

THRIFTY OIL CO.

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Mr. Amir Gholami, REHS
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Local #RO0000348
RWQCB #01-1476

RE: **Former Thrifty Oil Co. Station #054**
2504 Castro Valley Boulevard
Castro Valley, CA
***Site Conceptual Model and
Plume Travel Time Report***

Dear Mr. Gholami:

Presented herein is the *Site Conceptual Model and Plume Travel Time Report* prepared for former Thrifty Oil Co. (Thrifty) Station #054 located at 2504 Castro Valley Boulevard, Castro Valley, California. As requested this report contains a discussion of sensitive receptors, plot plans showing excavation areas and existing UST components, depth specific soil and groundwater isoconcentration maps for pre- and post-remediation, tables of historical soil and groundwater data with comparisons to ESLs and Regional Board Basin Plan water quality objectives, a complete list of all boring logs, and cross sections showing borings, wells, preferential pathways, excavation boundaries, water levels, and residual contamination.

Should you have any questions regarding this report, please contact either Michael Bowery or myself at 562 921-3581.

Respectfully submitted,



Chris Panaitescu
General Manager
Environmental Affairs

cc: BP West Coast Products LLC; Mr. Bobby Lu, P.G
File



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Site Conceptual Model and Plume Travel Time Report

**Thrifty Oil Co. Station No. 054
2504 Castro Valley Boulevard
Castro Valley, California**

**RWQCB File No. 01-1476
Facility Global ID No. T0600101363**

**May 5, 2006
GHC 1331**

Prepared for
Thrifty Oil Co.
13116 Imperial Highway
Santa Fe Springs, California 90670

Prepared by
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Huntington Beach, California 92649

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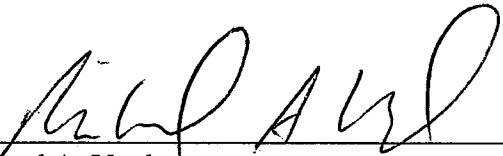
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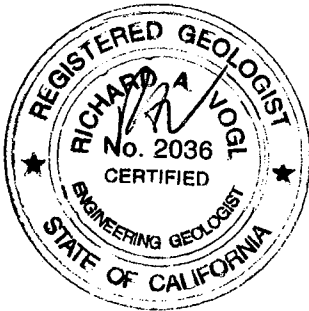
CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a GeoHydrologic Consultants, Inc. California Registered Geologist.



May 5, 2006
Date

Richard A. Vogl
Principal Hydrogeologist
California Registered Geologist (5526)
California Certified Hydrogeologist (47)
California Certified Engineering Geologist (2036)



1.0 INTRODUCTION

On behalf of Thrifty Oil Co. (Thrifty), GeoHydrologic Consultants, Inc. (GHC) has prepared this report to fulfill the requirements of the Alameda County Health Care Agency (ACHCA), which required Thrifty to prepare a Site Conceptual Model for Thrifty Station No. 054 located at 2504 Castro Valley Boulevard in Castro Valley, California (“the Site”; **Figure 1**). The requirements of this work were set forth in the ACHCA’s letter to Thrifty dated December 7, 2005. The purpose of this work is to summarize all environmental activities that have occurred at the Site to date.

2.0 SITE DESCRIPTION

The Site is an active service station located at the northeast corner of the intersection of Castro Valley Boulevard and Stanton Avenue in the City of Castro Valley, California. The Site consists of three active pump islands, a cashier’s booth, and two double-walled underground storage tanks (USTs) (**Figure 2**).

3.0 SITE CHARACTERIZATION DATA

3.1 Geology / Hydrogeology

3.1.1 Geology

The Site is located at 2504 Castro Valley Boulevard in the City of Castro Valley (**Figure 1**). The Site is located within the San Francisco Bay structural depression of the Coast Ranges Physiographic Province in Alameda County. Bedrock in the vicinity is composed of Cretaceous-age sandstones, shales, and conglomerates. Shallow bedrock beneath the Site consists primarily of shale. Soils encountered during drilling activities consist primarily of silt, clay or clay with gravel and/or possible evaporites overlying clay with abundant siltstone gravel.

Geologic cross sections are included as **Figures 3A, 3B, and 3C**. The lines of cross section are shown in **Figure 2**. Historic soil sample laboratory analytical results along with the San Francisco Regional Water Quality Control Board’s (SFRWQCB) Environmental Screening Levels (ESLs) for soil are included in **Table 1**.

3.1.2 Hydrogeology

Groundwater is present beneath the Site at depths ranging from approximately 2.64 feet bgs in RE-3 to 9.83 feet bgs in RS-8, which is shown in **Table 2** along with the SFRWQCB’s Basin Plan Objectives (BPOs) for groundwater. A groundwater elevation

contour map based on the March 15, 2006 monitoring data indicates that groundwater flows to the east-northeast at an approximate gradient of 0.0507 feet/foot (**Figure 5**).

