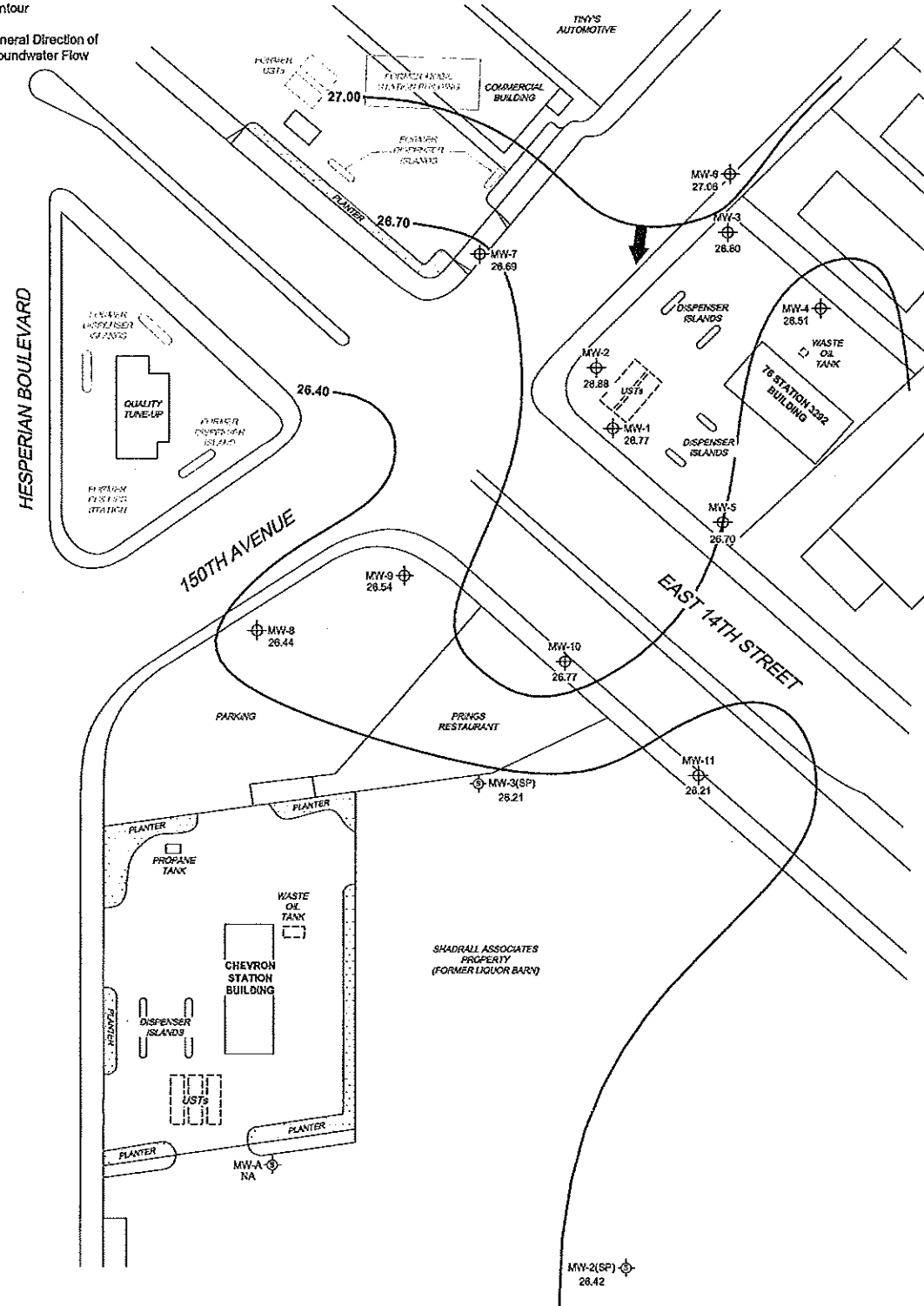
PROJECT: 164771  
 FACILITY:  
 76 STATION 3292  
 16008 EAST 14TH STREET  
 SAN LEANDRO, CALIFORNIA

**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 December 18, 2007

**FIGURE 2**

**LEGEND**

- MW-11  Monitoring Well with Groundwater Elevation (feet)
- MW-3(SP)  Shadral Monitoring Well
- 27.00  Groundwater Elevation Contour
-  General Direction of Groundwater Flow



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NA = not analyzed, measured, or collected. UST = underground storage tank.







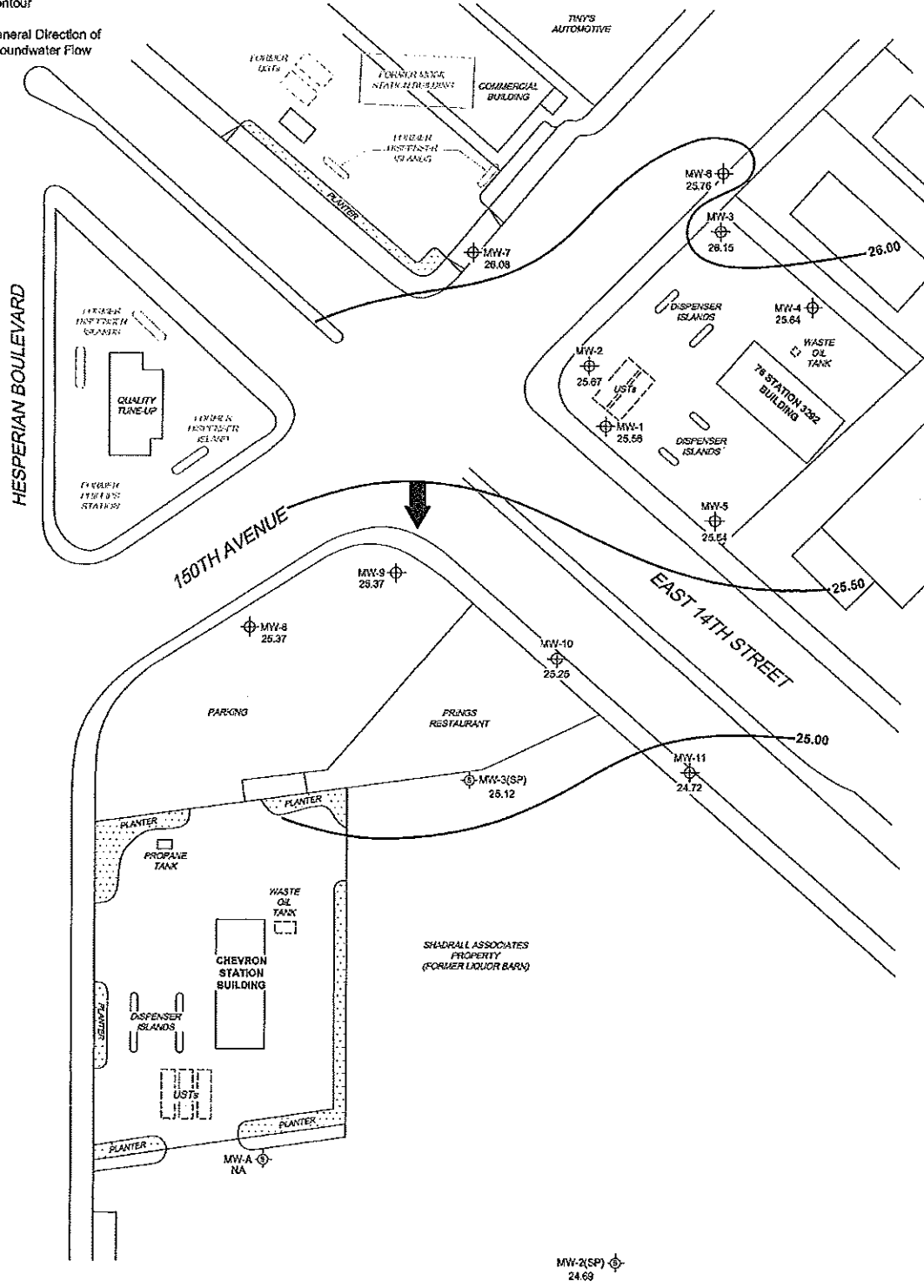
PROJECT: 154771  
 FACILITY: 76 STATION 3292  
 15008 EAST 14TH STREET  
 SAN LEANDRO, CALIFORNIA

**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 March 25, 2008

**FIGURE 2**

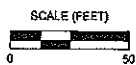
**LEGEND**

- MW-11  Monitoring Well with Groundwater Elevation (feet)
- MW-3(SP)  Shadral Monitoring Well
- 26.00  Groundwater Elevation Contour
-  General Direction of Groundwater Flow



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NA = not analyzed, measured, or collected. UST = underground storage tank.



PROJECT: 154771  
 FACILITY:  
 78 STATION 3292  
 15008 EAST 14TH STREET  
 SAN LEANDRO, CALIFORNIA

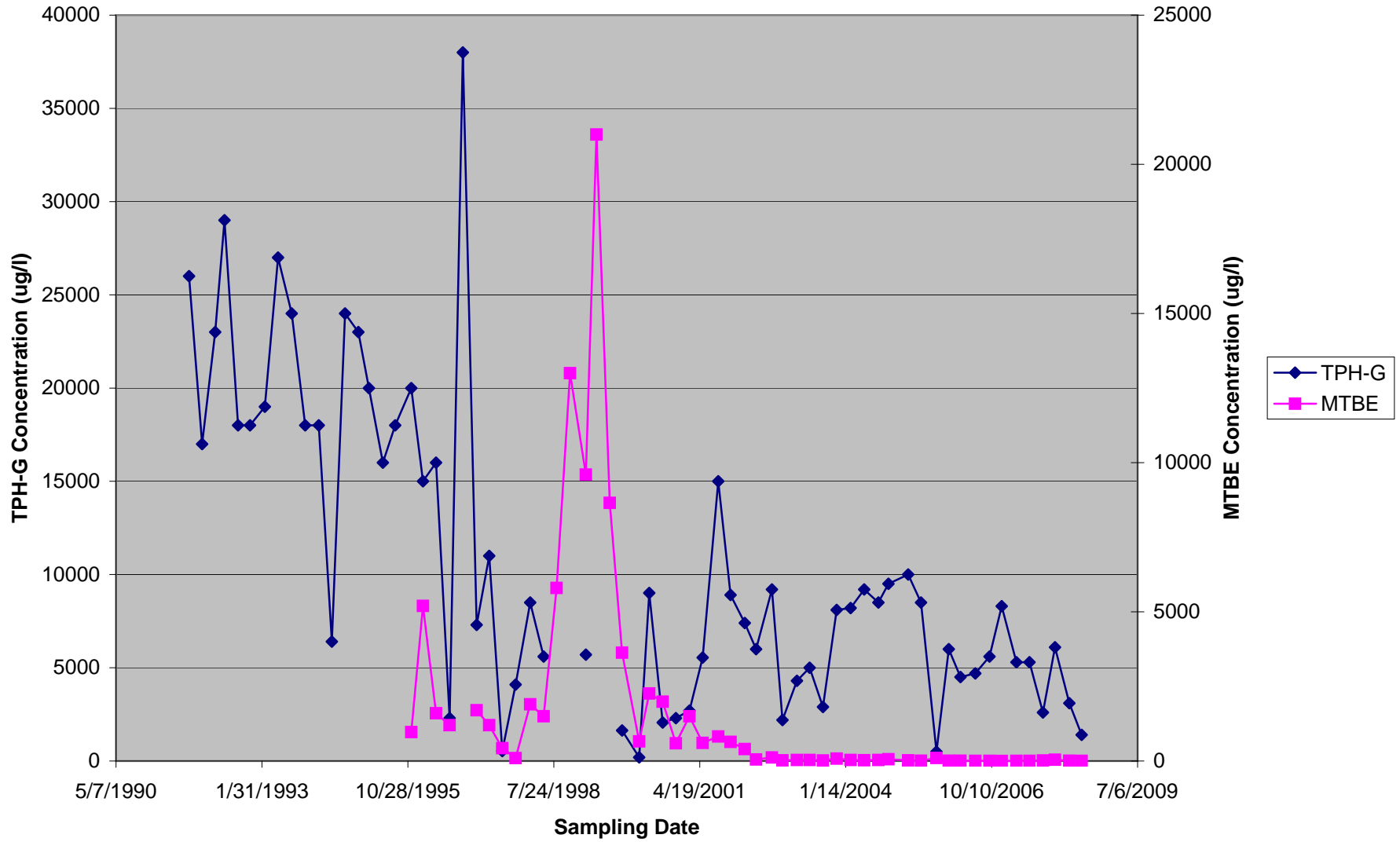
**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 June 18, 2008

**FIGURE 2**

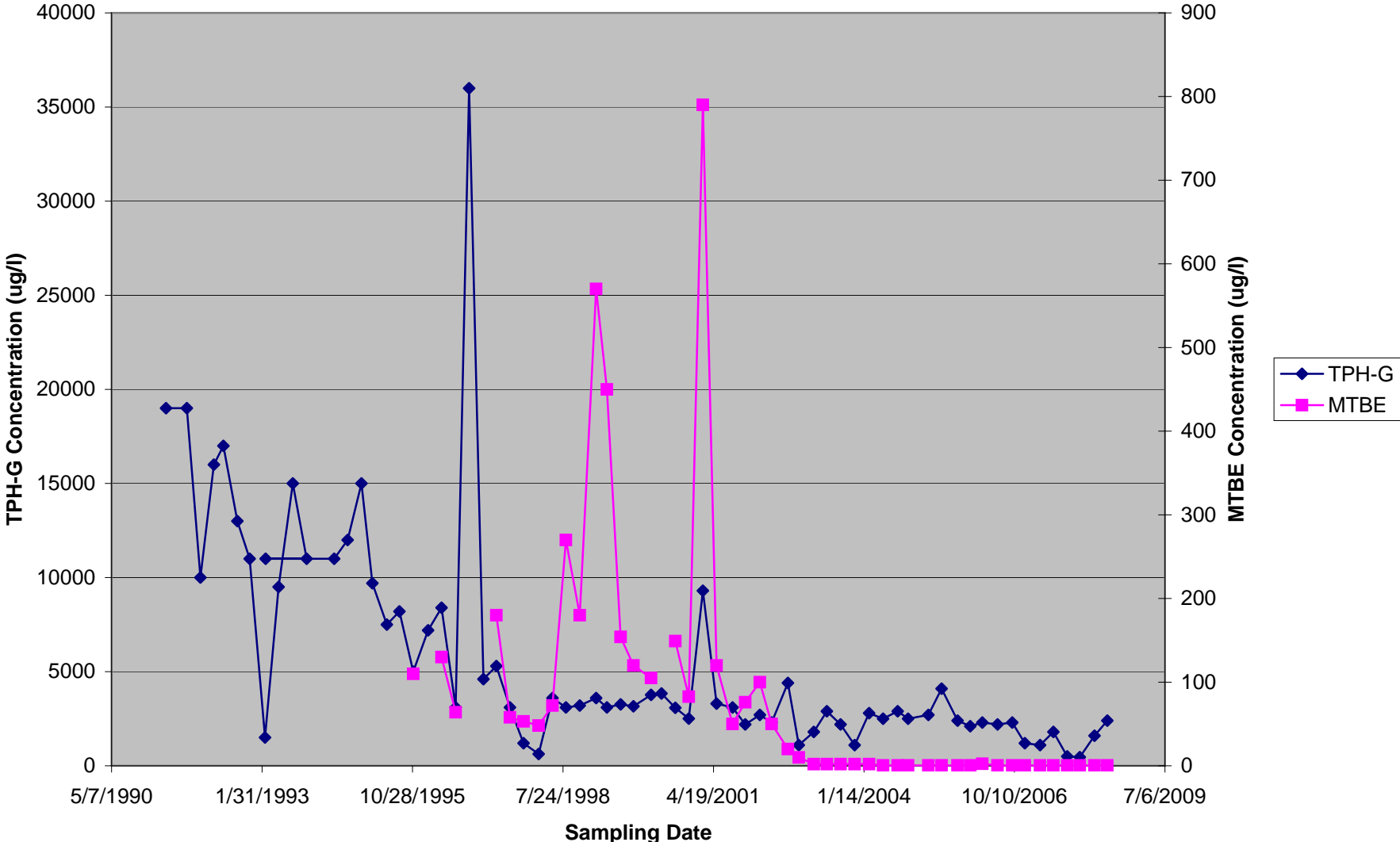
**APPENDIX E**

TPH-G, MTBE Concentration Graphs

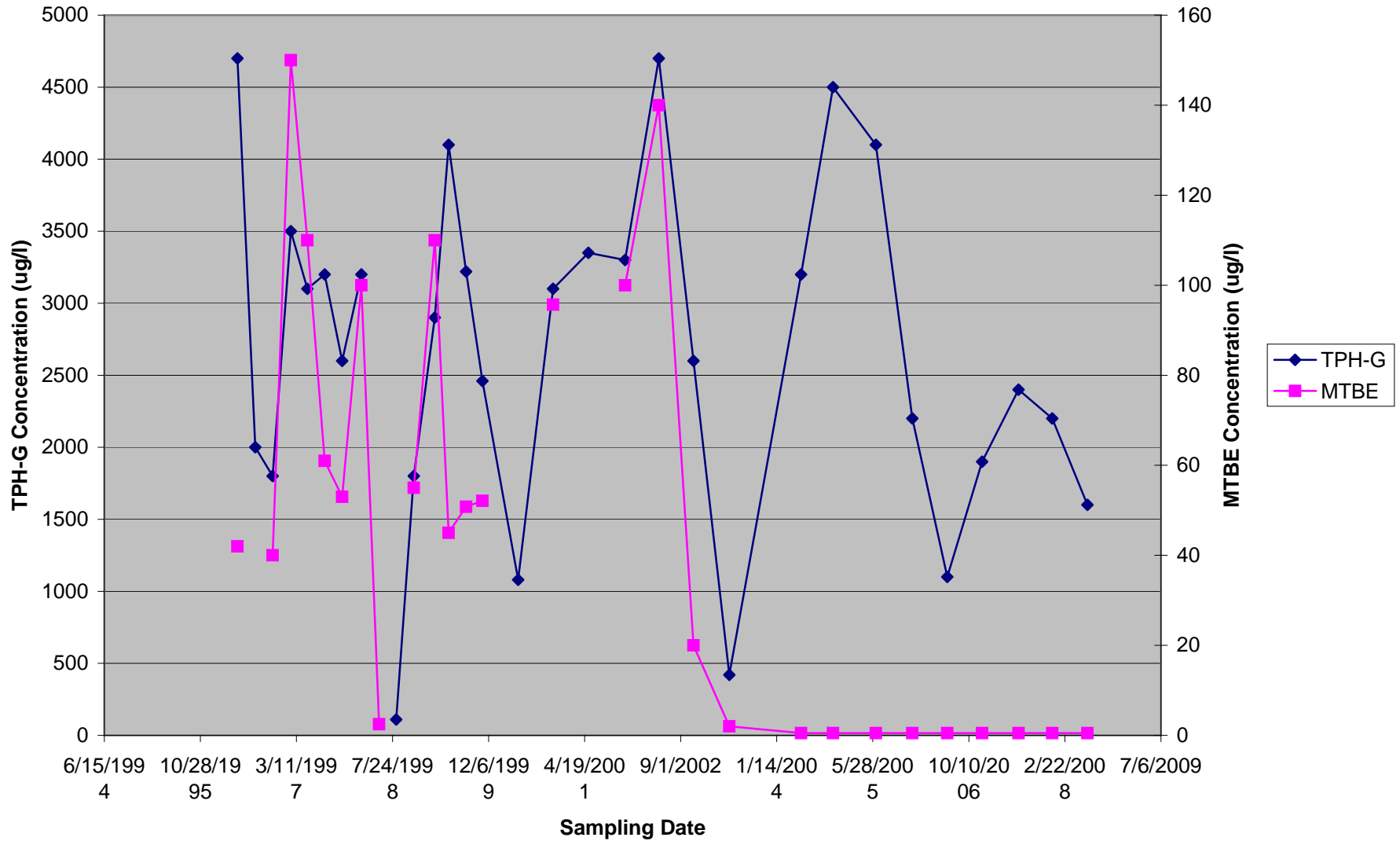
TPH-G, MTBE Concentrations vs Sampling Date