3.2 Production Well Survey

A groundwater production well location survey was conducted by the County of Alameda for the Site in March 2006. Fourteen production wells were located within a one-mile radius of the Site (**Figure 1**). The nearest well is located approximately 2,640 feet northeast of the Site at 20036 Anita Avenue in Castro Valley. The results of the production well survey are included in **Appendix E**.

3.3 Previous Site Assessment Activities

On December 17, 1987, four 20 foot deep soil borings (B-1 through B-4) were completed by Interstate Soils Sampling under the observation of an engineering geologist from Hydrotech. The borings showed that the Site is underlain by 12 to 15 feet of clayey soil overlying shale bedrock. Hydrocarbon contamination was found in all of the borings with the maximum contamination occurring between the five and ten foot depths. Contamination decreased with depth thereafter as determined by laboratory analysis. Only boring B-1 showed any significant contamination below 15 feet with 420 parts per million (ppm) of total petroleum hydrocarbons (TPH) at a total depth of 20 feet. The highest concentration of TPH detected was in B-1 at the ten foot interval at a concentration of 1,120 mg/kg. The ESL for TPH in soil is 100 mg/kg.

Monitoring wells PW-1 and PW-2 were installed at the Site at some point between December 17, 1986 and December 15, 1988 to estimated depths of 15 feet bgs. A report summarizing the installation details of wells PW-1 and PW-2 could not be located.

A follow-up assessment in February, 1988 was conducted by Robert Elbert and Associates to further define the extent of hydrocarbon contamination. Seven monitoring wells (RE-1 through RE-7) were drilled and installed to depths ranging from 15 to 25 feet bgs. Laboratory analysis of soil samples indicated that the main zone of soil contamination tended to trend northwest-southeast, through the former tank area. The maximum TPH as gasoline (TPHg) concentration encountered was in RE-4 at the five foot interval at a concentration of 1,900 mg/kg. The maximum benzene concentration encountered was in RE-4 at the five foot interval at a concentration of 13 mg/kg. The ESL for benzene in soil is 0.044 mg/kg. Water samples collected from wells RE-1 through RE-7 all contained elevated levels of TPHg, and free product was found in wells RE-3 (0.01 feet), PW-1 (0.07 feet) and PW-2 (0.03 feet). The BPO for TPHg in groundwater is 100 µg/L.

In January, 1989, three gasoline USTs and their associated piping were removed from the Site under the supervision of GeoRemediation, Inc (GRI). The tanks consisted of three 12,000-gallon capacity USTs. Shortly thereafter, new USTs were installed in the same location as the former USTs. Approximately 800 cubic yards of hydrocarbon impacted soil was excavated and removed from the Site. Assuming an average concentration of

500 mg/kg, approximately 1,296 pounds of hydrocarbon was excavated and removed from the Site.

Another assessment was conducted by Remediation Services Intl. (RSI) in May, 1991. This investigation was performed to assess the potential for offsite contamination and included the installation of three groundwater monitoring wells (RS-8, RS-9, and RS-10). One well (RS-8) is directly east of the underground storage tanks (USTs), on the adjacent property. The second well (RS-9) is located upgradient of the former USTs, to the west of the Site on Stanton Avenue. The third well (RS-10) is located downgradient from the USTs, southeast of the Site on Castro Valley Boulevard. TPHg was detected in two borings, at concentrations of 20 mg/kg in RS-8 at the ten foot interval and at a concentration of 580 mg/kg in RS-9 at the five foot interval. Benzene was only detected in RS-8 at the five foot interval at a concentration of 0.045 mg/kg.

On September 21, 1995, offsite monitoring well RS-11 was installed to 25 feet bgs southeast of the Site in order to define the lateral extent of groundwater contamination within this area offsite. Soil samples collected from the soil boring indicated that TPH and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not present within the vadose zone samples collected above the laboratory detection limit.

Copies of historic boring and well logs are included in **Appendix A**. Historic soil sample laboratory analytical results are included in **Table 1**. Groundwater data is included in **Table 2**, and well completion details are included in **Table 3**. ESLs for soil and BPOs for groundwater are included in **Appendix D**.

3.4 Previous Remedial Activities

In August 1989, RSI installed a Spray Aeration Vapor Extraction (SAVE) system at the Site for soil and groundwater remediation. However, due to unanticipated delays in permits, the system was not started until April, 1990. The system was operated only during daylight hours recovering soil vapor during the first three months of operation.

The equipment was relocated onsite in late June 1990, and from that date on the equipment was in operation for 24 hours a day. On January 31, 2000, Thrifty submitted a *Request for Shutdown and Removal of the Vapor Extraction System* to the ACHCA. The ACHCA authorized the vapor extraction shut down and removal on February 16, 2000. By the end of the operation, the SAVE system had destroyed a total of 5,631 pounds of hydrocarbons and removed and treated 27,992 gallons of groundwater. System operational data is included in **Appendix B**.

4.0 SITE CONCEPTUAL MODEL

This Site Conceptual Model was prepared on behalf of Thrifty Oil Co. (Thrifty) to fulfill the requirements set forth by the Alameda County Health Care Agency (ACHCA) in their letter dated December 7, 2005. As additional information is obtained from the Site, the

Site Conceptual Model will be updated appropriately. The current Site Conceptual Model is as follows:

- Soils beneath the Site consist primarily of silt, clay or clay with gravel overlying clay with abundant siltstone gravel from the ground surface to the total depth of investigation (25 feet) (**Figures 3A, 3B, and 3C**). Bedrock in the vicinity is composed of Cretaceous age sandstones, shales, and conglomerates. Shallow bedrock beneath the Site consists primarily of shale.
- Underground utility locations are depicted in **Figure 2**.
- Groundwater is present beneath the Site at depths ranging from approximately 2.64 feet bgs in RE-3 (164.05 feet above sea level) to 9.83 feet bgs in RS-8 (154.20 feet above sea level) (**Table 2**). The historic groundwater gradient ranges from 0.0353 feet per foot to 0.05 feet per foot. A groundwater elevation contour map based on the March 15, 2006 monitoring data indicates that groundwater flows to the east-northeast at an approximate gradient of 0.0507 feet/foot (**Figure 5**). Based on this gradient, an estimated hydraulic conductivity of a silt of 0.08 m/day (Todd, 1980) and an assumed porosity of 46 percent, the groundwater velocity beneath the Site is calculated to be approximately 0.0088 meters per day or 3.22 meters per year.
- During the 1st quarter 2006 groundwater sampling event on March 15, 2006, samples were taken from wells PW-1, RE-2 through RE-4, RE-6, RE-7, RS-9, and RS-11. TPHg was detected in wells PW-1, RE-7, RE-4, RS-11, RE-6, and RE-2 at concentrations of 35,500 µg/L, 11,700 µg/L, 4,910 µg/L, 426 µg/L, 166 µg/L, and 57 µg/L, respectively. Benzene was detected in wells RE-7 and RE-4 at concentrations of 73 µg/L and 37 µg/L, respectively. MTBE was detected in wells PW-1, RE-7, RE-4, RS-11, RE-6, RE-2, and RS-9 at concentrations of 28,500 µg/L, 10,200 µg/L, 4,940 µg/L, 336 µg/L, 117 µg/L, 31 µg/L, and 17 µg/L, respectively. The BPOs for TPHg, benzene, and MTBE in groundwater are 100 µg/L, 1.0 µg/L, and 5.0 µg/L, respectively. Distributions of TPHg, benzene, and MTBE in groundwater are shown in **Figures 6A, 6B, and 6C**, respectively and are shown in **Table 2**. Pre-remediation distributions of TPHg and benzene are shown in **Figures 6D and 6E**. Samples were not analyzed for MTBE prior to the start of remediation activities. Post-remediation distributions of TPHg, benzene, and MTBE are shown in **Figures 6F through 6H**.
- The main contaminants of concern at the Site are benzene and MTBE, because of the toxicity of benzene, and the solubility, odor, and taste threshold associated with MTBE. The main potential exposure pathway appears to be through ingestion of groundwater that has been impacted by these fuel constituents. Under typical subsurface conditions, benzene will naturally attenuate through volatilization, dispersion, and biodegradation to plume lengths of less than 150 to 200 feet. Based on historical data for the Site, it appears that the benzene plume and the total petroleum hydrocarbons (TPH), ethylbenzene, toluene, and xylene plumes have all been stable and/or shrinking as a result of natural attenuation. On the other hand, MTBE is very soluble, appears to be far more resilient to biodegradation compared to TPH and benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds, and

longer plumes can typically be expected. The concentrations of MTBE detected in groundwater in the onsite wells have decreased somewhat over time (**Figure 7** series). However, the most recent groundwater sampling event (March, 2006) indicated that the maximum MTBE concentration detected in groundwater was 28,500 µg/L in PW-1.