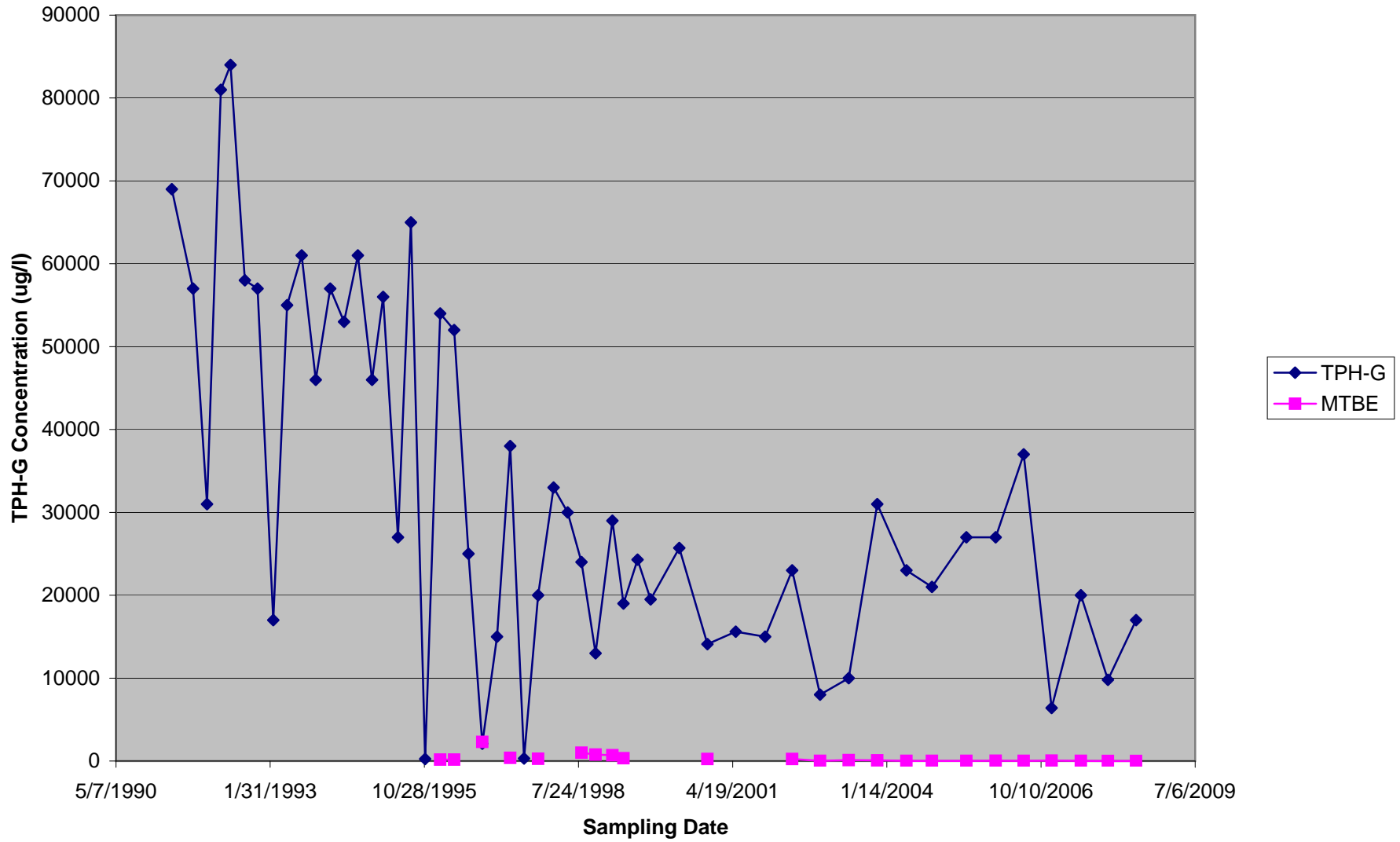
MW-2: TPH-G, MTBE Concentration vs Sampling Date



MW-3SP: TPH-G, MTBE Concentration vs Sampling Date

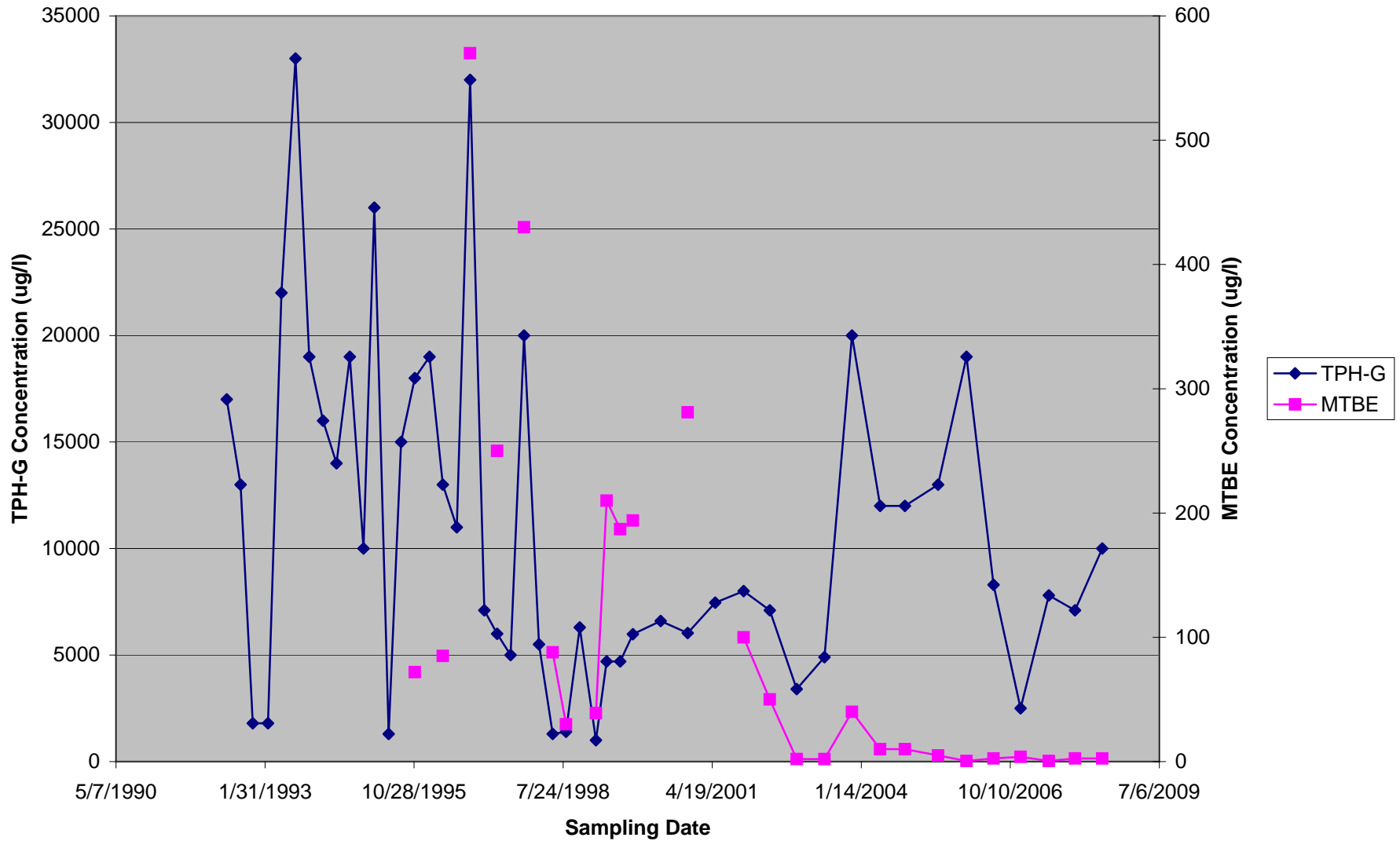


MW-5 TPH-G Concentration vs. Sampling Date





MW-7: TPH-G, MTBE Concentrations vs. Sampling Date







**APPENDIX F**  
TRC Sensitive Receptor Study



ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818  
phone 916-558-7600  
fax 916-558-7639

June 29, 2007

Ms. Donna Drogos  
Supervising Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502

RE: Sensitive Receptor Survey and File Review  
TRC Project no. 125917  
Dated: June 28, 2007

76 Station no. 3292  
15008 East 14<sup>th</sup> Street  
San Leandro, California

Dear Ms. Drogos,

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

Please feel free to contact me if you have any questions or require additional information.

Respectfully,

A handwritten signature in black ink that reads "Bill Borgh". The signature is written in a cursive, slightly slanted style.

Bill Borgh  
Site Manager – Risk Management and Remediation

Attachment



1590 Solano Way  
#A  
Concord, CA 94520

925.688.1200 PHONE  
925.688.0388 FAX

www.TRCSolutions.com

June 28, 2007

TRC Project No. 125917

Ms. Donna Drogos  
Supervising Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502

RE: SENSITIVE RECEPTOR SURVEY AND FILE REVIEW  
76 SERVICE STATION No. 3292  
15008 EAST 14<sup>TH</sup> STREET, SAN LEANDRO, CALIFORNIA

Dear Ms. Drogos:

On behalf of ConocoPhillips, TRC has prepared this sensitive receptor survey and file review report for 76 Service Station No. 3292, located at 15008 East 14<sup>th</sup> Street (Site) in San Leandro, California (Figure 1).

### **SCOPE OF WORK**

To identify public and municipal wells within one-half mile of the Site, TRC contacted the California Department of Water Resources (DWR) to review copies of well completion reports for any wells located within the vicinity of the Site. The results of the DWR well report review, excluding destroyed water supply wells, groundwater monitoring wells and extraction wells, are summarized in Table 1 and Figure 1.

Also included in the survey was an evaluation of nearby surface water bodies as possible sensitive receptors. TRC reviewed various site and vicinity maps and conducted a site reconnaissance of the area. Figure 1 shows the nearby surface water bodies, as applicable.

In order to obtain information on the surrounding service stations, TRC contacted the Alameda County Health Care Services (ACHCS) and the City of San Leandro Environmental Services to review reports and correspondence for the leaking underground fuel cases at 14901 East 14<sup>th</sup> Street, 14994 East 14<sup>th</sup> Street, and 15002 Hesperian Boulevard. The file review results are discussed below.

## **SENSITIVE RECEPTOR SURVEY**

A request was made to the DWR for well completion reports within the vicinity of the site. Of the approximately 69 well reports received, thirteen wells were water supply wells located within a one-half mile radius of the Site.

Wells 3S/3W-01A5 and 3S/2W-06E6 are located approximately 1,980 feet west and 1,254 feet southwest of the Site, respectively. These two wells listed in the DWR well reports as a domestic well and a domestic/irrigation well, respectively. The available construction details for these wells are provided in Table 1.

Nine of the 13 water supply wells located within a one-half mile radius of the Site are listed in the DWR report as irrigation wells. These irrigation wells are located in all directions from the Site, except to the southeast, at distances of between 1,320 and 1,881 feet.

In addition, two wells identified in the DWR reports within a one-half mile radius of the Site did not indicate a use. These two wells are located 1,584 feet west and 1,848 feet east of the Site. No surface water bodies were observed within a one-half mile radius of the Site.

Groundwater at the Site is encountered at an approximate depth of 10 feet below grade and historical groundwater flow direction is typically to the south-southwest.

## **FILE REVIEW**

A request was made to the ACHCS to review the files of three leaking underground fuel tank (LUFT) cases in the vicinity of the Site (Figure 2). The main files for two of the sites were maintained by the City of San Leandro, therefore, TRC requested a file review through that agency. Selected documents obtained during the file reviews are included as Appendix A. Two of the sites, Quality Tune Up located at 14901 East 14<sup>th</sup> Street and Former Mobil 04-FGN located at 14994 East 14<sup>th</sup> Street, are both active LUFT cases. They are located to the west and northwest of the site, respectively. The third site, Chevron Station #9-2013 located at 15002 Hesperian Boulevard, is a closed LUFT case, located southwest of the site.

### Quality Tune Up, 14901 East 14<sup>th</sup> Street, San Leandro, California

The Quality Tune Up (QTU) facility is located west of the Site and is an active LUFT case. The QTU property was previously a gasoline service station with one 5,500-gallon and two 10,000-gallon gasoline underground storage tanks (USTs), one 200-gallon waste oil UST and three dispenser islands. The file for the QTU site contained very little information on the current environmental status of the facility, and no data on past site environmental activities. A Phase II Site Investigation was completed at the site in October 2004 by Ninyo & Moore (2005).



## Sensitive Receptor Survey and File Review

76 Service Station No. 3292

June 28, 2007

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The investigation identified total petroleum hydrocarbons as gasoline (TPH-g) at 20,000 micrograms per liter ( $\mu\text{g/L}$ ) and methyl tertiary butyl ether (MTBE) at 5.5  $\mu\text{g/L}$ , as contaminants in groundwater. These results are from grab groundwater samples collected from a boring on the south side of the QTU site. As part of their conclusions, Ninyo & Moore indicated that TPH-g and MTBE groundwater contamination beneath the QTU facility may be attributed to migration from an upgradient off-site property or a combination of off- and on-site sources. The shallow groundwater constituent concentration map (Figure 3 from the Ninyo & Moore June 2005 Report) indicates that MTBE concentrations are generally at or below detection limits along the upgradient northeastern and eastern edge of the property and detectable MTBE concentrations are located adjacent to former tank and dispenser islands on the QTU property.

### Former Mobil Service Station 04-FGN, 14994 East 14<sup>th</sup> Street, San Leandro, California

The former Mobil Service Station is located to the northwest of the Site and is an active LUFT case. The former Mobil Station had seven monitoring wells that were sampled on a quarterly basis since 1988. Historical groundwater sampling data indicate that very high concentrations of TPH-g, total petroleum hydrocarbons as diesel (TPH-d), benzene, toluene, ethylbenzene and xylenes (BTEX), and MTBE were identified in onsite wells. A Formal Case Closure Report was submitted to ACHCS by Alton Geoscience in 1998. There are no records of the county ever responding to this case closure report. In March 2000, four of the monitoring wells were destroyed leaving only three monitoring wells onsite. These wells were last sampled July 7, 2004 and at that time TPH-g was detected in all three wells at a maximum of 2,250  $\mu\text{g/L}$  and MTBE was not detected above the laboratory reporting limit of 0.5  $\mu\text{g/L}$  (ETIC, 2004). ExxonMobil sent a letter dated March 22, 2005, requesting closure of the site and stated that they planned to cease sampling. At the time the file review was conducted, site closure had not been granted.

### Chevron Station #9-2013, 15002 Hesperian Boulevard, San Leandro, California

The Chevron station is located southwest of the Site and is still an active gasoline service station. The Chevron station had eight monitoring wells that were sampled on a quarterly basis since 1987. Historical groundwater sampling data indicate that detectable concentrations of TPH-g, BTEX and MTBE were identified in onsite wells. In a report by Weiss Associates (1994), it was documented that they believed the contaminants in the Chevron wells were from an offsite source. In 1994 Chevron strongly tried to implicate Unocal as the responsible party for the contamination detected in their monitoring wells by having their research and technology division conduct a fingerprinting of groundwater samples from four of the Chevron site wells (ACHCS, 1994a). Unocal countered that the laboratory methods used by Chevron were questionable and their conclusions were based on specific compounds identified in the test results that were linked to assumed refining processes at the Unocal refineries. Moreover, Chevron's evaluation didn't provide comparative data from Chevron's refining process (methods used to finish the gasoline through specific units) or the specific compound concentrations in their brand name gasoline (ACHCS, 1994b). This attempt to incriminate Unocal for the groundwater contamination plume beneath the Chevron station was unsuccessful and dropped after this incident.





## **Sensitive Receptor Survey and File Review**

76 Service Station No. 3292

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The Chevron station was granted case closure on July 27, 1999 even with 1,000 µg/L of TPH-g and 64 µg/L of MTBE present in the groundwater (ACHCS, 1999). The case closure summary indicated that the site had been adequately characterized, there were no known sensitive receptors down gradient of the site, and the plume appeared stable.

## **CONCLUSIONS**

### **Sensitive Receptor Survey**

Six wells identified in the DWR reports, including the two domestic wells, are located to the west and southwest of the Site and are in the path of local groundwater flow. However, based on the distance from the Site (greater than 1,000 feet), these wells are unlikely to be impacted by the groundwater hydrocarbon plume beneath the Site. No other current or potential sensitive receptors were identified within a one-half mile radius of the Site.