- Hydrocarbon soil contamination was first detected in December, 1987 in four 20-foot deep borings (B-1 through B-4) at concentrations up to 1,120 mg/kg of total recoverable petroleum hydrocarbons, indicating that the initial petroleum hydrocarbons release occurred at some point prior to this first assessment, in the area of the former USTs.
- On January, 1989, three gasoline USTs and their associated piping were removed from the Site under the supervision of GeoRemediation, Inc (GRI). The tanks consisted of three 12,000-gallon capacity USTs. Shortly thereafter, new USTs were installed in the same location as the former USTs. Approximately 1,296 pounds of impacted soil was excavated.
- GHC estimates the mass of TPH in soil beneath the Site to be approximately 13,771 pounds, the mass of benzene in soil beneath the Site to be approximately 39 pounds. The mass of MTBE in soil beneath the Site can not be estimated due to the fact that none of the soil samples taken to date have been analyzed for MTBE. These figures were calculated from the historic soil concentration data (**Table 1**) and pre-remediation soil concentration maps (**Figures 4A** through **4C**).
- TPHg concentrations in excess of 100 mg/kg are confined primarily to depths of 10 feet bgs or less and the vertical and horizontal extent of contamination has been fairly defined at the Site. The downward vertical migration of petroleum hydrocarbons in soil beneath the Site appears to have been substantially attenuated at relatively shallow depths as a result of the lower permeability soils and shallow groundwater which were encountered at these same shallow depths beneath the Site, as demonstrated by the decrease in hydrocarbon soil concentrations to low levels or non-detectable levels at depth. TPHg, benzene, and MTBE pre-remediation soil concentration maps are included as **Figures 4A** through **4C**, respectively. Post-remediation soil concentration maps could not be generated due to the lack of soil data collected after the start of remediation activities. Soil data from offsite well RS-11 was incorporated as post-remediation data in **Figures 4A** through **4C**.
- In August 1989, RSI installed a Spray Aeration Vapor Extraction (SAVE) system at the Site for soil and groundwater remediation. However, due to unanticipated delays in permits, the system was not started until April, 1990. The system was operated only during daylight hours recovering soil vapor during the first three months of operation. The equipment was relocated onsite in late June 1990, and from that date on the equipment was in operation for 24 hours a day. On January 31, 2000, Thrifty submitted a *Request for Shutdown and Removal of the Vapor Extraction System* to the ACHCA. The ACHCA authorized the vapor extraction shut down and removal on February 16, 2000. By the end of the operation, the SAVE system had destroyed a

total of 5,631 pounds of hydrocarbons and removed and treated 27,992 gallons of groundwater. System operational data is included in **Appendix B**.

- Approximately 1,296 pounds of hydrocarbon impacted soil was excavated and removed from the Site during UST removal activities.
- As demonstrated by the BIOSCREEN Natural Attenuation Decision Support System runs included in the following section, the MTBE contaminant plume with no degradation arrives at the nearest receptor (groundwater production well; 2,640 feet downgradient) at year 280. A maximum concentration of MTBE is observed at this receptor well at year 399 at a concentration of 1.117 mg/L, which is above the maximum contaminant level (MCL) of 0.013 mg/L, and the plume becomes detached from the source at year 366. The plume impacts the well at a concentration below the MCL at approximately year 308. The results of using the 1st Order Decay model show that the contaminant plume never arrives at the receptor (groundwater production well; 2,640 feet), but gets closest at a distance of 528 feet from the source at year 225 at a concentration of 0.001 mg/L, which is below the MCL of 0.013 mg/L, and the plume becomes detached from the source at year 366. The plume never impacts the receptor well.
- As demonstrated by the BIOSCREEN Natural Attenuation Decision Support System runs included in the following section, the benzene contaminant plume with no degradation arrives at the receptor (groundwater production well; 2,640 feet downgradient;) at year 421. A maximum concentration of benzene is observed at this receptor well at years 545 to 667 at a concentration of 0.021 mg/L, which is above the MCL of 0.001 mg/L. The plume impacts the well at concentration equal to the MCL at year 421, the year it arrives at the receptor. The 1st Order Decay model results in the benzene plume never arriving at the receptor, thus the plume never impacts the well at concentration above the MCL.

5.0 PLUME TRAVEL TIME REPORT

The plume travel time was estimated using BIOSCREEN Natural Attenuation Decision Support System. BIOSCREEN is an easy to use screening model that simulates remediation through natural attenuation (RNA) of dissolved hydrocarbons at petroleum release sites. The software, programmed in Microsoft Excel spreadsheet environment and based on the Domenico analytical solute transport model, has the ability to simulate advection, dispersion, adsorption, and aerobic decay as well as anaerobic reactions that have been shown to be the dominant biodegradation process at many petroleum release sites. BIOSCREEN includes three different model types:

- solute transport without decay
- solute transport with biodegradation modeled as a first-order decay process (simple, lumped-parameter approach)

- solute transport with biodegradation modeled as an “instantaneous” biodegradation reaction (approach used by BIOPLUME models)

In our case all three models types would be applicable for the Site, although the solute transport without decay model will be used as a worst case scenario. Based on the actual observed groundwater conditions at the Site, the solute transport first-order decay model appears to be most representative of actual Site conditions including plume sizes and concentrations for MTBE. If natural attenuation analytical results were present for the Site these values were used for input parameters in the “Instantaneous” Biodegradation Reaction. If Site data was not available, model default parameters were used.

The model is designed to simulate biodegradation by both aerobic and anaerobic reactions. It was developed for the Air Force Center for Environmental Excellence (AFCEE) Technology Transfer Division at Brooks Air Force Base by Groundwater Services, Inc., of Houston, Texas.

BIOSCREEN attempts to answer the two fundamental questions regarding RNA:

- How far will the dissolved contaminant plume extend if no engineered controls or further source reduction measures are implemented?
- How long will the plume persist until natural attenuation processes cause it to dissipate?

BIOSCREEN has the following limitations:

- As an analytical model, BIOSCREEN assumes simple groundwater flow conditions.
- As a screening tool, BIOSCREEN only approximates more complicated processes that occur in the field.

Site-specific data was entered into BIOSCREEN to determine the degree of RNA. Site-specific data such as hydraulic conductivity and porosity were based on text book values for similar as observed at the Site (Todd 1980). The Site specific groundwater gradient which was obtained from the 4th Quarter 2005 sampling event was used and the model length was set at the distance from the closest groundwater production well (approximately 2,640 feet downgradient from the source area). Based on the well survey performed by the County of Alameda, production wells within a one-mile radius of the Site are shown in **Figure 8**, and the survey results are included in **Appendix E**. It was assumed that this well was downgradient during the simulation, and that the gradient in the model was equal to that measured at the Site during the 4th quarter. Input parameters such as the estimated plume length and the concentrations of MTBE and benzene were also based on the actual Site data collected during the 4th quarter. The highest concentration of benzene in groundwater was detected at 143 µg/L (0.143 mg/L), which was used for the purpose of the model. The highest concentrations of MTBE in groundwater were detected at 22,300 µg/L (22.3 mg/L) and 13,200 µg/L (13.2 mg/L), which were used for the purpose of the model. The source mass for benzene was assumed

to be equal to the mass of benzene in soil and in one pore volume of groundwater for a dissolved phase benzene plume measuring 40 feet by 85 feet by 20 feet thick, at a concentration of 0.143 mg/L. The source mass for MTBE was assumed to be equal to the mass of MTBE in soil and in one pore volume of groundwater for a dissolved phase MTBE plume measuring 75 feet by 290 feet by 20 feet thick, at an MTBE concentration of 17.75 mg/L. The partitioning coefficient for MTBE (12.59 L/kg) was obtained from the American Petroleum Institute's Strategies for Characterizing Subsurface Releases of Gasoline Containing MTBE (Regulatory and Scientific Affairs Publication Number 4699 dated February 2000). The fraction of organic carbon used (0.0025) was the mean concentration for site soils in the Los Angeles area as reported by the RWQCB in their Interim Site Assessment & Cleanup Guidebook dated May 1996.

- The input parameters and model results for years 1, 225, 279, 280, 308, 309, 365, 366, 398, 399, and 400 are included in **Appendix C**. As demonstrated by the output included in **Appendix C**, the MTBE contaminant plume with no degradation arrives at the nearest receptor (groundwater production well; 2,640 feet downgradient) at year 280. A maximum concentration of MTBE is observed at this receptor well at year 399 at a concentration of 1.117 mg/L, which is above the maximum contaminant level (MCL) of 0.013 mg/L, and the plume becomes detached from the source at year 366. The plume impacts the well at a concentration below the MCL at approximately year 308. The results of using the 1st Order Decay model show that the contaminant plume never arrives at the receptor (groundwater production well; 2,640 feet downgradient), but gets closest at a distance of 528 feet from the source at year 225 at a concentration of 0.001 mg/L, which is below the MCL of 0.013 mg/L, and the plume becomes detached from the source at year 366. The plume never impacts the receptor well.
- The input parameters and model results for benzene for years 1, 420, 421, 544, 545, 667, and 668 are included in **Appendix C**. As demonstrated by the output included in **Appendix C**, the benzene contaminant plume with no degradation arrives at the receptor (groundwater production well; 2,640 feet downgradient;) at year 421. A maximum concentration of benzene is observed at this receptor well at years 545 to 667 at a concentration of 0.021 mg/L, which is above the MCL of 0.001 mg/L. The plume impacts the well at concentration equal to the MCL at year 421, the year it arrives at the receptor. The 1st Order Decay model results in the benzene plume never arriving at the receptor. The plume never impacts the well at concentration above the MCL.

6.0 EVIDENCE OF RECENT RELEASE

In a letter dated December 30, 2004, submitted jointly to ConocoPhillips and the ACHCA, Thrifty provided evidence of a recent release of hydrocarbons as detected in groundwater samples collected during the 2nd, 3rd, and 4th Quarters 2004. Data collected during the 1st Quarter 2005 indicated that while TPHg, benzene, and MTBE concentrations appeared to be decreasing, they were still significantly elevated over March, June, and September 2004

levels in onsite wells RE-2, RE-4, RE-6, and RE-7 located near the underground storage tanks and pump islands. The decrease in concentrations may simply be the result that the dissolved plume is moving away from the source and/or that some of the plume is being sorbed onto the soil particles.