### **File Review**

#### **• Quality Tune Up**

The QTU property used to be a gasoline station with USTs/dispenser islands, which would be the substantial contributor to the contaminants detected in groundwater beneath that facility. The Ninyo & Moore Limited Phase II Site Assessment Report indicated that the "MTBE detected in the soil beneath the water table is most likely attributed to migration of MTBE from an upgradient off-site property" since the gasoline station discontinued operations prior to 1981 and MTBE was not widely utilized as a fuel additive at that time. Figure 3 from the Ninyo & Moore Report dated June 2005, indicates that detectable MTBE concentrations are located adjacent to the former tanks and dispenser islands and are generally at or below detection limits along the upgradient northeastern and eastern edge of the QTU property. The historical groundwater flow direction at the 76 Service Station has typically been to the south-southwest, cross gradient to the QTU facility, which makes it unlikely that the 76 Service Station (situated to the east) is a contributor to the groundwater plume beneath the QTU facility. If fuel containing MTBE was not used at the former gasoline station on the QTU property, which has not been adequately verified, then it is possible that a source directly upgradient (north) of QTU could be the contributor to groundwater contamination at that facility.

#### **• Former Mobil Service Station 04-FGN**

The former Mobil station has groundwater monitoring data from 1988 to 2004 that indicates very high detectable concentrations of TPH-g, TPH-d, MTBE and BTEX along the southern corner of the property (closest to the Site). Due to the proximity of the former service station to the 76 Service Station, and the groundwater flow direction, it is feasible that the groundwater plume from the former Mobil station has migrated beneath the 76 Service Station and East 14<sup>th</sup> Street.



## Sensitive Receptor Survey and File Review

76 Service Station No. 3292

June 28, 2007

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This conclusion is based on previous groundwater monitoring data for the Mobil station along with data from the most upgradient well for the 76 Service Station (MW-7), located along the southern corner of the former Mobil station, which indicates very high detectable concentrations of petroleum hydrocarbons still remain in groundwater beneath the former Mobil station.

- **Chevron Station #9-2013**

In the Case Closure Summary (March 1999) completed for the Chevron station, it was never mentioned that the plume was the result of an offsite source. It appears that discussions initiated in 1994 regarding Unocal as a potentially responsible party were resolved. Since the Chevron station is located down gradient from the 76 Service Station, it is not a feasible contributor to the hydrocarbon plume beneath the Site.

### Recommendations

Based on the absence of any potential sensitive receptors and the presence of residual groundwater impacts from the Chevron plume likely present further downgradient of the current offsite, downgradient monitoring wells, TRC does not recommend any further offsite assessment at this time. The current dissolved-phase hydrocarbon plume from the Site has likely merged with the residual impacts left in place beneath the Chevron Station #9-2013. Therefore, any well installed further downgradient of the current offsite, downgradient wells MW-8 through MW-11 and MW-3(SP) would not provide any additional plume definition.

TRC therefore recommends completing an updated Tier II RBCA evaluation to determine if current onsite and offsite groundwater impacts exceed the site-specific target levels (SSTLs). Based on the results of the updated RBCA, TRC may recommend no further action and request the site be referred for closure.

### REFERENCES

Alameda County Health Care Services (ACHCS), 1994a, Unocal Station #3292, 15008 East 14<sup>th</sup> Street, San Leandro, California, May 17, 1994, Correspondence.

ACHCS, 1994b, Chevron Service Station #9-2013, 15002 Hesperian Boulevard, San Leandro, California, November 2, 1994, Correspondence.

ACHCS, 1999, Remedial Action Completion Certification, Chevron Station #9-2013, 15002 Hesperian Boulevard, San Leandro, California, July 27, 1999, Correspondence, Case Closure Summary, and Figure 1.

Alton Geoscience, 1998, Formal Case Closure Report, Former Mobil Station 04-FGN, 14994 East 14<sup>th</sup> Street, San Leandro, California, November 23, 1998, Figure 3.



**Sensitive Receptor Survey and File Review**

76 Service Station No. 3292

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ETIC, 2004, Semi-Annual Quarterly Monitoring Report, Third Quarter 2004, Former Mobil Station 04-FGN, 14994 East 14<sup>th</sup> Street, San Leandro, California, September 1, 2004, Table 2.

Ninyo & Moore, 2005, Limited Phase II Environmental Site Assessment, Quality Tune Up, 14901 East 14<sup>th</sup> Street, San Leandro, California, June 6, 2005, Pages 15-17 and Figure 3.

Weiss Associates, 1994, Comprehensive Site Evaluation and Proposed Future Action Plan at Chevron Service Station 9-2013, 15002 Hesperian Boulevard, San Leandro, July 11, 1994, Pages 5, 8, and 13.

If you have any questions or concerns regarding this information, please contact either of the undersigned at 925-688-1200.

Sincerely,  
TRC



Rachelle Dunn  
Senior Staff Geologist



Keith Woodburne, P.G.  
Senior Project Geologist

Attachments:

Figure 1 – Sensitive Receptors within Half-Mile of Site  
Figure 2 – Site Plan

Table 1 - Summary of Well Information

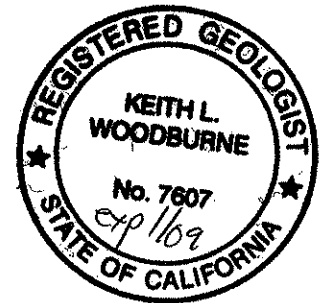
Appendix A – File Review Documents

-Correspondence, Unocal Station #3292, 15008 East 14<sup>th</sup> Street, San Leandro, May 17, 1994 (ACHCS)

-Correspondence, Chevron Service Station #9-2013, 15002 Hesperian Boulevard, San Leandro, November 2, 1994 (ACHCS)

-Selected Text from the Remedial Action Completion Certification, Chevron Station #9-2013, 15002 Hesperian Boulevard, San Leandro, July 27, 1999 (ACHCSA)

- Figure 3 from the Formal Case Closure Report, Former Mobil Station 04-FGN, 14994 East 14<sup>th</sup> Street, San Leandro, California, November 23, 1998 (Alton Geoscience)



## **Sensitive Receptor Survey and File Review**

76 Service Station No. 3292

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- Table 2-Groundwater Monitoring Data from the Semi-Annual Quarterly Monitoring Report, Third Quarter 2004, Former Mobil Station 04-FGN, 14994 East 14<sup>th</sup> Street, San Leandro, California, September 1, 2004 (ETIC)

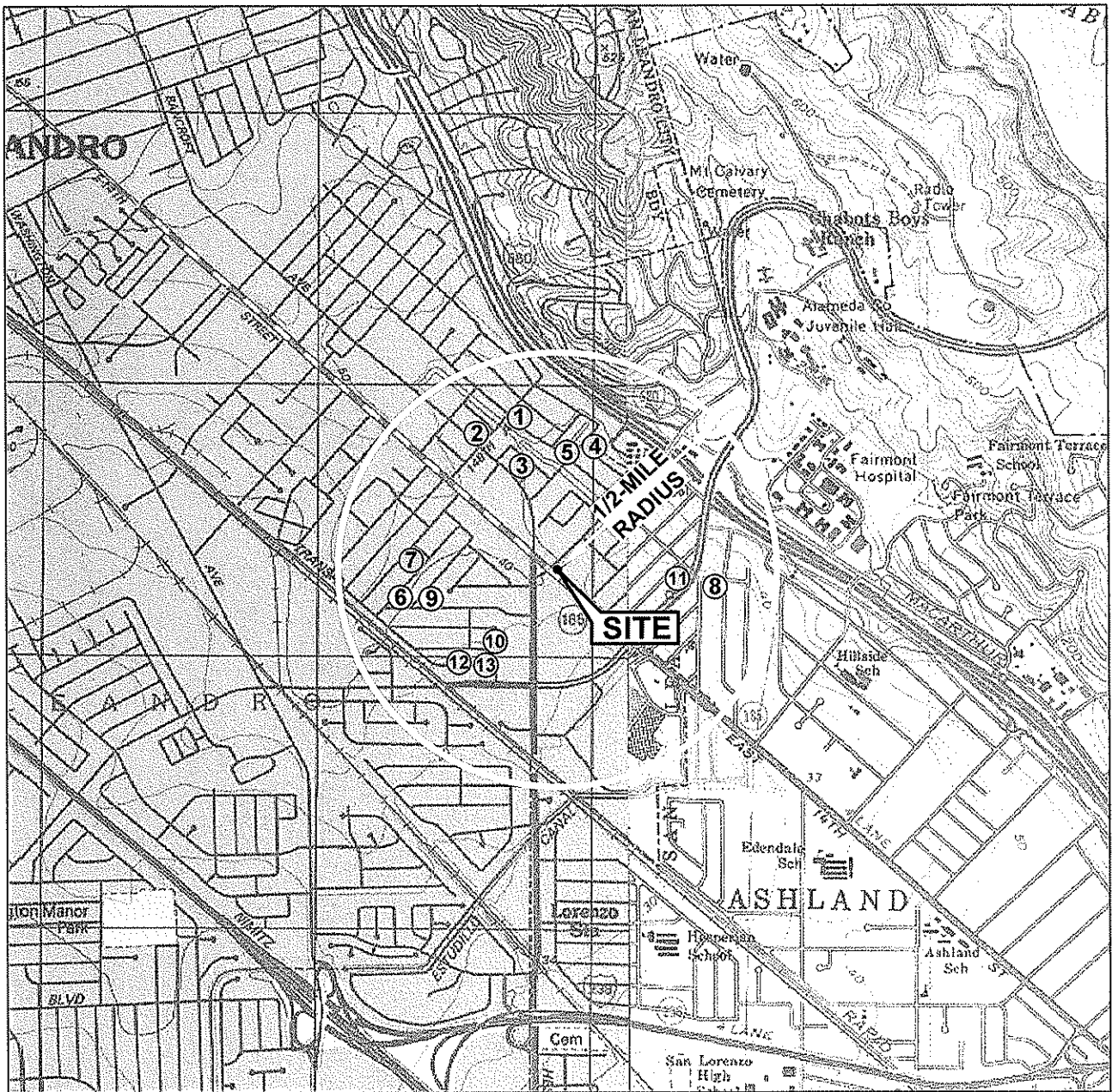
- Selected Text and Figure 3 from the Limited Phase II Environmental Site Assessment, Quality Tune Up, 14901 East 14<sup>th</sup> Street, San Leandro, California, June 6, 2005 (Ninyo & Moore)

-Selected Text from the Comprehensive Site Evaluation and Proposed Future Action Plan at Chevron Service Station 9-2013, 15002 Hesperian Boulevard, San Leandro, July 11, 1994 (Weiss Associates)

cc: Bill Borgh, ConocoPhillips (electronic upload only)



## Figures



1 MILE 3/4 1/2 1/4 0 1 MILE



SCALE 1 : 24,000



SOURCE:  
 United States Geological Survey  
 7.5 Minute Topographic Maps:  
 Hayward and San Leandro Quadrangles,  
 California

**LEGEND**

- ⑥ Domestic Well
- ① Irrigation Well
- ⑩ Domestic and Irrigation Well
- ⑨ Not Stated

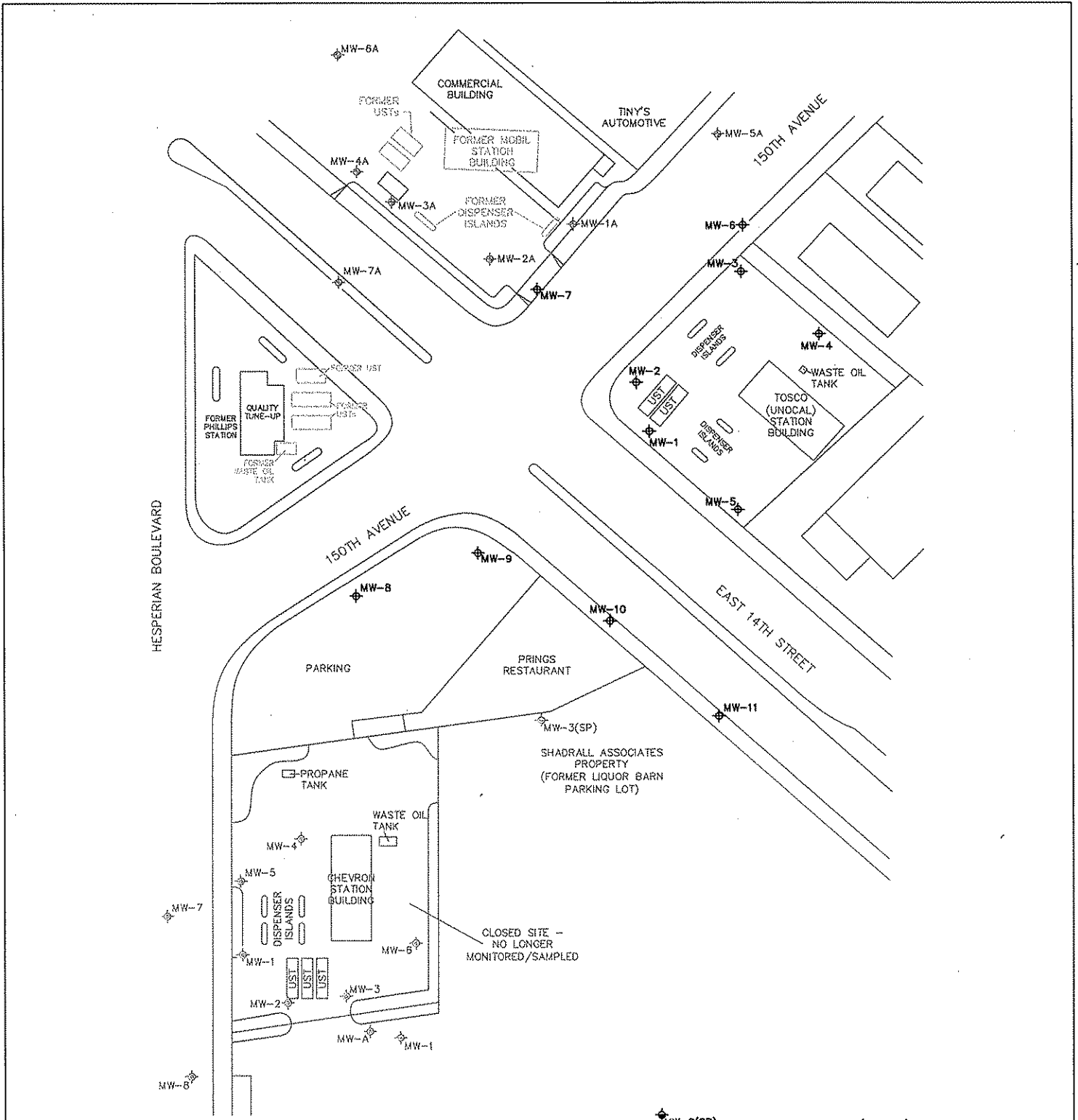


**SENSITIVE RECEPTORS WITHIN  
 HALF-MILE OF SITE**

76 Service Station #3292  
 15008 East 14th Street  
 San Leandro, California

**TRC**

**FIGURE 1**



**LEGEND**

- ⊕ Groundwater monitoring well
- ⊙ Groundwater monitoring well (Shadrall property)
- ⊕ Groundwater monitoring well (former Mobil)
- ⊕ Groundwater monitoring well (Chevron)



MW-2(SP)

SCALE (FEET)



**SITE PLAN**

76 Service Station #3292  
 15008 East 14th Street  
 San Leandro, California



**FIGURE 2**

## Table



**TABLE 1  
SUMMARY OF WELL INFORMATION**

76 Service Station #3292  
15008 East 14th Street  
San Leandro, California

Map Location	State Well Identification	Owner	Well Use	Well Total Depth (fbg)	Screened Interval (fbg)	Depth to Water (ft)	Date Installed	Approximate Distance From Site (ft)
Figure 1, number 1	2S/2W-31M1	Robert W. Bennett, Jr.	Irrigation	42	27 to 42	22	6/22/1977	1,881 NW
Figure 1, number 2	2S/2W-31M3	Howard E. Green	Irrigation	35	20 to 35	20	6/15/1977	1,782 NW
Figure 1, number 3	2S/2W-31N1	Carl C. McElroy	Irrigation	40	20 to 40	20	NA	1,320 NW
Figure 1, number 4	2S/2W-31P1	August Farias	Irrigation	40	20 to 40	20	NA	1,551 N
Figure 1, number 5	2S/2W-31P2	John E Deborn	Irrigation	NA	NA	20	5/27/1977	1,518 N
Figure 1, number 6	3S/3W-01A5	Wm McCabe	Domestic	45	25 to 45	15	5/8/1977	1,980 W
Figure 1, number 7	3S/3W-01A4	Aaron Geiser	Irrigation	48	20 to 48	18	5/13/1977	1,848 W
Figure 1, number 8	3S/2W-06B1	NA	NA	52	32 to 44	NA	NA	1,848 E
Figure 1, number 9	3S/2W-06E1	Adams	NA	45	NA	NA	9/1949	1,584 W
Figure 1, number 10	3S/2W-06E6	Wm Dennis	Irrigation & Domestic	60	24 to 56	40	11/14/1977	1,254 SW
Figure 1, number 11	3S/2W-06B4	Paul M. Fearon	Irrigation	30	10 to 30	12	8/6/1977	1,386 E
Figure 1, number 12	3S/2W-06E5	Herbert H. Howard	Irrigation	37	17 to 37	15	3/8/1977	1,716 SW
Figure 1, number 13	3S/2W-06E4	Stanley-M Boone	Irrigation	40	20 to 40	15	2/12/1977	1,650 SW

Notes: NA - Not Available

**Appendix A**  
**File Review Documents**

**Correspondence  
Unocal Station #3292  
15008 East 14<sup>th</sup> Street, San Leandro  
May 17, 1994 (ACHCS)**



ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
State Water Resources Control Board  
Division of Clean Water Programs  
UST Local Oversight Program  
80 Swan Way, Rm 200  
Oakland, CA 94621  
(510) 271-4530

STID 2400

May 17, 1994

Mr. Edward Ralston  
Unocal Corporation  
2000 Crow Canyon Place, Suite 400  
P.O. Box 5155  
San Ramon, CA 94583

RE: UNOCAL STATION #3292, 15008 EAST 14TH STREET, SAN LEANDRO

Dear Mr. Ralston:

Attached please find a copy of recent correspondence with enclosure from Chevron U.S.A. Products Company presenting data reportedly from the evaluation of fuel compounds in ground water sampled from several wells located at a nearby Chevron station, 15002 Hesperian Boulevard. Chevron concludes that the noted evaluation, or "finger printing," suggests that their wells are impacted by the plume originating from the subject Unocal site.

Please have your experts consider these data and suggest how this new issue may be resolved such that the multi-party investigation occurring in the area continues in a cooperative fashion and towards a common goal.

Please contact me at your earliest convenience. I may be reached at 510/271-4530.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott O. Seery".

Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

enclosure

cc: Rafat A. Shahid, Assistant Agency Director (w/o)  
Gil Jensen, Alameda County District Attorney's Office (w/o)  
Mike Bakaldin, San Leandro Fire Department (w/o)  
Ed Laudani, Alameda County Fire Department (w/o)  
Kenneth Kan, Chevron U.S.A. Products Company (w/o)  
Steve Pao, Mobil Oil Company (w/ enclosure)  
Paul Feldman, Esq. (w/ enclosure)

ALCO  
HAZMAT



**Chevron**

94 MAY 12 PM 1:06

May 10, 1994

**Chevron U.S.A. Products Company**  
2410 Camino Ramon  
San Ramon, CA 94583  
P.O. Box 5004  
San Ramon, CA 94583-0804

**Marketing Department**  
Phone 510 842 9500

Mr. Scott Seery  
Alameda County Environmental Health  
80 Swan Way, Rm. 200  
Oakland, CA 94621

Re: Chevron Service Station No. 9-2013  
15002 Hesperian Blvd., San Leandro, California

Dear Mr. Seery :

At the request of Chevron U.S.A. Products Co., Groundwater Technology obtained several groundwater samples from monitoring wells (MW-2, MW-3, MW-6, MW-8). These samples were subsequently analyzed and fingerprinted by Chevron Research & Technology Co. (CRTC) in Richmond, California.

Results from CRTC's analysis suggest UNOCAL's plume migrated to our site. Several compounds found in coker gasoline were detected. UNOCAL refineries in Rodeo and Santa Maria, CA were reported to have cokers. Since Chevron's Richmond Refinery does not have a coker, it suggests that these wells contain traces of UNOCAL's plume.

In light of this information, Chevron would like to cease the additional investigation that you requested in your letter dated August 18, 1993. It is Chevron's opinion based on CRTC's summary and Law Environmental's Phase II Site Assessment Report dated November 14, 1990 that this investigation should be part of UNOCAL's responsibility.

Please respond to our request in writing. For additional information, refer to the enclosed project summary from CRTC dated May 5, 1994. If you have any questions or comments, please feel free to contact me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan  
Engineer

LKAN/MacFile 9-2013R14

Enclosure

cc: Mr. Lester Feldman, RWQCB-San Francisco Bay Region  
2101 Webster Str., Ste. 500, Oakland, CA 94612

Mr. Steve Willer, Chevron U.S.A. Products Co.

MAY 9 '94 J.M.M.

CHEVRON RESEARCH AND TECHNOLOGY COMPANY  
ANALYTICAL SCIENCES UNIT PROJECT SUMMARY

Project No.	5767	Requested by	K. L. Kan
Date Initiated	4/7/94	Location	CUSA Products Co.
Date Completed	5/5/94		P.O. Box 5004
CRTC Charge Code	TT15267		San Ramon, CA 94583
		Phone	842-8752

**Project Description:** Analyze four water samples, labeled MW-2, MW-3, MW-6, and MW-8, taken from Chevron service station number 9-2013 at 15002 Hesperian Blvd., San Leandro, CA. Determine if Unocal's plume has reached Chevron's facility. A site plan shows MW-3 to be upgradient towards the Unocal site. MW-6 is located on Chevron property. MW-2 is located cross-gradient to MW-6. MW-8's location is not shown.

**Results:** All of the wells contain some gasoline. Blank-corrected concentrations are shown in the following table.

Well	mg/L (ppm) gasoline, duplicate
MW-2	1.6, 3.5
MW-3	2.4, 1.9
MW-6	0.6, 0.4
MW-8	0.04, 4.7

The gasoline in the wells appears to be present as entrained material (microscopic bubbles, coated dust particles) rather than dissolved hydrocarbon. This observation is supported by the dramatic changes in concentration between duplicates, especially for MW-8. The lack of prominent BTEX peaks also suggests entrainment, although it could also be attributed to preferential biodegradation of aromatics.

Fingerprints from wells MW-2, MW-3 and MW-8 have an identical pattern, with prominent peaks in the C<sub>9</sub> to C<sub>12</sub> region. A few of these peaks appear to be the aromatic compounds generically typical of gasolines. Many of the peaks cannot be identified without GC/MS analysis. The MW-6 fingerprints contain these same compounds, but not always in the same ratios.

There are no compounds in the gasolines that definitively link them with Unocal. However, there are four compounds that occur in all of the sample gasolines that are present in moderate to high concentrations in coker gasoline and not typically present in other gasoline blending stocks. Tentative identifications for two of these peaks are 1-nonene and 1-undecene. Unocal refineries at Rodeo, CA and Santa Maria, CA both have cokers. Chevron's Richmond refinery does not currently have a coker. This suggests that all four wells contain traces of a Unocal plume.

*over?*

Analytical Approach: The samples were extracted with carbon disulfide and analyzed by gas chromatography using a flame ionization detector to determine the hydrocarbon composition. Total extractable petroleum hydrocarbon was quantified by an ethylcyclohexane internal standard.

Analyzed by: N. Berkowitz

Reported by: E. A. Harvey *E.A.H.*

Reviewed by: J. Kimberlin *J.K.*

KLKan

AWVerstuyft

DCYoung

JKimberlin

NBerkowitz

EHarvey

ECDfile

Tech.files 300.6110

### Request for Environmental Analysis and Chain of Custody

Chevron U.S.A. Inc.

To E. A. Harvey Chevron Research Company, Environmental Analysis Lab, Room 54-1114 576 Standard Avenue, Richmond, CA 94802		(Phone: 415-620-4993)	Date 4-7-94
Requestor (Chevron) <i>Kenneth Kan</i>		Phone CTN 842-8752	
Company, Department <i>CHEVRON U.S.A. PRODUCTS COMPANY, SAR GROUP</i>		Charge Code 3 465R 60092013	
Address <i>2410 Camino Ramon, P.O. Box 5004, San Ramon, CA 94583-0804</i>			
Sampler <i>Hector Merino</i>		Phone 510 671-2387	
Company, Address <i>GROUNDWATER TECHNOLOGY, INC., 4057 FORT CHICAGO HWY, CONCORD, CA 94520</i>			
Sampling Location (Address) <i>15002 HESPERIAN BLVD., SAN LEANDRO, CALIFORNIA (CHEVRON STATION 9-2013)</i>			
<input checked="" type="checkbox"/> Service Station <input type="checkbox"/> Fuel Terminal <input type="checkbox"/> Marine Terminal <input type="checkbox"/> Pipeline <input type="checkbox"/> Refinery <input type="checkbox"/> Other _____			
<input checked="" type="checkbox"/> Chevron <input type="checkbox"/> Gulf <input type="checkbox"/> BP <input type="checkbox"/> Cumberland Farms <input type="checkbox"/> Other _____			
Type of Analysis Desired <input checked="" type="checkbox"/> Identify Product <input type="checkbox"/> Compare Spill with Potential Sources (Send Source Samples) <input type="checkbox"/> Compare Samples with Previous Analyses. Log Numbers and/or Dates: _____ <input type="checkbox"/> EPA Method(s) _____ (Call 415-620-4993 for Approval) <input type="checkbox"/> Other _____			
Reason for Request (Clearly State Problem, Site History, Draw or Enclose a Map) <i>UNOCAL'S PLUME MAY HAVE OR PROBABLY REACHED THE CHEVRON SITE. DOES MW-6, MW-3, MW-2, AND MW-8 (CHEVRON ON-SITE WELLS) CONTAIN UNOCAL PRODUCT? FOR ADDITIONAL INFORMATION, REFER TO GROUNDWATER TECHNOLOGY'S, Nov. 23, 1993 GROUNDWATER REPORT AND LAW ENVIRONMENTAL SITE PLAN THAT ARE ATTACHED TO THIS FORM.</i>			
Sample Name/Number  MW-2 mw-3 mw-6 mw-8	Date Sampled 4-5-94 ↓ ↓ ↓	Sampled by Hector Merino ↓ ↓	
Transporter <i>Clayton Gonzales</i>	Date Received 4-7-94	Initials CIG	
Laboratory Chevron Research	Date Received 4-7-94	Initials NB	
Minimum Sample: Hydrocarbon - 1 pint; Water - 1 quart; Soil - 8 ounce.			
It is the shipper's responsibility to insure federal D.O.T. regulations are complied with. Consultation with a Chevron Regional Transport Specialist is MANDATORY prior to air shipment. Contact your Chevron Representative or call the Hazmat Help Line (415) 894-3481 for assistance.			
When in doubt, assume the sample is flammable.			

**OSHA HAZARD WARNING ON REVERSE SIDE**



**Correspondence**  
**Chevron Service Station #9-2013**  
**15002 Hesperian Boulevard, San Leandro**  
**November 2, 1994 (ACHCS)**



X

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
Director



STID 770

ALAMEDA COUNTY CC4580  
DEPT. OF ENVIRONMENTAL HEALTH  
DIV. OF ENVIRONMENTAL PROTECTION  
1131 HARBOR BAY PKWY., #250  
ALAMEDA CA 94502-6577

November 2, 1994

Mr. Kenneth Kan  
Chevron U.S.A. Products Company  
P.O. Box 5004  
San Ramon, CA 94583-0804

RE: CHEVRON SERVICE STATION #9-2013, 15002 HESPERIAN BOULEVARD,  
SAN LEANDRO

Dear Mr. Kan:

Attached please find a copy of recent correspondence with enclosure from Unocal Corporation presenting their evaluation of Chevron's previous "fingerprint" analysis of fuel compounds in water sampled from four of the Chevron wells. Chevron had concluded from their evaluation the likelihood that the plume originating from the nearby Unocal site (15008 E. 14th Street) had impacted the Chevron site. Unocal's evaluation appears to discount that conclusion.

As has been articulated in the past, once the latest phase of the investigation at the nearby former Mobil site (14994 E.14th Street) has been completed, a meeting will be scheduled to discuss appropriate corrective action.

Please contact me at 510/567-6783, or -6700, should you have any questions or comments.

Sincerely,

Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

attachment

- cc: Rafat A. Shahid, Director, Environmental Services
- Gil Jensen, Alameda County District Attorney's Office
- Mike Bakaldin, San Leandro Fire Department
- Ed Laudani, Alameda County Fire Department
- Ed Ralston, Unocal Corporation
- Steve Pao, Mobil Oil Company
- Paul Feldman, Davis, Malm & D'Agostine
- One Boston Place, Boston, MA 02108-4470

Unocal Corporation  
2000 Crow Canyon Place, Suite 400  
San Ramon, California 94583  
Telephone (510) 867-0706  
Facsimile (510) 277-2309

ALCO  
HAZMAT

94 NOV -1 P11 2:22



October 24, 1994

Mr. Scott Seery  
Alameda County Health Care  
Services Agency  
Hazardous Materials Division  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, California 94502

UNOCAL SERVICE STATION #3292  
15008 East 14th Street  
San Leandro, California

Northern Region  
Corporate Environmental  
Remediation & Technology

Dear Mr. Seery:

Please find enclosed a copy of Unocal's response to Chevron's evaluation of fuel compounds found in groundwater at their site. Chevron's report was evaluated by our forensic geochemist, Dr. Bob Haddad. As the report suggests, Chevron's method of fingerprinting is somewhat questionable. In addition, Chevron's identification of "coker" compounds actually implicates Chevron as the source of contamination, rather than Unocal as Chevron has previously suggested. Therefore, it is Unocal's opinion that Chevron should continue as a responsible party for the investigation and remediation of petroleum hydrocarbon contamination.

Should you have any question regarding this matter, please feel free to contact me at (510) 277-2311.

Sincerely,

Edward C. Ralston  
Senior Environmental Geologist

cc: R.D. Sisk, UNOCAL  
R.H. Kezerian, KEI

Memorandum

**UNOCAL** 76

RECEIVED

CERT  
Brea, California

OCT 13 1994

October 5, 1994

ENV 94-500

TO: E. A. Ralston

FROM: R. I. Haddad

*R.I. Haddad*

RESPONSE TO THE CHEVRON RESEARCH  
AND TECHNOLOGY COMPANY ANALYTICAL  
SCIENCES UNIT PROJECT SUMMARY,  
PROJECT #5767

At your request, I have reviewed the data and conclusions presented in the Chevron Research and Technology Company Analytical Sciences Unit Project Summary (Chevron project #5767, completed 5/5/94) and the associated May 10, 1994, letter by Mr. Kenneth Kau of Chevron U.S.A. Products Company.

I have several questions regarding this Summary. The first one concerns the analytical approach; it is unclear whether the method used employed a purge and trap type extraction/injection procedure. This method is necessary when dealing with samples having low boiling point ranges (e.g., gasoline). If the extraction procedure involved any type of solvent removal (e.g., solvent blow down, roto-evaporation, etc.), then it is certain that compounds with boiling points < nC8 have not been quantitatively recovered.

The concentration of BTEX compounds present in the samples will be directly related to the analytical approach. Assuming a purge and trap method was used, the lack of prominent BTEX would most likely be due to differential solubility and migration of these compounds. Comparison of internal ratios (e.g., B/T, B/X, etc.) could be used to evaluate the "degree of environmental weathering" in these samples. I am unclear whether the conclusions that "the gasoline . . . appears to be present as entrained material (microscopic bubbles, coated dust particles) rather than dissolved hydrocarbon" is based on direct observation of these microscopic bubbles in coated dust particles or is offered as a way to explain the poor reproducibility of their results. (As an aside, if purge and trap was not used, differences in the degree to which the solvent is removed for the samples prior to analysis could very likely account for the poor reproducibilities noted in the summary.) In order to further evaluate the data, I would need to have a more detailed account of the analytical approach.

My second concern regards the logic used in the Summary's conclusions. It appears clear that the conclusion was driven by a preconceived notion. The language used in the Reason for Request portion of the Request for Environmental Analysis and Chain of Custody clearly indicates this bias.

RESPONSE TO THE CHEVRON RESEARCH  
AND TECHNOLOGY COMPANY ANALYTICAL  
SCIENCES UNIT PROJECT SUMMARY,  
PROJECT #5767

Page 2

The most troubling aspect of the Summary is the assumption that because (1) coker gas oil contains olefins, (2) Unocal has coker facilities, and (3) olefins may be present in these samples, then the product must belong to Unocal. Unocal gasoline delivered to the San Leandro site does come from the San Francisco Refinery (Rodeo). However, as should be obvious to those familiar with refining processes, the coker gas oil is not blended directly into finished gasoline. Rather is run through a hydrotreating unit to refine the stream. The use of the hydrogenation unit means that gasoline derived from this treatment contains no olefinic compounds. This lack of olefins in the finished gasoline from SFR is somewhat unique as most major refineries use a FCC unit (a catalytic process) to work the streams. This catalytic process produces olefins which do show up in the finished gasoline. It might be useful to evaluate Chevrons product with respect to the level of olefin concentration present. The point being that the use of coker gas oil is not the most significant source of olefins in finished gasoline. Rather, it appears that olefin content in the finished gasoline is more likely a function of whether the refinery is using a hydrogenation unit or a FCC unit to help finish the gasoline streams.

In closing, I would like to see a more detailed discussion of the analytical approach used in this study. Assuming valid results, I would then like to see the gas chromatograms to evaluate the validity of the identifications (the summary noted no GC/MS was used). This latter point is important for two reasons. First, the C9 - C12 range of gasoline gas chromatogram is quite crowded and I have not seen 1-nonene and 1-decene in any finished products or free products. Second, the presence of these olefinic compounds in what appears to be a weathered product is interesting since these compounds are usually among the most reactive compounds with respect to both biotic (microbial) and abiotic processes.

If you have any questions, please do not hesitate to contact me at (714) 577-1484.

RIH/cs

xc: B. J. Kelly  
G. T. Ririe

**Selected Text from the Remedial Action Completion Certification  
Chevron Station #9-2013  
15002 Hesperian Boulevard, San Leandro  
July 27, 1999 (ACHCSA)**



ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

July 27, 1999

ENVIRONMENTAL HEALTH SERVICES  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
(510) 337-9335 (FAX)

STID 770

Philip Briggs  
Chevron Products Company  
P.O. Box 6004  
San Ramon, CA 94583-0904

RE: (Former) Chevron Station #9-2013, 15002 Hesperian Boulevard, San Leandro

Dear Mr. Briggs:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]) of the California Health and Safety Code. The State Water Resources Control Board (SWRCB) has required since March 1, 1997 that this agency use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at this site.

**SITE INVESTIGATION AND CLEANUP SUMMARY**

Please be advised that the following conditions exist at the site:

- o Up to 1000 micrograms per liter (ug/l) Total Petroleum Hydrocarbons as Gasoline (TPH-G) and 64 ug/l methyl tert-butyl ether (MtBE) are present in groundwater beneath the site.

If you have any questions, please contact the undersigned at (510) 567-6783.