In a letter dated February 1, 2005, Conoco Phillips (TOSCO) responded to Thrifty's assertion that a recent release had occurred and indicated that the site is likely being impacted by an offsite source. ConocoPhillips indicated in their letter that no pattern of fluctuation in dissolved hydrocarbon concentrations has been established to date that has not been seen before at the site. Thrifty's review of the data, however, indicates that over the past 14 years (since 1991), there have been no fluctuations in dissolved hydrocarbon concentrations even close to those seen between the 3rd and 4th Quarters of 2004. ConocoPhillips stated in their letter that dissolved elevated concentrations of hydrocarbons were present in wells RE-6 and RE-7, but were not present in well PW-1 located between RE-6 and RE-7. Data collected during the 2nd Quarter 2005 and the 1st Quarter 2006 indicated that well PW-1 contained the highest TPHg and MTBE concentrations. Thus, it appears that the recent release did impact well PW-1. Data during the third quarter 2005 indicates that dissolved hydrocarbon concentrations were not detected in well PW-1. However, the dissolved concentrations in adjacent, upgradient well RE-6 continued to decline whereas in downgradient well RE-7 the concentrations remained high indicating that the contamination is simply migrating in the area of these three wells. During the 1st quarter 2006, elevated TPHg and MTBE concentrations were again detected in well PW-1 at concentrations of 35,500 and 28,200 ug/L, respectively. TPHg and MTBE remained high in RE-7 during the 1st quarter 2006 and benzene increased from ND<16 to 73 ug/L.

ConocoPhillips has asserted that the dissolved hydrocarbon concentrations noted in wells RE-3 and RE-4 were the result of migration of the dissolved plume from well RE-1. However, the maximum TPHg concentrations detected in well RE-1 was 150,000 ug/L on January 8, 1991, 28,000 ug/L on March 8, 1995, then consistently decreased to <50 ug/L beginning on December 1, 1999, as a result of active remediation conducted by Thrifty at the site from April 1990 to January 2000, whereas the TPHg concentration in well RE-4 was 297,000 ug/L in December 2004, thus the December 2004 levels were almost double than the highest historical level recorded 13 years ago, when the active remediation was just initiated.

Thrifty has plotted TPHg, benzene, and MTBE concentrations over time versus groundwater elevations for wells RE-2 (**Figure 7D**), RE-3 (**Figure 7E**), RE-4 (**Figure 7F**), RE-6 (**Figure 7H**), RE-7 (**Figure 7I**), and PW-1 (**Figure 7A**). The increases in TPHg and MTBE in wells RE-2, RE-4, RE-6, and RE-7 for the 3rd and 4th quarters of 2004 and 1st quarter of 2005 are quite dramatic when compared to the TPHg and MTBE concentrations over time. There is also a significant increase in TPHg and MTBE concentrations in well PW-1 in the 1st quarter 2005 and the 1st quarter 2006. There is a corresponding rise in groundwater elevation in each of these wells; however, there have been comparable rises in groundwater elevations in the past with no corresponding increase in dissolved hydrocarbon concentrations. Thus, it appears that a rise in groundwater elevation is not the reason for the significant increases in dissolved hydrocarbon concentrations at the site.

Further evidence of a recent release is provided by the use of BTEX ratios that are used as a means to compare the relative age of gasoline releases into the subsurface. The most common method is the cumulative BTEX ration that is described as B+T/E+X. Site investigations indicate that values between 1 and 6 are supportive of a recent release and that values less than 0.5 usually indicate a release older than about 8 to 10 years (Kaplan et. al. 1997, "Forensic Environmental Geochemistry: Differentiation of Fuel Types, Their Sources and Release Time;" Robert D. Morrison: "Forensic Techniques for Establishing the Origin and Timing of Contaminant Release"). The table provided below provides B+T/E+X ratios based on the groundwater samples collected during sampling events beginning in September 2004.

Sampling Date	Well ID	B	T	B+T	E	X	E+X	B+T/E+X
9/2/04	RE-3	982	65	1,047	77	86	163	6.42
9/2/04	RE-4	587	50	637	34	65	99	6.43
12/8/04	RE-4	4,680	44,900	49,580	4,850	29,000	33,850	1.46
12/8/04	RE-7	4,380	34,800	39,180	5,370	25,000	30,370	1.29
3/16/05	RE-7	2,840	19,400	22,240	2,760	14,400	17,160	1.30
6/1/05	RE-4	1,530	6,890	8,420	39	6,880	6,919	1.22
6/1/05	RE-7	1,860	8,690	10,550	1,180	4,980	6,160	1.71

Based on the September 2, 2004, sampling results, the B+T/E+X for monitoring wells RE-4 and RE-3 were 6.43 and 6.42, respectively. Beginning in September 2004, the BTEX ratios ranged between 0.54 and 6.43 thus providing additional evidence of a recent release at former Thrifty Station #054. Wells RE-3 and RE-4 are located downgradient of the USTs/piping and well RE-7 is located downgradient of the dispensers. Although well RE-2 is not located downgradient of the dispensers, it is located very close to the dispensers which appear to be a source of the recent release along with the USTs and/or piping.