Sincerely,

Scott O. Seery, CHMM  
Hazardous Materials Specialist

Enclosures:

1. Case Closure Letter
2. Case Closure Summary

cc: Dick Pantages, Chief  
Ui Chin Hwang, 15018 Hesperian Blvd., San Leandro, CA 94578

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**

**I. AGENCY INFORMATION**

Date: 03/22/99

Agency name: **Alameda County-EPD**  
City/State/Zip: **Alameda, CA 94502**  
Responsible staff person: **Scott Seery**

Address: **1131 Harbor Bay Pkwy #250**  
Phone: **(510) 567-6700**  
Title: **Haz. Materials Spec.**

**II. CASE INFORMATION**

Site facility name: **Chevron Service Station #9-2013**  
Site facility address: **15002 Hesperian Blvd., San Leandro 94578**  
RB LUSTIS Case No: **N/A**                      Local Case No./LOP Case No.: **770**  
URF filing date: **04/17/84**                      SWEEPS No: **N/A**

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Chevron Products Co. <u>Attn:</u> Phil Briggs	P.O. Box 6004 San Ramon, CA 94583-0904	(925) 842-9136
Estate of G.W. Scheffer	P.O. Box 173 San Jose, CA 95103	

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	10,000 gal	gasoline	Removed	~ 1984
2	10,000 "	"	"	"
3	5,000 "	"	"	"
4	1,000	waste oil	"	"
5	1,000	" "	"	1998

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: UNK (possible line leak)

Site characterization complete? YES

Date approved by oversight agency:

Monitoring Wells installed? YES      Number: 8

Proper screened interval? YES

Highest GW depth below ground surface: 7.6'      Lowest depth: 15.09'

Flow direction: SW - SE

Most sensitive current use: commercial/retail



Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Are drinking water wells affected? NO Aquifer name: San Leandro Cone

Is surface water affected? NO Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): NA

Report(s) on file? YES Where is report filed? Alameda County  
1131 Harbor Bay Pkwy  
Alameda CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	2x10K; 5K; 1K gals. 1,000 gals.	UNK Disposal – Erickson, inc. Richmond, CA	8/84 10/30/98
Piping	UNK	UNK	
Free Product	"	"	
Soil	"	"	
Groundwater	4700 gals.	Disposal – I.T. Corp. Martinez, CA	8/7/84

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)<sup>1,2,5</sup></u>		<u>Water<sup>3,4</sup> (ppb)</u>	
	<u>Before</u>	<u>After</u>	<u>Before</u>	<u>After</u>
TPH (Gas)	UNK	<10	12,000	1000
TPH (Diesel)	"	NA	NA	NA
Benzene	"	<0.3	120	<0.5
Toluene	"	<0.3	110	<0.5
Xylene	"	<0.3	130	<0.5
Ethylbenzene	"	<0.3	110	<0.5
Other (MtBE)	"	NA	NA	64

- Notes:
- 1) "Before" soil results reflect the (presumed) August 1984 tank removals for which no documentation could be located by the local agencies and Chevron.
  - 2) "After" soil results reflect soil samples collected during installation of wells MW-6, -7, and -8, the only soil samples for which there are available results.
  - 3) "Before" water results from samples collected December 8, 1987 from well MW-5.
  - 4) "After" water results reflect May 15, 1998 sampling event, as follows: TPH-G from well MW-6; MtBE from well MW-2; BTEX reflects data from all wells.
  - 5) Samples collected during the 1998 waste oil UST closure were analyzed for TPH-G, TPH-D, BTEX, MtBE, TOG, HVOC, and SVOC. No detectable target compounds were identified except for 504-ppm bis(2-ethylhexyl)phthalate.

### Leaking Underground Fuel Storage Tank Program

#### Comments (Depth of Remediation, etc.):

Available information indicates four USTs were removed from this site sometime during or around August 1984. A tank closure report or similar document could not be located by the City of San Leandro Fire Department, this agency, or Chevron at the time of this writing.

The original tanks were reportedly installed in 1969, and were comprised of two (2) 10,000 and one 5,000 gallon gasoline, and one 1,000-gallon waste oil UST. These early tanks were reportedly replaced in 1984 with three (3) 10,000-gallon gasoline and one 1000-gallon waste oil USTs. All replacement tanks were comprised of fiberglass-reinforced plastic (FRP). It is unknown if the USTs are of single- or double-walled construction, as conflicting accounts have been presented.

The 1000-gallon waste oil tank, along with the hydraulic lifts and oil/water separator, were removed from the site during October 1998 under San Leandro Fire Department oversight. The condition of the tank was sound, and the sample results unremarkable. Excavated soil was returned to the tank pit. The fuel tanks remain in-place at the site.

#### IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? \_\_\_\_\_

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? \_\_\_\_\_

Does corrective action protect public health for current land use? YES  
Site management requirements: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommissioned: NO

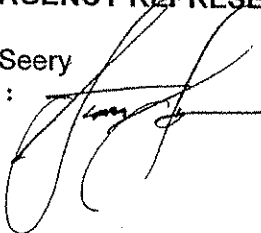
Number Decommissioned: NA Number Retained: 8

List enforcement actions taken: NONE

List enforcement actions rescinded: NONE

#### V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Scott Seery

Signature: 

Title: Haz Mat Specialist

Date: 4-12-99

Leaking Underground Fuel Storage Tank Program

V. LOCAL AGENCY REPRESENTATIVE DATA (Continued)

Reviewed by

Name: Tom Peacock Title: Supervising Haz Mat Specialist

Signature: *Tom Peacock* Date: 4-9-99

Name: Don Hwang Title: Haz Mat Specialist

Signature: *Don Hwang* Date: 3/31/99

VI. RWQCB NOTIFICATION

Date Submitted to RB: 4-12-99 RB Response:  
RWQCB Staff Name: Chuck Headlee Title: San. Eng. Assoc. Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

The record reflects that five (5) wells were initially installed at the site during 1983, reportedly in response to a line leak that occurred in April of that year. These wells were reportedly monitored solely for the presence of free product (FP). Boring logs are, at best, rudimentary in their descriptions. Nevertheless, all encountered sediments are reportedly comprised of clay or silty clay to the depths explored. "Vapors" (presumably hydrocarbon vapors) were noted on logs for well borings MW-2, -3, -4, and -5 at depths of ~ 13-14' BG. The occurrence of these "vapors" appears consistent with the interception of the interface between the saturated and unsaturated zones. Soil samples were not collected. The wells were monitored twice in July 1983, and then weekly for two months in 1984 for the presence of FP. In each instance, no FP was reportedly detected. These wells were not sampled again until 1987.

In December 1987, the 5 original wells were sampled, perhaps for the first time where data were reported. Up to 12,000-ug/l total "fuel" hydrocarbons (TFHC) and 120-ug/l benzene, among other aromatic fuel components, were identified in water sampled from well MW-5 located NW of the fuel dispensers. Water sampled from apparent downgradient wells MW-2 and -3 also exhibited elevated concentrations of TFHC of up to 4000 ug/l and benzene of up to 80 ug/l during this sampling event.

In May 1988, three (3) additional wells were installed, two (MW-7 and -8) within Hesperian Blvd. and one (MW-6) on-site. All wells were sampled at this time.

In October 1990, three wells were installed by others on the property south and east of the Chevron site to assess plumes from several sources. One such well (MW-1 aka "MW-A") was installed south and in close proximity to the Chevron UST cluster. Detectable concentrations of total petroleum hydrocarbons as gasoline (TPH-G) and ethylbenzene (E) were identified in water sampled from this well at that time. Soil samples were not collected. Beginning in 1995, Chevron began collecting samples from this well. Only low levels or non-detectable concentrations of fuel compounds were identified in samples collected from well MW-A through August 1998.

### Leaking Underground Fuel Storage Tank Program

All Chevron wells were also sampled and monitored through August 1998, beginning with a quarterly schedule in 1987 and 1988, reduced to a semi- or annual scheduled thereafter in select wells. Diminishing trends in dissolved phase fuel compounds have been identified in samples collected since 1987. Groundwater flow was predominantly calculated towards the south over the course of the investigation, with periodic swings from SW to SE.

This case appears to be a "Low Risk Groundwater Case", as described in the January 5, 1996 San Francisco Bay Regional Water Quality Control memorandum entitled "*Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Sites,*" as follows:

**1) The leak has been stopped and ongoing sources, including free product, have been removed or remediated.**

The subject tanks were removed in 1984. Free product has not been known to occur at the site.

**2) The site has been adequately characterized.**

An 8-well network of wells was installed, monitored, and sampled over the course of several years. An additional well was installed on the adjoining property downgradient of the site. These points have allowed an adequate confirmation of underlying geology, groundwater flow, and contaminant extent.

**3) The dissolved hydrocarbon plume is not migrating.**

The plume appears stable. Hydrocarbon concentrations have attenuated over time.

**4) No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted.**

There are no known municipal or residential water wells or surface water bodies within 750' downgradient of the subject site that would be impacted by shallow groundwater from this site.

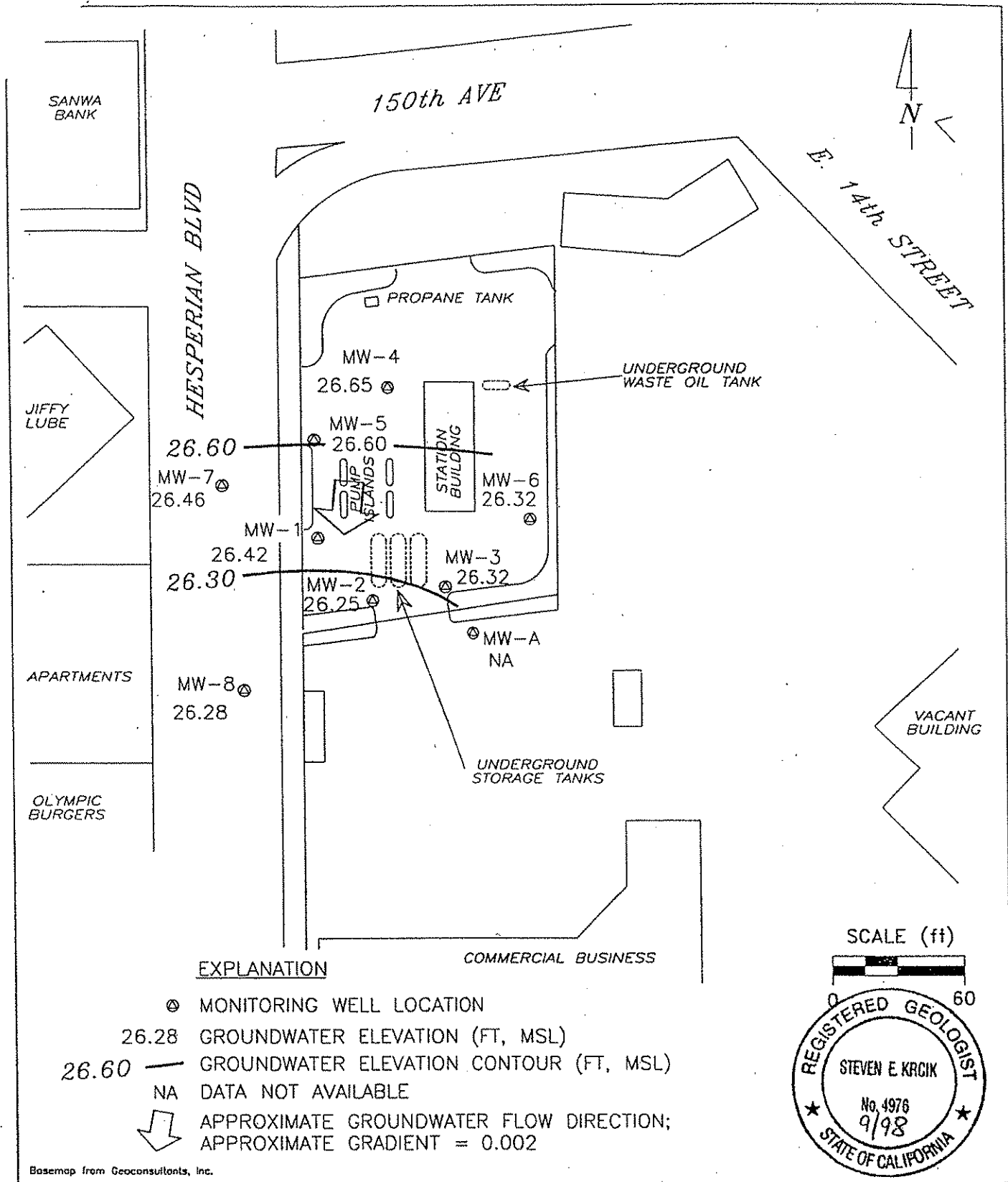
**5) The site presents no significant risk to human health.**

Comparison of ASTM E 1739-95 *Risk Based Screening Levels (RBSL)* with site-specific concentration and occurrence of risk-driving target compounds (e.g., benzene) in groundwater demonstrate that RBSL values are not exceeded for any plausible exposure pathways. Further, default criteria used to calculate the published RBSLs present more conservative parameters, as site-specific geology (clay) is much less conducive to vertical vapor transport to potential receptors at the site.

Sparse soil data have been presented to date. However, inference may be reasonably made that a substantial and, hence, potential risk-inducing soil source is not present at the site based on diminishing concentrations of target compounds in groundwater sampled since the late 1980s.

**6) The site presents no significant risk to the environment.**

No environmental receptors are known or expected to be proximal to the site.



Base map from Geoconsultants, Inc.

PREPARED BY

**RRM**  
engineering contracting firm

**Chevron Station 9-2013**  
15002 Hesperian Boulevard  
San Leandro, California

**GROUNDWATER ELEVATION CONTOUR MAP,  
AUGUST 12, 1998**

FIGURE:

1

PROJECT:  
DAC04

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-1</b>												
12/08/87	35.77	23.84	11.93	--	--	--	--	--	--	--	--	--
05/23/88	35.77	24.23	11.54	--	--	--	--	--	--	--	--	--
06/07/88	35.77	24.10	11.67	--	<1000	7.0	4.6	1.1	20	--	--	--
08/05/88	35.77	23.18	12.59	--	--	--	--	--	--	--	--	--
09/08/88	35.77	22.81	12.96	--	600	0.91	<1.0	7.0	18	--	0.2	<0.1
12/05/88	35.77	22.69	13.08	--	2200	16	5.0	150	250	--	<1.0	<1.0
12/05/88	35.77	22.69	13.08	--	2700	16	5.0	170	330	--	<1.0	<1.0
03/14/89	35.77	24.11	11.66	--	3900	11	2.1	66	150	--	--	--
06/13/89	35.77	23.82	11.95	--	3000	2.0	1.0	23	51	--	--	--
09/13/89	35.77	22.55	13.22	--	1400	0.8	2.0	6.0	9.0	--	--	--
12/13/89	35.77	22.59	13.18	--	870	4.0	2.0	7.0	14	--	--	--
03/13/90	35.77	23.49	12.28	--	870	1.0	<0.3	7.0	13	--	--	--
10/11/90	35.77	22.06	13.71	--	2100	4.5	4.3	19	84	--	--	--
04/05/91	35.77	24.49	11.28	--	6000	19	12	86	130	--	--	--
10/30/91	35.77	21.77	14.00	--	3800	360	31	18	17	--	--	--
04/23/92	35.77	24.98	10.79	--	320	30	1.4	1.6	1.7	--	--	--
07/20/92	35.77	23.82	11.95	--	1100	25	4.4	3.6	4.9	--	--	--
10/30/92	35.77	22.53	13.24	--	1300	6.0	8.0	4.2	7.0	--	--	--
01/20/93	35.77	26.07	9.70	--	1000	7.7	3.1	4.9	7.2	--	--	--
04/30/93	35.77	26.64	9.13	--	960	1.8	4.3	4.1	6.8	--	--	--
08/06/93	35.77	25.22	10.55	--	950	<1.0	1.9	2.2	1.9	--	--	--
10/22/93	35.77	24.39	11.38	--	920	1.4	1.3	0.7	6.0	--	--	--
01/25/94	35.77	24.63	11.14	--	6000	<2.5	12	18	60	--	--	--
04/05/94	35.77	25.43	10.34	--	480	1.5	5.3	5.5	7.9	--	--	--
07/01/94	35.77	24.81	10.96	--	1000	0.9	8.5	9.7	29	--	--	--
02/13/95	35.77	--	--	Inaccessible	--	--	--	--	--	--	--	--
05/10/95	35.77	27.01	8.76	--	270	0.72	2.0	1.3	4.3	--	--	--
08/02/95	35.77	26.06	9.71	--	310	2.0	<1.2	5.4	6.2	--	--	--
05/08/96	35.77	26.77	9.00	--	<50	<0.5	<0.5	<0.5	<0.5	3.8	--	--
11/07/96	35.77	25.01	10.76	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
05/07/97	35.77	26.53	9.24	--	190	0.6	<0.5	1.6	<0.5	<2.5	--	--
11/04/97	35.77	24.42	11.35	--	81	<0.5	<0.5	<0.5	<0.5	16	--	--
05/15/98	35.77	27.66	8.11	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	35.77	26.42	9.35	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-2</b>												
12/08/87	35.00	24.21	10.79	--	--	--	--	--	--	--	--	--
05/23/88	35.00	24.20	10.80	--	--	--	--	--	--	--	--	--
06/07/88	35.00	24.07	10.93	--	<1000	52	5.8	13	12	--	--	--
08/05/88	35.00	23.14	11.86	--	--	--	--	--	--	--	--	--
09/08/88	35.00	22.74	12.26	--	600	1.0	<10	<10	<10	--	<1.0	<1.0
09/08/88	35.00	22.74	12.26	--	400	1.3	<1.0	<1.0	<1.0	--	<0.1	<0.1
12/05/88	35.00	22.63	12.37	--	<100	<0.5	<1.0	2.0	<1.0	--	<1.0	<1.0
03/14/89	35.00	24.00	11.00	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	35.00	23.78	11.22	--	<500	0.7	<0.5	2.0	3.0	--	--	--
09/13/89	35.00	22.47	12.53	--	<500	0.5	1.0	<0.5	0.8	--	--	--
12/13/89	35.00	22.55	12.45	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
03/13/90	35.00	23.47	11.53	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
10/11/90	35.00	22.05	12.95	--	<50	<0.5	0.6	0.7	1.1	--	--	--
04/05/91	35.00	24.48	10.52	--	160	1.3	<0.5	0.7	0.8	--	--	--
10/30/91	35.00	21.38	13.62	--	69	3.0	<0.5	<0.5	<0.5	--	--	--
10/30/91	35.00	21.38	13.62	--	81	7.4	<0.5	<0.5	<0.5	--	--	--
04/23/92	35.00	24.92	10.08	--	250	53	29	3.5	11	--	--	--
07/20/92	35.00	23.78	11.22	--	690	94	6.6	5.5	4.7	--	--	--
10/30/92	35.00	22.48	12.52	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
01/20/93	35.00	26.00	9.00	--	780	<0.5	1.7	12	10	--	--	--
04/30/93	35.00	26.51	8.49	--	720	8.7	1.8	4.7	5.1	--	--	--
08/06/93	35.00	25.08	9.92	--	780	2.4	1.2	2.6	3.4	--	--	--
10/22/93	35.00	24.30	10.70	--	1700	38	53	11	80	--	--	--
01/25/94	35.00	24.52	10.48	--	600	1.1	1.9	2.4	3.7	--	--	--
04/05/94	35.00	25.35	9.65	--	970	6.0	<0.5	4.5	8.2	--	--	--
07/01/94	35.00	24.73	10.27	--	940	4.0	5.0	4.9	13	--	--	--
02/13/95	35.00	26.76	8.24	Sampled annually	--	--	--	--	--	--	--	--
05/10/95	35.00	26.85	8.15	--	--	--	--	--	--	--	--	--
08/02/95	35.00	25.92	9.08	--	260	<1.0	<1.0	<1.0	1.2	--	--	--
05/08/96	35.00	26.59	8.41	--	120	<0.5	<0.5	<0.5	<0.5	4.6	--	--
11/07/96	35.00	24.92	10.08	--	--	--	--	--	--	--	--	--
05/07/97	35.00	26.95	8.05	--	160	<0.5	<0.5	<0.5	<0.5	9.3	--	--
11/04/97	35.00	24.30	10.70	--	--	--	--	--	--	--	--	--
05/15/98	35.00	27.37	7.63	--	<50	<0.5	<0.5	<0.5	<0.5	64	--	--
05/15/98	35.00	27.37	7.63	Confirmation run	--	--	--	--	--	26	--	--
08/12/98	35.00	26.25	8.75	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.				Analytical results are in parts per billion (ppb)								
DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-3</b>												
12/08/87	36.17	23.86	12.31	--	--	--	--	--	--	--	--	--
05/23/88	36.17	25.35	10.82	--	--	--	--	--	--	--	--	--
06/07/88	36.17	24.07	12.10	--	--	--	--	--	--	--	--	--
08/05/88	36.17	23.13	13.04	--	<1000	6.3	13	23	220	--	--	--
09/08/88	36.17	22.76	13.41	--	--	--	--	--	--	--	--	--
12/06/88	36.17	22.67	13.50	--	2000	1.2	<1.0	38	100	--	<0.1	<0.1
03/14/89	36.17	24.02	12.15	--	3000	10	<10	250	740	--	<10	<10
06/13/89	36.17	23.77	12.40	--	600	1.4	<0.5	8.7	17	--	--	--
09/13/89	36.17	22.49	13.68	--	10,000	9.0	6.0	290	530	--	--	--
12/13/89	36.17	22.59	13.58	--	8100	4.0	3.0	86	210	--	--	--
03/13/90	36.17	23.48	12.69	--	2600	20	<0.3	91	170	--	--	--
10/11/90	36.17	22.06	14.11	--	4200	17	<0.3	130	200	--	--	--
10/11/90	36.17	22.06	14.11	--	9800	3.0	28	380	640	--	--	--
04/05/91	36.17	24.52	11.65	--	9800	<3.0	12	430	720	--	--	--
04/05/91	36.17	24.52	11.65	--	120,000	<60	200	630	970	--	--	--
10/30/91	36.17	21.81	14.36	--	96,000	<15	92	420	570	--	--	--
04/23/92	36.17	24.93	11.24	--	5100	<0.5	8.8	66	73	--	--	--
07/20/92	36.17	23.79	12.38	--	590	<0.5	1.6	1.1	0.6	--	--	--
10/30/92	36.17	22.49	13.68	--	2100	12	3.5	25	21	--	--	--
01/20/93	36.17	26.01	10.16	--	2900	8.1	8.0	23	20	--	--	--
04/30/93	36.17	26.53	9.64	--	420	42	3.8	3.1	2.3	--	--	--
08/06/93	36.17	25.12	11.05	--	340	1.7	0.9	<0.5	<1.5	--	--	--
10/22/93	36.17	24.31	11.86	--	3000	<1.0	8.8	7.7	6.1	--	--	--
01/25/94	36.17	24.51	11.66	--	3000	3.6	3.4	<0.5	6.2	--	--	--
04/05/94	36.17	25.35	10.82	--	5600	8.2	15	18	34	--	--	--
07/01/94	36.17	24.74	11.43	--	1700	50	32	24	31	--	--	--
02/13/95	36.17	26.84	9.33	--	3800	1.3	16	12	20	--	--	--
05/10/95	36.17	26.91	9.26	--	1700	<2.5	<2.5	4.0	5.4	--	--	--
08/02/95	36.17	25.97	10.20	--	20,000	<5.0	<5.0	<5.0	<5.0	--	--	--
05/08/96	36.17	26.64	9.53	--	1700	<10	<10	<10	<10	--	--	--
11/07/96	36.17	24.73	11.44	--	720	<1.0	1.8	1.3	2.0	52	--	--
05/07/97	36.17	26.80	9.37	--	1400	<1.2	<1.2	<1.2	6.9	7.9	--	--
11/04/97	36.17	24.42	11.75	--	1500	9.7	<2.0	3.7	<2.0	<10	--	--
05/15/98	36.17	27.42	8.75	--	1300	16	7.4	<2.0	3.6	21	--	--
08/12/98	36.17	26.32	9.85	--	400	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
					320	<0.5	2.1	<0.5	<0.5	<2.5	--	--



## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-4</b>												
12/08/87	36.05	24.33	11.72	--	--	--	--	--	--	--	--	--
05/23/88	36.05	24.44	11.61	--	--	--	--	--	--	--	--	--
06/08/88	36.05	24.11	11.94	--	<1000	<0.5	31	1.0	1.1	--	--	--
08/05/88	36.05	23.25	12.80	--	--	--	--	--	--	--	--	--
09/08/88	36.05	22.86	13.19	--	1300	<0.1	<1.0	<1.0	<1.0	--	<0.1	<0.1
12/06/88	36.05	22.74	13.31	--	100	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0
03/14/89	36.05	24.17	11.88	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	36.05	23.86	12.19	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
09/13/89	36.05	22.56	13.49	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
12/13/89	36.05	22.72	13.33	--	140	<0.3	<0.3	<0.3	<0.6	--	--	--
03/13/90	36.05	24.56	11.49	--	210	<0.3	<0.3	<0.3	<0.6	--	--	--
10/11/90	36.05	22.12	13.93	--	370	<0.5	2.8	1.9	3.9	--	--	--
04/05/91	36.05	24.63	11.42	--	790	<0.5	1.6	1.6	2.3	--	--	--
10/30/91	36.05	21.62	14.43	--	510	<0.5	0.5	<0.5	<0.5	--	--	--
04/23/92	36.05	25.12	10.93	--	880	6.6	7.0	5.9	11	--	--	--
07/20/92	36.05	23.91	12.14	--	500	<0.5	1.2	0.6	2.2	--	--	--
10/30/92	36.05	22.60	13.45	--	750	<0.5	1.4	6.0	21	--	--	--
01/20/93	36.05	26.29	9.76	--	280	<0.5	<0.5	<0.5	<0.5	--	--	--
04/30/93	36.05	26.86	9.19	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
08/06/93	36.05	25.37	10.68	--	580	<1.0	12	<1.0	<3.0	--	--	--
10/22/93	36.05	24.51	11.54	--	<50	<0.5	0.6	<0.5	<1.5	--	--	--
01/25/94	36.05	24.68	11.37	--	1200	2.0	5.4	5.5	8.2	--	--	--
04/05/94	36.05	25.54	10.51	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/01/94	36.05	24.91	11.14	--	350	<0.5	<0.5	<0.5	<0.5	--	--	--
02/13/95	36.05	27.10	8.95	Sampled annually	--	--	--	--	--	--	--	--
05/10/95	36.05	27.19	8.86	--	--	--	--	--	--	--	--	--
08/02/95	36.05	26.15	9.90	--	130	<0.5	<0.5	<0.5	<0.5	--	--	--
05/08/96	36.05	26.95	9.10	--	<50	<0.5	0.63	<0.5	<0.5	7.5	--	--
11/07/96	36.05	25.27	10.78	--	--	--	--	--	--	--	--	--
05/07/97	36.05	27.07	8.98	--	120	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
11/04/97	36.05	24.58	11.47	--	--	--	--	--	--	--	--	--
05/15/98	36.05	27.78	8.27	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	36.05	26.65	9.40	--	--	--	--	--	--	--	--	--

### Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-5</b>												
12/08/87	35.65	23.61	12.04	--	--	--	--	--	--	--	--	--
05/23/88	35.65	24.26	11.39	--	--	--	--	--	--	--	--	--
06/08/88	35.65	24.17	11.48	--	<1000	<0.5	5.0	2.0	5.5	--	--	--
08/05/88	35.65	23.23	12.42	--	--	--	--	--	--	--	--	--
09/08/88	35.65	22.86	12.79	--	340	<0.1	<1.0	<1.0	<1.0	--	0.2	<0.1
12/06/88	35.65	22.69	12.96	--	<100	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0
03/14/89	35.65	24.07	11.58	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	35.65	23.85	11.80	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
09/13/89	35.65	22.54	13.11	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
12/13/89	35.65	22.35	13.30	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
03/13/90	35.65	23.53	12.12	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
10/11/90	35.65	22.09	13.56	--	<50	<0.5	<0.5	<0.5	1.0	--	--	--
04/05/91	35.65	24.56	11.09	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/30/91	35.65	21.53	14.12	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/23/92	35.65	25.07	10.58	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/20/92	35.65	23.87	11.78	--	<50	<0.5	<0.5	<0.5	0.7	--	--	--
10/30/92	35.65	22.57	13.08	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
01/20/93	35.65	27.21	8.44	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/30/93	35.65	26.80	8.85	--	<50	<0.5	0.5	<0.5	<1.5	--	--	--
08/06/93	35.65	25.30	10.35	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
10/22/93	35.65	24.46	11.19	--	<50	0.9	<0.5	<0.5	<1.5	--	--	--
01/25/94	35.65	24.63	11.02	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/05/94	35.65	25.50	10.15	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/01/94	35.65	24.86	10.79	--	110	<0.5	1.0	<0.5	0.8	--	--	--
02/13/95	35.65	26.99	8.66	Sampled annually	--	--	--	--	--	--	--	--
05/10/95	35.65	27.15	8.50	--	--	--	--	--	--	--	--	--
08/02/95	35.65	26.17	9.48	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
05/08/96	35.65	26.85	8.80	--	<50	<0.5	0.63	<0.5	<0.5	7.1	--	--
11/07/96	35.65	25.47	10.18	--	--	--	--	--	--	--	--	--
05/07/97	35.65	26.79	8.86	--	<50	<0.5	0.63	<0.5	<0.5	<2.5	--	--
11/04/97	35.65	24.48	11.17	--	--	--	--	--	--	--	--	--
05/15/98	35.65	27.73	7.92	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	35.65	26.60	9.05	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-6</b>												
06/08/88	36.92	24.02	12.90	--	<1000	<0.5	6.0	11	30	--	--	--
08/05/88	36.92	23.16	13.76	--	--	--	--	--	--	--	--	--
09/08/88	36.92	22.79	14.13	--	1200	0.6	<1.0	95	16	--	0.3	<0.1
12/06/88	36.92	22.64	14.28	--	600	0.7	<1.0	6.0	9.0	--	<0.1	<0.1
03/14/89	36.92	24.01	12.91	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	36.92	23.89	13.03	--	2000	<0.5	0.9	3.0	5.0	--	--	--
09/13/89	36.92	22.57	14.35	--	2300	1.0	3.0	0.9	3.0	--	--	--
12/13/89	36.92	22.53	14.39	--	870	5.0	1.0	2.0	1.0	--	--	--
03/13/90	36.92	23.16	13.76	--	1000	1.0	<0.3	1.0	1.0	--	--	--
10/11/90	36.92	22.04	14.88	--	370	<0.5	1.1	0.6	0.8	--	--	--
04/05/91	36.92	24.54	12.38	--	520	<0.5	1.0	1.0	<0.5	--	--	--
10/30/91	36.92	21.83	15.09	--	760	<0.5	1.6	0.9	<0.5	--	--	--
04/23/92	36.92	24.93	11.99	--	1000	30	22	7.4	32	--	--	--
07/20/92	36.92	23.78	13.14	--	400	<0.5	0.6	<0.5	0.5	--	--	--
10/30/92	36.92	22.47	14.45	--	420	2.3	1.3	<0.5	<0.5	--	--	--
01/20/93	36.92	26.12	10.80	--	580	4.3	0.7	1.1	0.8	--	--	--
04/30/93	36.92	26.56	10.36	--	750	<0.5	1.5	0.7	<1.5	--	--	--
08/06/93	36.92	25.17	11.75	--	1200	<0.5	2.9	0.6	<0.9	--	--	--
10/22/93	36.92	24.32	12.60	--	1100	8.7	1.1	0.6	<1.5	--	--	--
01/25/94	36.92	24.51	12.41	--	730	5.3	3.4	1.2	2.2	--	--	--
04/05/94	36.92	25.38	11.54	--	450	10	3.3	0.6	0.6	--	--	--
07/01/94	36.92	24.72	12.20	--	1000	1.6	6.6	0.8	1.8	--	--	--
02/13/95	36.92	26.72	10.20	--	870	<1.0	<1.0	<1.0	<1.0	--	--	--
05/10/95	36.92	26.88	10.04	--	690	<0.5	<0.5	<0.5	<0.5	--	--	--
08/02/95	36.92	26.02	10.90	--	1200	<2.0	<2.0	<2.0	<2.0	--	--	--
05/08/96	36.92	26.64	10.28	--	700	<5.0	<5.0	<5.0	<5.0	<25	--	--
11/07/96	36.92	25.64	11.28	--	450	5.5	<0.5	<0.5	<0.5	<2.5	--	--
05/07/97	36.92	26.44	10.48	--	1700	24.0	4.4	<1.0	<1.0	6	--	--
11/04/97	36.92	24.50	12.42	--	1400	<2.0	<2.0	<2.0	<2.0	15	--	--
05/15/98	36.92	27.47	9.45	--	1000	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	36.92	26.32	10.60	--	690	<0.5	<0.5	0.60	1.8	<2.5	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-7</b>												
06/08/88	35.71	24.05	11.66	--	<1000	<0.5	0.8	<0.5	<0.5	--	--	--
08/05/88	35.71	23.20	12.51	--	--	--	--	--	--	--	--	--
09/08/88	35.71	22.83	12.88	--	80	<0.1	<1.0	<1.0	<1.0	--	0.2	<0.1
12/06/88	35.71	22.65	13.06	--	<50	<0.1	<1.0	<1.0	<1.0	--	<0.1	<0.1
03/14/89	35.71	23.97	11.74	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	35.71	23.84	11.87	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
09/13/89	35.71	--	--	--	--	--	--	--	--	--	--	--
12/13/89	35.71	22.61	13.10	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
03/13/90	35.71	23.50	12.21	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
10/11/90	35.71	22.03	13.68	--	66	<0.5	0.8	1.5	3.0	--	--	--
04/05/91	35.71	24.44	11.27	--	260	0.6	0.9	0.7	1.1	--	--	--
10/30/91	35.71	21.61	14.10	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/23/92	35.71	24.97	10.74	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/20/92	35.71	23.82	11.89	--	<50	<0.5	<0.5	<0.5	0.7	--	--	--
10/30/92	35.71	22.51	13.20	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
01/20/93	35.71	26.13	9.58	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/30/93	35.71	26.67	9.04	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
08/06/93	35.71	25.26	10.45	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
10/22/93	35.71	24.37	11.34	--	<50	<0.5	0.7	<0.5	<1.5	--	--	--
01/25/94	35.71	24.57	11.14	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/05/94	35.71	25.46	10.25	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/01/94	35.71	25.04	10.67	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
02/13/95	35.71	27.00	8.71	Sampled annually	--	--	--	--	--	--	--	--
05/10/95	35.71	27.04	8.67	--	--	--	--	--	--	--	--	--
08/02/95	35.71	26.05	9.66	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
05/08/96	35.71	26.79	8.92	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
11/07/96	35.71	25.35	10.36	--	--	--	--	--	--	--	--	--
05/07/97	35.71	26.50	9.21	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
11/04/97	35.71	24.70	11.01	--	--	--	--	--	--	--	--	--
05/15/98	35.71	27.60	8.11	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	35.71	26.46	9.25	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-8</b>												
06/08/88	35.28	23.96	11.32	--	<1000	<0.5	<0.5	<0.5	<0.5	--	--	--
08/05/88	35.28	23.12	12.16	--	--	--	--	--	--	--	--	--
09/08/88	35.28	22.76	12.52	--	<50	<0.1	<1.0	<1.0	<1.0	--	0.1	<0.1
12/05/88	35.28	22.59	12.69	--	<50	<0.1	<1.0	<1.0	<1.0	--	<0.1	<0.1
03/14/89	35.28	23.85	11.43	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
06/13/89	35.28	23.78	11.50	--	<500	<0.5	<0.5	<0.5	<0.5	--	--	--
09/13/89	35.28	--	--	--	--	--	--	--	--	--	--	--
12/13/89	35.28	22.56	12.72	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
03/13/90	35.28	23.45	11.83	--	<50	<0.3	<0.3	<0.3	<0.6	--	--	--
10/11/90	35.28	21.97	13.31	--	<50	<0.5	<0.5	<0.5	0.5	--	--	--
04/05/91	35.28	24.38	10.90	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/30/91	35.28	21.72	13.56	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/23/92	35.28	24.86	10.42	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/20/92	35.28	23.74	11.54	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/30/92	35.28	22.44	12.84	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
01/20/93	35.28	25.88	9.40	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/30/93	35.28	26.44	8.84	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
08/06/93	35.28	25.11	10.17	--	<50	<0.5	<0.5	<0.5	<1.5	--	--	--
10/22/93	35.28	24.24	11.04	--	<50	<0.5	0.7	<0.5	<1.5	--	--	--
01/25/94	35.28	24.47	10.81	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
04/05/94	35.28	25.34	9.94	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
07/01/94	35.28	24.36	10.92	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
02/13/95	35.28	26.75	8.53	Sampled annually	--	--	--	--	--	--	--	--
05/10/95	35.28	--	--	Inaccessible	--	--	--	--	--	--	--	--
06/06/95	35.28	26.52	8.76	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
08/02/95	35.28	25.90	9.38	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
05/08/96	35.28	26.58	8.70	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
11/07/96	35.28	25.05	10.23	--	--	--	--	--	--	--	--	--
05/07/97	35.28	26.54	8.74	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
11/04/97	35.28	24.65	10.63	--	--	--	--	--	--	--	--	--
05/15/98	35.28	27.30	7.98	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
08/12/98	35.28	26.28	9.00	--	--	--	--	--	--	--	--	--

## Cumulative Table of Well Data and Analytical Results

Vertical Measurements are in feet.

Analytical results are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene	MTBE	EDC	EDB
<b>MW-A</b>												
05/10/95	--	--	9.08	--								
08/04/95	--	--	10.02	--	210	<0.5	<0.5	<0.5	<0.5	--	--	--
05/08/96	--	--	9.50	--	220	<0.5	<0.5	<0.5	<0.5	--	--	--
11/07/96	--	--	11.14	--	78	<0.5	<0.5	<0.5	<0.5	2.5	--	--
05/07/97	--	--	9.54	--	480	3.5	<0.5	3.1	1.3	<2.5	--	--
11/04/97	--	--	11.45	--	18	1.1	<0.5	<0.5	0.60	<2.5	--	--
05/15/98	--	--	8.51	--	230	1.6	1.0	<0.5	0.70	4.1	--	--
08/12/98	--	--	9.60	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
					180	<0.5	<0.5	<0.5	<0.5	<2.5	--	--

**Figure 3 from the Formal Case Closure Report  
Former Mobil Station 04-FGN  
14994 East 14<sup>th</sup> Street, San Leandro  
November 23, 1998 (Alton Geoscience)**

**Table 2-Groundwater Monitoring Data from the  
Semi-Annual Quarterly Monitoring Report, Third Quarter 2004  
Former Mobil Station 04-FGN  
14994 East 14<sup>th</sup> Street, San Leandro, California  
September 1, 2004 (ETIC)**



TABLE 2 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 04-FGN, 14994 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Concentrations (µg/L)							
					TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020 or 8021)	MTBE (8240 or 8260)
MW1A	03/31/88	36.35	—	—	29,000	ND	ND	ND	550	640	—	—
MW1A	01/31/89	36.35	—	—	11,200	—	260	ND	500	500	—	—
MW1A	02/24/94	36.35	9.42	26.93	11,000	2,500	70	ND	260	180	—	—
MW1A	08/03/94	36.35	12.00	24.35	13,000	7,100	61	50	280	230	—	—
MW1A	11/23/94	36.35	11.18	25.17	12,000	2,500	49	ND	300	190	—	—
MW1A	02/28/95	36.35	9.08	27.27	10,000	3,200	25	ND	110	67	—	—
MW1A	05/10/95	36.35	8.33	28.02	10,000	3,600	31	ND	140	81	—	—
MW1A	08/02/95	36.63	9.49	27.14	10,000	3,800	24	18	130	80	—	—
MW1A	11/02/95	36.63	11.05	25.58	12,000	3,400 <sup>i</sup>	ND	ND	190	150	—	—
MW1A	02/08/96	36.63	7.55	29.08	8,000	3,600 <sup>i</sup>	100	21	87	58	—	—
MW1A	05/08/96	36.63	7.52	29.11	9,200	—	11	ND	120	64	—	—
MW1A	08/09/96	36.63	9.63	27.00	—	—	—	—	—	—	—	—
MW1A	08/20/96	36.63	—	—	6,800	—	64	22	100	55	130	ND
MW1A	11/07/96	36.63	11.01	25.62	7,900	—	100	12	70	34	95	ND
MW1A	02/10/97	36.63	7.58	29.05	5,800	—	36	15	67	29	58	ND
MW1A	05/07/97	36.63	9.15	27.48	1,400	—	13	ND	11	ND	ND	—
MW1A	09/10/97	36.63	10.88	25.75	7,800	—	64	ND	70	26	120	ND
MW1A	02/12/98	36.63	5.52	31.11	ND	—	ND	ND	ND	ND	ND	—
MW1A	08/12/98	36.63	8.80	27.83	500	—	41	12	1.8	20	ND	—
MW1A	12/10/99	36.63	10.86	25.77	1,700	—	ND	1.4	6.2	3.3	ND	—
MW1A	01/14/00	36.63	11.33	25.30	4,600	—	ND	30	28	ND	ND	—
MW1A	10/27/00	36.63	10.30	26.33	3,500	—	<10	2.6	13	6.4	18	<5
MW1A	01/18/01	36.63	10.45	26.18	4,500	—	<10	3.9	12	4.7	<20	—
MW1A	07/10/01	36.63	10.72	25.91	2,000	—	<20	18	9.6	18	<20	<2
MW1A	11/27/01	16.34	Well resurveyed to new reference point									
MW1A	01/16/02	16.34	9.02	7.32	2,690	—	11.7	1.60	6.80	6.00	23.9	—
MW1A	07/08/02	16.34	10.43	5.91	1,570	—	12.0	11.0	<5.0	<5.0	24.0	<0.50
MW1A	01/23/03	16.34	8.84	7.50	2,040	—	16.5	3.5	8.70	5.90	—	<0.50
MW1A	07/09/03	16.34	9.97	6.37	1,440	—	8.60	1.0	7.3	5.2	13.6	<0.5
MW1A	01/15/04	16.34	9.39	6.95	1,640	—	0.70	5.2	4.0	2.8	—	<0.5
MW1A	07/07/04	16.34	10.75	5.59	2,210	—	18.7	2.9	3.7	1.5	—	<0.5
MW2A	02/24/94	36.61	9.52	27.09	6,400	4,500	31	ND	58	42	—	—
MW2A	08/23/94	36.61	12.05	24.56	7,500	7,100	42	21	71	53	—	—

TABLE 2 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 04-FGN, 14994 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Concentrations (µg/L)							
					TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020 or 8021)	MTBE (8240 or 8260)
MW2A	11/23/94	36.61	11.25	25.36	7,000	1,800	33	11	39	ND	—	—
MW2A	02/28/95	36.61	9.10	27.51	9,000	1,600	29	36	96	45	—	—
MW2A	05/10/95	36.61	8.42	28.19	5,100	1,600	20	27	32	35	—	—
MW2A	08/02/95	36.62	9.54	27.08	4,300	1,800	36	ND	11	16	—	—
MW2A	11/02/95	36.62	11.08	25.54	4,300	3,000 <sup>i</sup>	22	ND	10	11	—	—
MW2A	02/08/96	36.62	7.68	28.94	2,900	940 <sup>i</sup>	32	13	13	ND	—	—
MW2A	05/08/96	36.62	8.64	27.98	2,500	—	13	12	19	26	—	—
MW2A	08/09/96	36.62	9.71	26.91	—	—	—	—	—	—	—	—
MW2A	08/20/96	36.62	—	—	2,500	—	19	11	6.8	8.1	36	—
MW2A	11/07/96	36.62	11.04	25.58	4,700	—	58	7.3	5.3	ND	55	—
MW2A	02/10/97	36.62	7.75	28.87	2,600	—	12	10	35	15	ND	—
MW2A	05/07/97	36.62	9.23	27.39	3,300	—	25	18	16	11	ND	—
MW2A	09/10/97	36.62	10.91	25.71	2,800	—	24	ND	ND	ND	43	—
MW2A	02/12/98	36.62	5.59	31.03	3,800	—	10	11	30	14	ND	—
MW2A	08/12/98	36.62	8.85	27.77	1,300	—	0.8	8.7	2.4	4.7	ND	—
MW2A	12/10/99	36.62	10.90	25.72	1,300	—	ND	2.2	ND	ND	ND	—
MW2A	01/14/00	36.62	11.39	25.23	2,700	—	1.3	18	2.4	ND	ND	—
MW2A	10/27/00	36.62	10.48	26.14	2,600	—	9.6	2.4	<5.0	<5.0	7.9	—
MW2A	01/18/01	36.62	10.61	26.01	3,800	—	<5.0	2.1	3.0	2.0	<10	—
MW2A	07/10/01	36.62	10.78	25.84	2,100	—	<10	2.6	2.8	3.4	<10	—
MW2A	11/27/01	16.12	Well resurveyed to new reference point									
MW2A	01/16/02	16.12	9.11	7.01	2,500	—	9.80	5.10	6.50	9.80	16.0	—
MW2A	07/08/02	16.12	10.48	5.64	682	—	6.3	0.7	0.9	3.3	8.5	—
MW2A	01/23/03	16.12	8.94	7.18	1,180	—	8.8	3.1	4.8	5.8	—	<0.50
MW2A	07/09/03	16.12	10.03	6.09	1,430	—	7.80	1.5	3.1	3.4	10.5	<0.5
MW2A	01/15/04	16.12	9.48	6.64	1,530	—	0.50	4.8	2.2	2.9	—	<0.5
MW2A	07/07/04	16.12	10.80	5.32	797	—	5.70	1.3	1.7	1.1	—	<0.5
MW3A	02/24/94	36.92	9.85	27.07	19,000	10,000	52	30	690	290	—	—
MW3A	08/23/94	36.92	12.33	24.59	14,000	11,000	44	24	1,000	100	—	—
MW3A	11/23/94	36.92	11.56	25.36	13,000	2,600	30	18	690	52	—	—
MW3A	02/28/95	36.92	9.35	27.57	8,500	—	11	ND	340	24	—	—
MW3A	05/10/95	36.92	8.55	28.37	7,600	3,800	ND	ND	400	45	—	—
MW3A	08/02/95	36.93	9.75	27.18	9,200	3,800	17	13	340	34	—	—

TABLE 2 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 04-FGN, 14994 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Concentrations (µg/L)							
					TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020 or 8021)	MTBE (8240 or 8260)
MW3A	11/02/95	36.93	11.29	25.64	9,200	4,400 <sup>i</sup>	31	ND	360	72	—	—
MW3A	02/08/96	36.93	7.97	28.96	6,900	3,800 <sup>i</sup>	38	ND	230	43	—	—
MW3A	05/08/96	36.93	8.82	28.11	7,700	—	ND	ND	270	38	—	—
MW3A	08/09/96	36.93	9.95	26.98	—	—	—	—	—	—	—	—
MW3A	08/20/96	36.93	—	—	5,600	—	8.0	29	180	23	12	—
MW3A	11/07/96	36.93	11.28	25.65	8,600	—	47	ND	150	29	ND	—
MW3A	02/10/97	36.93	7.95	28.98	8,300	—	28	ND	130	23	ND	—
MW3A	05/07/97	36.93	9.45	27.48	37,000	—	230	110	630	ND	ND	—
MW3A	09/10/97	36.93	11.13	25.80	5,500	—	16	ND	75	11	ND	—
MW3A	02/12/98	36.93	5.72	31.21	10,000	—	37	ND	84	25	ND	—
MW3A	08/12/98	36.93	9.05	27.88	5,600	—	4	18	39	19	ND	—
MW3A	12/10/99	36.93	11.21	25.72	5,900	—	ND	3.0	22	5.0	ND	—
MW3A	01/14/00	36.93	11.64	25.29	6,500	—	7.5	27	37	ND	ND	—
MW3A	10/27/00	36.93	10.78	26.15	6,300	—	<10	3.8	17	5.6	<20	—
MW3A	01/18/01	36.93	10.87	26.06	7,300	—	<20	3.1	14	3.3	<10	—
MW3A	07/10/01	36.93	11.03	25.90	5,200	—	7.3	8.0	11	9.6	<10	—
MW3A	11/27/01	16.42	Well resurveyed to new reference point									
MW3A	01/16/02	16.42	9.38	7.04	4,900	—	19.0	<5.00	16.0	14.0	28.0	<5
MW3A	07/08/02	16.42	10.75	5.67	2,470	—	9.1	1.8	8.8	4.1	17.5	—
MW3A	01/23/03	16.42	9.20	7.22	2,240	—	12.5	4.5	7.9	28.0	—	<0.50
MW3A	07/09/03	16.42	10.28	6.14	2,850	—	10.8	2.8	8.3	5.5	15.7	<0.5
MW3A	01/15/04	16.42	9.77	6.65	2,810	—	1.20	8.2	5.9	9.1	—	<0.5
MW3A	07/07/04	16.42	11.07	5.35	2,250	—	15.9	2.7	5.8	1.8	—	<0.5
MW4A	08/02/95	37.18	9.63	27.55	ND	ND	ND	ND	ND	ND	—	—
MW4A	11/02/95	37.18	11.48	25.70	ND	ND	ND	ND	ND	ND	—	—
MW4A	02/08/96	37.18	8.18	29.00	ND	ND	ND	1.1	ND	0.92	—	—
MW4A	05/08/96	37.18	8.49	28.69	ND	—	ND	ND	ND	—	—	—
MW4A	08/09/96	37.18	10.05	27.13	—	—	—	—	—	—	—	—
MW4A	08/20/96	37.18	—	—	ND	—	ND	ND	ND	ND	ND	—
MW4A	11/07/96	37.18	11.48	25.70	ND	—	ND	ND	ND	0.88	ND	—
MW4A	02/10/97	37.18	8.11	29.07	ND	—	ND	2.4	ND	ND	ND	—
MW4A	05/07/97	37.18	9.64	27.54	ND	—	ND	ND	ND	ND	ND	—
MW4A	09/10/97	37.18	11.32	25.86	—	—	—	—	—	—	—	—

TABLE 2 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 04-FGN, 14994 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Concentrations (µg/L)							
					TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020 or 8021)	MTBE (8240 or 8260)
MW4A	02/12/98	37.18	5.90	31.28	ND	—	ND	ND	ND	ND	ND	—
MW4A	08/12/98	37.18	9.21	27.97	—	—	—	—	—	—	—	—
MW4A	12/10/99	37.18	11.46	25.72	ND	—	ND	0.39	ND	0.95	ND	—
MW4A	03/09/00	Well destroyed										
MW5A	08/02/95	35.91	8.74	27.17	1,300	220	16	0.68	1.3	4.3	—	—
MW5A	11/02/95	35.91	10.34	25.57	180	ND	1.9	1.2	ND	ND	—	—
MW5A	02/08/96	35.91	6.67	29.24	160	150	1.9	2.2	ND	0.89	—	—
MW5A	05/08/96	35.91	7.35	28.56	260	—	2.4	6.7	2.0	9.6	—	—
MW5A	08/09/96	35.91	8.81	27.10	—	—	—	—	—	—	—	—
MW5A	08/20/96	35.91	—	—	ND	—	ND	1.8	ND	ND	9.4	—
MW5A	11/07/96	35.91	10.25	25.66	—	—	—	—	—	—	—	—
MW5A	02/10/97	35.91	6.93	28.98	ND	—	ND	1.2	ND	ND	ND	—
MW5A	05/07/97	35.91	8.42	27.49	—	—	—	—	—	—	—	—
MW5A	09/10/97	35.91	10.15	25.76	—	—	—	—	—	—	—	—
MW5A	02/12/98	35.91	5.32	30.59	ND	—	ND	ND	ND	ND	ND	—
MW5A	08/12/98	35.91	8.19	27.72	—	—	—	—	—	—	—	—
MW5A	12/10/99	35.91	10.10	25.81	ND	—	ND	ND	ND	ND	ND	—
MW5A	03/09/00	Well destroyed										
MW6A	08/02/95	37.10	9.68	27.42	ND	ND	ND	ND	ND	ND	—	—
MW6A	11/02/95	37.10	11.26	25.84	ND	ND	ND	ND	ND	ND	—	—
MW6A	02/08/96	37.10	7.79	29.31	ND	ND	ND	1.3	ND	1.3	—	—
MW6A	05/08/96	37.10	8.38	28.72	ND	—	ND	1.6	ND	1.2	—	—
MW6A	08/09/96	37.10	9.82	27.28	—	—	—	—	—	—	—	—
MW6A	08/20/96	37.10	—	—	ND	—	ND	ND	ND	ND	ND	—
MW6A	11/07/96	37.10	11.02	26.08	—	—	—	—	—	—	—	—
MW6A	02/10/97	37.10	7.70	29.40	ND	—	ND	3.4	ND	ND	ND	—
MW6A	05/07/97	37.10	9.31	27.79	—	—	—	—	—	—	—	—
MW6A	09/10/97	37.10	11.08	26.02	—	—	—	—	—	—	—	—
MW6A	02/12/98	37.10	5.52	31.58	ND	—	ND	ND	ND	ND	ND	—
MW6A	08/12/98	37.10	8.91	28.19	—	—	—	—	—	—	—	—
MW6A	12/10/99	37.10	11.24	25.86	ND	—	ND	0.32	ND	ND	ND	—
MW6A	03/09/00	Well destroyed										

TABLE 2 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 04-FGN, 14994 EAST 14TH STREET, SAN LEANDRO, CALIFORNIA

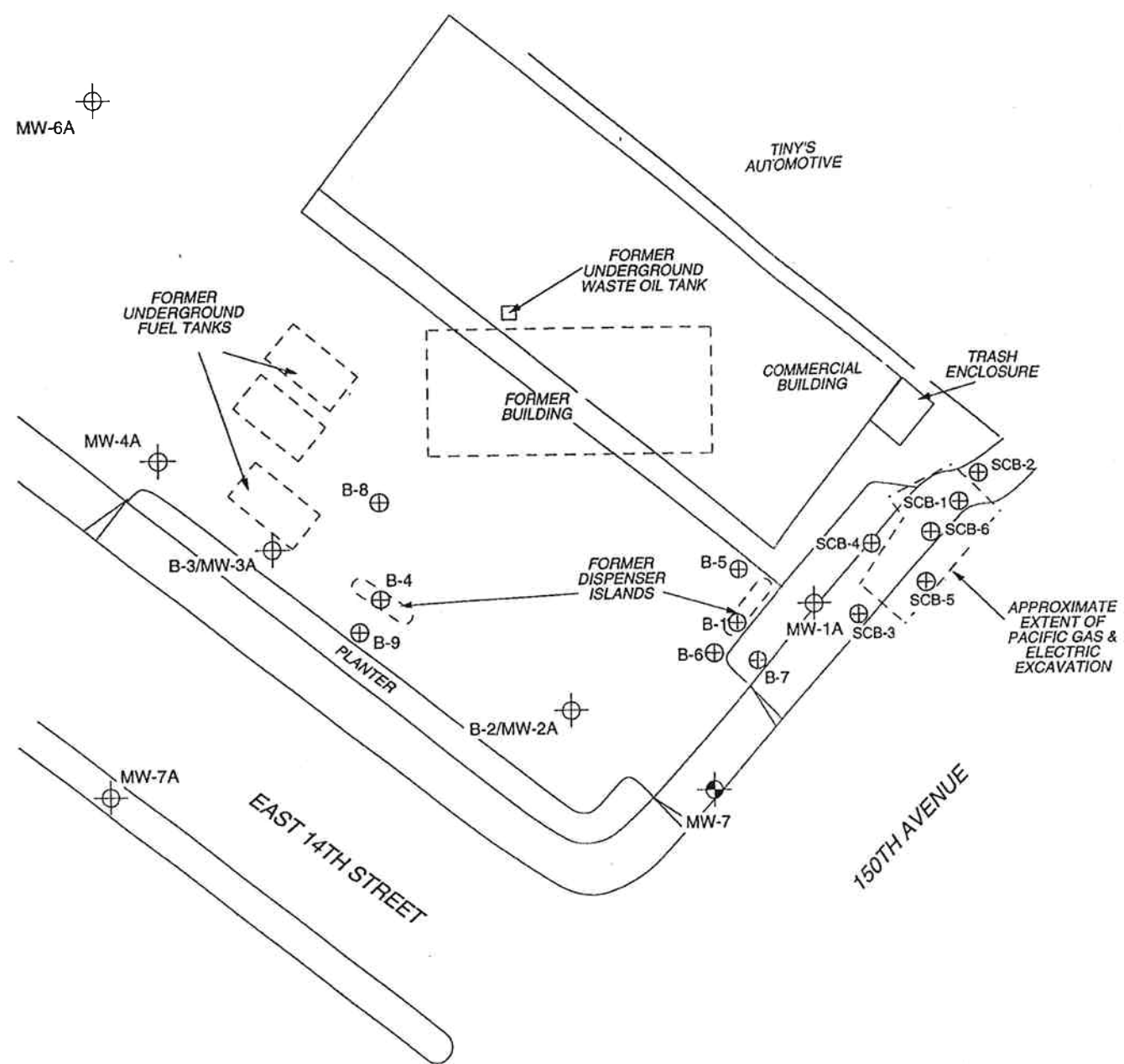
Well ID	Date	TOC Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Concentrations (µg/L)							
					TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020 or 8021)	MTBE (8240 or 8260)
MW7A	11/02/95	37.39	11.77	25.62	ND	ND	ND	ND	ND	ND	—	—
MW7A	02/08/96	37.39	8.68	28.71	ND	75	ND	1.4	ND	1.5	—	—
MW7A	05/08/96	37.39	9.00	28.39	ND	—	2.2	6.3	1.4	7.9	—	—
MW7A	08/09/96	37.39	10.31	27.08	—	—	—	—	—	—	—	—
MW7A	08/20/96	37.39	—	—	ND	—	ND	ND	ND	ND	ND	—
MW7A	11/07/96	37.39	11.81	25.58	ND	—	ND	0.96	ND	1.6	ND	—
MW7A	02/10/97	37.39	8.57	28.82	ND	—	ND	2.4	ND	ND	ND	—
MW7A	05/07/97	37.39	10.05	27.34	ND	—	ND	ND	ND	ND	ND	—
MW7A	09/10/97	37.39	11.66	25.73	ND	—	ND	ND	ND	ND	ND	—
MW7A	02/12/98	37.39	6.55	30.84	ND	—	ND	ND	ND	ND	ND	—
MW7A	08/12/98	37.39	9.65	27.74	ND	—	0.5	ND	ND	ND	ND	—
MW7A	12/10/99	37.39	11.80	25.59	ND	—	ND	ND	ND	ND	ND	—
MW7A	03/09/00	Well destroyed										

i Unidentified hydrocarbons <C10

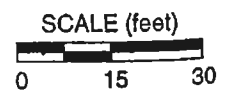
- TPH-d Total Petroleum Hydrocarbons as diesel.
- TPH-g Total Petroleum Hydrocarbons as gasoline.
- MTBE Methyl tertiary butyl ether.
- ND Not detected at or above laboratory reporting limit.
- TOC Top of casing.
- µg/L Micrograms per liter.
- Not analyzed or not provided.