Thrifty has contended in the past that an offsite upgradient source contributed to the contamination previously detected in offsite, upgradient well RS-9. The concentrations in well RS-9, however, have never been detected at the concentrations recently found in wells RE-2, RE-4, RE-6, and RE-7.

ConocoPhillips also provided evidence of tank tightness testing and secondary containment testing. Unfortunately, the most recent tank tightness test report was dated May 5, 2004 and the most recent secondary containment test report was dated September 7, 2004, both of

which could have predated the recent release that apparently occurred during the 4th Quarter 2004. The UST Monitor Certification Summary Report dated May 5, 2004 also reported one gallon of water in the 89 turbine sump and about 8 ounces of fuel in the 91 turbine sump. However, Thrifty has not received from ConocoPhillips reports of the other quantitative release detection methods required by the CCR Title 23, Section 3 Chapter 16 to be used to monitor the UST and piping system (i.e. inventory reconciliation).

In addition, the presence of MTBE in groundwater indicates a post 1991 release since Thrifty did not dispense MTBE blended gasoline during its operation. Thrifty's refinery (Golden West Refining Co.) began using MTBE in gasoline manufacturing processes in October 1992 when this site was already operated by BP Oil and later by TOSCO.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Between system startup in April of 1990 and the end of the operation in February of 2000, the SAVE system destroyed a total of 5,631 pounds of hydrocarbons and removed and treated 27,992 gallons of groundwater. Approximately 1,296 pounds of hydrocarbon were excavated and removed from the Site during UST replacement activities in January, 1989.

The quarterly groundwater monitoring results confirm that the contaminant plume is attenuating and that groundwater concentrations have been decreasing over time, except for the concentration spikes caused by the recent release.

Based on the BIOSCREEN model output, the solute transport first-order decay model appears to be most representative of actual Site conditions including plume sizes and concentrations for MTBE and benzene. The 1st Order Decay model results in the MTBE and benzene plumes never arriving at the receptor well. The plumes never impact the well at concentration above their respective MCLs.

Thrifty believes that the recent increase (June 2005 and March 2006) in TPHg and MTBE concentrations in well PW-1 provide further evidence of a recent release at the site and strongly support Thrifty's position that if further assessment and remediation becomes necessary, it should be the responsibility of ConocoPhillips and that ConocoPhillips should investigate to determine if an upgradient source is contributing to the dissolved hydrocarbon plume at the site. Thrifty respectfully repeats its request that the ACHCA acknowledge the evidence of a new release (s) that occurred after 1991 and to designate the current operator of the facility as the Primary Responsible Party for any corrective actions required in the future.

Conoco Phillips asserted in the letter dated February 1, 2005, that an offsite upgradient source had likely impacted Thrifty Station No. 054. However, there was no corresponding increase in dissolved hydrocarbons in upgradient well RS-9 preceding the spike in dissolved hydrocarbon concentrations in well RE-2 in September and December 2004, thus, there does not appear to be evidence to support Conoco Phillips' assertion of an identified upgradient offsite source.

Based on these conclusions, on behalf of Thrifty, GHC requests regulatory closure of the Thrifty case.

TABLES

TABLE 1
Historic Soil Sample Laboratory Analytical Results
 Thrifty Oil Station #054 - Castro Valley, CA
 GHC - 1331

Sample ID	Date Sampled	ANALYTICAL PARAMETERS					
		TPHg (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)
ESLs shallow soil (≤ 3m bgs)		100	0.044	2.9	3.3	2.3	0.023
ESLs deep soil (>3m bgs)		100	0.044	2.9	3.3	2.3	0.023
B1-5	12/17/1986	230	-	-	-	-	-
B1-10	12/17/1986	1,120	-	-	-	-	-
B1-20	12/17/1986	420	-	-	-	-	-
B2-5	12/17/1986	320	-	-	-	-	-
B2-15	12/17/1986	<1	-	-	-	-	-
B3-5	12/17/1986	830	-	-	-	-	-
B3-15	12/17/1986	<1	-	-	-	-	-
B4-5	12/17/1986	850	-	-	-	-	-
B4-15	12/17/1986	4	-	-	-	-	-
PW-1*	-	-	-	-	-	-	-
PW-2*	-	-	-	-	-	-	-
RE1-5	2/15/1988	1,000	10	92	27	180	-
RE1-10	2/15/1988	ND	0.016	0.003	ND	0.005	-
RE2-5	2/16/1988	1.1	0.004	0.001	ND	ND	-
RE2-10	2/16/1988	130	0.02	0.02	0.75	0.14	-
RE3-5	2/14/1988	490	5.30	22.0	7.8	82.0	-
RE3-10	2/14/1988	0.1	0.014	0.010	ND	0.013	-
RE4-5	2/14/1988	1,900	13.0	120.0	44.0	410.0	-
RE4-10	2/14/1988	7.7	0.057	0.020	0.013	0.13	-
RE5-5	2/17/1988	17	0.36	0.036	0.029	0.14	-
RE5-10	2/17/1988	3.0	0.008	ND	0.007	0.017	-
RE6-5	2/17/1988	1.2	0.033	0.003	0.010	0.025	-
RE6-10	2/17/1988	0.6	0.025	0.002	0.004	0.005	-
RE7-5	2/17/1988	50	1.30	2.9	0.60	7.0	-
RE7-10	2/17/1988	110	0.57	0.05	0.08	0.37	-
RS8-5	5/8/1991	ND	0.045	0.013	0.006	0.023	-
RS8-10	5/8/1991	20	ND	ND	0.018	ND	-
RS9-5	5/8/1991	580	ND	0.46	1.0	4.0	-
RS9-10	5/8/1991	ND	ND	0.011	ND	ND	-
RS10-5	5/8/1991	ND	ND	0.005	ND	ND	-
RS11-5	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-
RS11-10	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-
RS11-15	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-
RS11-20	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-
RS11-24	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-
RS11-28	9/21/1995	<1	<0.005	<0.005	<0.005	<0.01	-