**Selected Text and Figure 3 from the  
Limited Phase II Environmental Site Assessment  
Quality Tune Up  
14901 East 14<sup>th</sup> Street, San Leandro, California  
June 6, 2005 (Ninyo & Moore)**





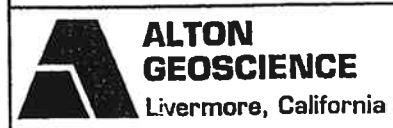
LEGEND	
MW-7A	Groundwater monitoring well (Mobil)
MW-7	Groundwater monitoring well (Unocal)
B-4	Soil boring



**SITE DETAIL SHOWING EXCAVATION AND SOIL SAMPLE LOCATIONS**

Former Mobil Station 04-FGN  
 14994 East 14th Street  
 San Leandro, California

**FIGURE 3**



SOURCE: Alisto Engineering Group

was detected in samples NMGW-4 at 2,600 µg/L, NMGW-5 at 450 µg/L, and NMGW-6 at 280 µg/L.

### 5.3. QA/QC Discussion

Laboratory QA/QC samples, including Laboratory Control Samples (LCS), Matrix Spike (MS) and Matrix Spike Duplicates (MSD) and Surrogates were within Recovery Control Limits (RCLs). No laboratory qualifiers were associated with analytical results with the exception of the aforementioned laboratory note related to the non-typical pattern associated with TPH-D.

## 6. SUMMARY AND CONCLUSIONS

Nine soil borings were drilled in the parking area on site on October 24, 2005. Undisturbed soil samples were collected from four of the soil borings (NM-3, NM-4, NM-7, and NM-9) and groundwater samples were collected from all nine of the borings (NM-1 through NM-9).

Based on the soil sample analytical results present herein, near surface soil samples collected have consistently been below the laboratory reporting limits for petroleum hydrocarbons with the exception of TPH-MO. TPH-MO was detected in soil samples NMSB3-02, NMSB3-16, NMSB4-02, and NMSB-05 at concentrations ranging from 19.0 mg/kg in NMSB3-02 to 53.0 mg/kg in NMSB4-02, which are below the TPH-MO ESL of 500 mg/kg. The concentrations of TPH-MO reported in the samples collected from NM-3 and NM-4 are likely related to the presence of residual fuels possibly present in the UST backfill material.

Concentrations of TPH-G and MTBE were reported at 180 mg/kg and 150 µg/kg, respectively, in NMSB3-16. These results, however, were reported from a saturated soil sample collected below the water table. These reported concentrations are above the San Francisco Bay Regional Water Quality Control Board Residential Environmental Screening Level (ESL) (RWQCB, July 2003) in surface soils (<3 meters) where groundwater is a source of drinking water for TPH-G (100 mg/kg) and MTBE (23 µg/kg).



The reported concentration of MTBE detected in the soil beneath the water table is most likely attributed to migration of MTBE from an upgradient off-site property or a combination of off- and on-site sources. MTBE was not widely utilized as a fuel additive until the early 1990s. Based on the historical operations of the site, the site discontinued operations as a gasoline station sometime prior to 1981, when the present day tenant began oil changing and smog check services.

The reported concentration of TPH-G reported in the soil beneath the water table may also be associated with an off-site source and/or attributable to residual fuel concentrations present beneath the site.

Based on information contained in the Tank Closure Summary, excavated soil from the former UST areas contained minor concentrations of petroleum hydrocarbons. Officials with the City of San Leandro Fire Department Hazardous Materials Division "determined, based on the laboratory results the excavated soil (approximately 230 cubic meters/300 cubic yards) could be used as backfill material along with imported engineered base rock from the Dumbarton Quarry." It is unknown if the import materials were tested for contaminants prior to combining the material with excavated backfill material. It also remains unclear if the subgrade UST-associated dispenser piping were removed at the time of the UST removal and excavation activities.

Based on the nature of the petroleum hydrocarbons in the soil in the vicinity of NM-3, soil characterization and/or remediation in this area most likely will be required by the SLESD.

TPH-G concentrations ranging from (2,100 µg/L to 20,000 µg/L) reported for groundwater samples NMGW-3, NMGW-4, NMGW-7, and NMGW-8 are above the ESL for residual fuels of 100 µg/L where groundwater is a current or potential source of drinking water

MTBE was reported in groundwater samples NMGW-1, NMGW-3, NMGW-5, and NMGW-8 (ranging in concentrations from 1.52 to 5.5 µg/L). Two of the reported concentrations were at or above the ESL for MTBE of 5.0 µg/L where groundwater is a current or potential source of drinking water. The presence of MTBE in groundwater samples NMGW-1, NMGW-3, NMGW-

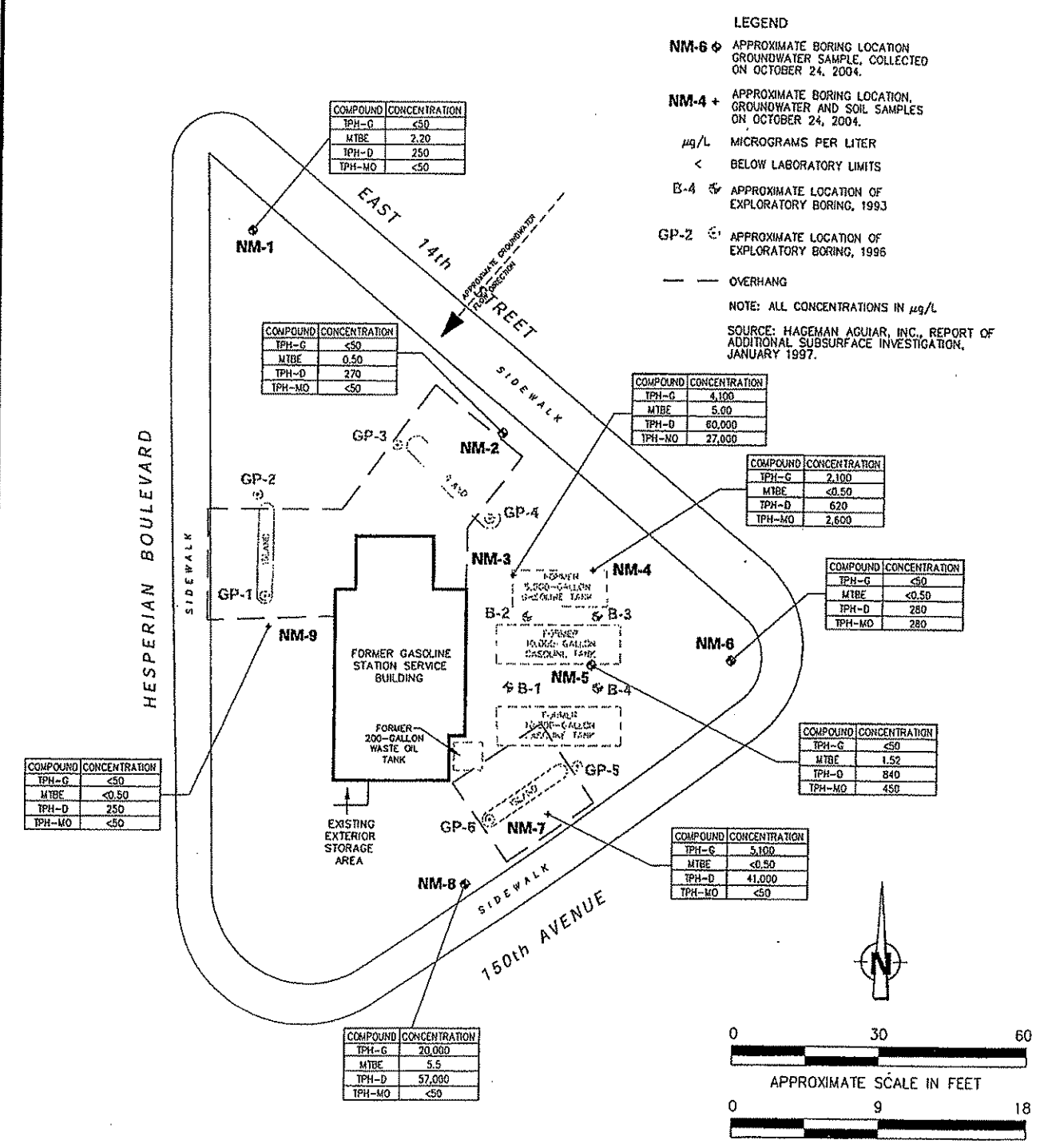
5, and NMGW-8 may be attributable to migration of MTBE from an upgradient off-site property, from an on-site source, or a combination of off- and on-site sources.

TPH-D was reported in all groundwater samples (NMGW-1 through NMGW-9) ranging from 250 µg/L to 60,000 µg/L. A note contained in the laboratory report indicates the TPH-D did not exhibit a typical diesel pattern on all water samples. These reported concentrations are above the ESL for residual fuels of 100 µg/L where groundwater is a current or potential source of drinking water.

TPH-MO was reported in groundwater samples NMGW-3, NMGW-4, NMGW-5, and NMGW-6, ranging in concentrations from 280 µg/L to 27,000 µg/L. These reported concentrations are above the ESL for residual fuels of 100 µg/L where groundwater is a current or potential source of drinking water.

Based on the groundwater sample analytical results presented herein and the groundwater sample analytical results obtained during previous investigations, elevated concentrations of residual fuels in the form of TPH-G and TPH-MO are present in the vicinity of NM-3 and NM-4. In addition, elevated concentrations of a "non-typical" pattern of TPH-D was reported in groundwater samples collected from all borings at the site. The "non-typical" TPH-D constituent may be related to a by-product or breakdown of old gasoline fuels. Groundwater samples collected from borings of NM-3, including NM-7 and NM-8 also were reported with elevated concentrations of TPH-G and TPH-D, which probably correspond to the migration of contaminants in groundwater towards the southwest, following the local flow direction. The source of contamination may be attributable to the presence of residual fuels remaining beneath the area of the former UST, sub-surface piping, and/or former dispensing equipment. This finding is based on the relatively lower concentrations of these same contaminants as reported in groundwater samples collected in boring NM-2 located adjacent to the former UST excavations.

401007-A3.DWG



NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.



**SHALLOW GROUNDWATER CONSTITUENT CONCENTRATION MAP**  
 QUALITY TUNE UP  
 14901 E. 14th STREET  
 SAN LEANDRO, CALIFORNIA

PROJECT NO.	DATE
401007002	6/2005

FIGURE
3

**Selected Text from the  
Comprehensive Site Evaluation and Proposed Future Action Plan  
Chevron Service Station 9-2013  
15002 Hesperian Boulevard, San Leandro  
July 11, 1994 (Weiss Associates)**



*Upgradient wells:*

- **MW-3(LB):** 11,000 ppb TPH-G and 540 ppb benzene were detected in ground water samples collected from well MW-3(LB), located approximately 100 ft northeast (upgradient) of the Chevron site, and downgradient of the UNOCAL and Mobil sites.
- **MW-4:** Up to 1,300 ppb TPH-G and 6.6 ppb benzene have been detected in well MW-4, located in the central northern (upgradient) area of the Chevron site.
- **MW-5:** High hydrocarbon concentrations were detected in MW-5 only once, immediately after well installation. Only very low to non-detectable concentrations of TPH-G and benzene have been detected in this well since 1987. MW-5 is located on the western border of the Chevron site. *upgradient of all on-site sources*

This pattern of upgradient concentrations increasing to the east and decreasing to the west indicates that an offsite plume originates to the northeast of the Chevron site.

*Midsite and cross-gradient wells:*

- **MW-6:** Up to 2,300 ppb TPH-G and 30 ppb benzene have been detected in MW-6, located on the eastern border of the Chevron site, cross gradient to the underground fuel storage tanks (UFSTs), and downgradient of the waste oil tank.
- **MW-1:** Up to 6,000 ppb TPH-G has been detected in MW-1, located on the western edge of the site, downgradient of the fuel pumps islands, and upgradient of the UFSTs. Benzene concentrations in this well were initially 7 ppb when the well was first sampled in June, 1988, increased steadily to 360 ppb in August, 1991, and have since decreased again. Benzene concentrations have been less than 2 ppb for the past year. *but were 7.7 (1/93), 6.0 (10/92), 25 (7/92), 30 (4/92), 360 (10/91), 19 (4/91)*
- **MW-7:** Low to non-detectable concentrations of TPH-G and benzene have been detected in MW-7, located approximately 35 feet west of the Chevron site, cross gradient to the fuel pump islands and upgradient of the UFSTs.

These data, again, indicate that a significant offsite source has generated a plume which is impacting the eastern portion of the site. The source of hydrocarbons detected in MW-1 is not known, and may be a combination of hydrocarbons originating from the Chevron site and from an offsite plume. *how about leaking pipes?*

## EVALUATION OF NON-ATTAINMENT ZONE CRITERIA AND FUTURE ACTION PLAN

### DISCUSSION OF NON-ATTAINMENT ZONE CRITERIA

In the following section each of the RWQCB criterion for establishment of a non-attainment area, and potential Chevron responsibility for these criteria, is considered for the subject site.

*Criteria a. The Discharger has demonstrated (e.g., pump tests, ground water monitoring, transport modeling) and will verify (e.g., ground water monitoring) that no significant pollution migration will occur due to hydrogeologic or chemical characteristics.*

After review of the data collected at this site we conclude that the Chevron plume is restricted to the western area of the site and has not migrated offsite, as indicated by consistently low or non-detect concentrations in down-gradient wells. Our reasoning is described below.

*Plume Locations:* The data collected in the vicinity of the Chevron site suggest the presence of at least three plumes:

- An extensive hydrocarbon plume appears to reside to the east of the Chevron site. This plume is impacting the site from the north and east, probably originates at either the UNOCAL or Mobil sites located on East 14th Street, north of the Chevron site.
- The low concentrations of VOCs detected in most of the site wells indicate that a widely dispersed VOC plume is impacting the site from the north. The origin of this plume is unknown, but the recent DTSC studies indicate that it may be a regional problem.
- A small area in the vicinity of MW-1 may be impacted by hydrocarbons originating from the Chevron site. However, chemical analysis of samples collected from this well indicate that the hydrocarbons in this area are at least partially associated with an offsite source. Concentrations detected in onsite downgradient well MW-2, and offsite

## CONCLUSIONS

Data collected at the site demonstrate the following points;

- All of the ground water monitored at this site has been impacted to some degree by an offsite source or sources.
- Hydrocarbon concentrations detected in ground water entering the Chevron site are **higher** than concentrations detected in ground water exiting the site, clearly indicating that Chevron is not responsible for any significant additional degradation of the regional aquifer.
- Hydrocarbon constituents detected in MW-4, MW-5, MW-6, MW-7 and MW-8 are primarily due to an offsite source.
- A small onsite source may be contributing to concentrations detected in MW-1 and MW-2, but the low concentrations detected in MW-1(LB) show that this portion of the plume is degraded by natural attenuation to very low levels before it reaches the site boundary.
- Chemical fingerprinting of samples collected from Chevron's four downgradient wells, MW-2, MW-3, MW-6, and MW-8, indicate that these samples contain a gasoline compound which is not present in gasoline distributed to Chevron stations in this area.
- At least three potentially responsible parties may be responsible for the offsite plume(s); Mobil Oil, UNOCAL Oil, and a lube shop upgradient of the Mobil site.

Based on the data summarized in this report, it is apparent that no additional appropriate or cost effective technologies exist that might significantly accelerate cleanup of any remaining hydrocarbons originating from the Chevron site.

Although elevated contaminant concentrations are present in the ground water at the Chevron site, these contaminants are primarily due to offsite sources and we submit that the portion of the plume which is attributable to Chevron meets all of the RWQCB criteria for establishing a non-attainment zone. However, we recognize that the presence of co-mingled offsite and onsite plumes will complicate this approach. We propose, therefore, that active remediation of the Chevron plume is not appropriate, but that Chevron continue to maintain a reduced monitoring plan for two years. Chevron will also maintain a cooperative approach in assisting other responsible parties in determining an appropriate response for management of the co-mingled plumes.