NOTES: TPHg analyzed by EPA Method 8015M
 BTEX and MTBE analysis by EPA Method 8260B
 "<" = Less than the specified laboratory detection limit
 - = Not analyzed
 * Wells PW-1 and PW-2: Data not available
 ESLs = Environmental Screening Levels
 3m bgs = 3 meters (10 feet) below ground surface

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
BPOs	100	1.0	40	30	20	5.0					
MONITORING WELL #PW-1 <i>Screen Interval = 5 to 15 feet (Est.)</i>											
04/11/88	-	-	-	-	-	-	-	-	-	-	-
04/09/90	230,000	600	2,700	1,000	16,000	-	5.10	NP	0.00	166.46	161.36
10/30/90	35,000	240	970	240	3,580	-	6.17	NP	0.00	166.46	160.29
01/18/91	37,000	43	140	42	1,600	-	6.28	NP	0.00	166.46	160.18
02/12/91	45,000	99	130	25	700	-	5.88	NP	0.00	166.46	160.58
03/20/91	1,900	0.43	ND	ND	2.8	-	4.75	NP	0.00	166.46	161.71
05/22/91	41,000	600	730	250	3,800	-	5.10	NP	0.00	166.46	161.36
06/19/91	-	-	-	-	-	-	5.61	NP	0.00	166.46	160.85
07/17/91	-	-	-	-	-	-	5.53	FILM	0.00	166.46	160.93
08/07/91	-	-	-	-	-	-	5.67	FILM	0.00	166.46	160.79
09/24/91	-	-	-	-	-	-	5.57	FILM	0.00	166.46	160.89
10/23/91	-	-	-	-	-	-	6.53	FILM	0.00	166.46	159.93
11/06/91	-	-	-	-	-	-	5.85	FILM	0.00	166.46	160.61
12/04/91	-	-	-	-	-	-	5.91	FILM	0.00	166.46	160.55
01/29/92	-	-	-	-	-	-	5.43	FILM	0.00	166.46	161.03
02/26/92	-	-	-	-	-	-	5.54	FILM	0.00	166.46	160.92
03/19/92	ND	ND	ND	ND	ND	-	5.47	NP	0.00	166.46	160.99
04/22/92	-	-	-	-	-	-	5.62	FILM	0.00	166.46	160.84
05/21/92	1,300	19	2.9	0.7	58	-	6.21	NP	0.00	166.46	160.25
06/25/92	-	-	-	-	-	-	6.94	NP	0.00	166.46	159.52
07/30/92	-	-	-	-	-	-	5.90	FILM	0.00	166.46	160.56
08/20/92	-	-	-	-	-	-	7.12	FILM	0.00	166.46	159.34
09/30/92	3,400	57	ND	26	240	-	6.42	NP	0.00	166.46	160.04
12/23/92	-	-	-	-	-	-	5.56	FILM	0.00	166.46	160.90
03/10/93	-	-	-	-	-	-	5.65	FILM	0.00	166.46	160.81
06/09/93	400	<0.5	1.1	<1.0	<1.0	-	5.30	NP	0.00	166.46	161.16
09/14/93	180	3.7	3.2	1.5	14	-	5.43	NP	0.00	166.46	161.03
12/14/93	<50	<0.3	<0.3	<0.3	<0.5	-	4.65	NP	0.00	166.46	161.81
03/02/94	<50	<0.3	<0.3	<0.3	<0.5	-	5.43	NP	0.00	166.46	161.03
06/06/94	330	1.3	<0.3	0.88	9.8	-	4.70	NP	0.00	166.46	161.76
09/06/94	1,100	67	<0.3	<0.3	24	-	6.48	NP	0.00	166.46	159.98
12/07/94	<50	<0.3	<0.3	<0.5	<0.5	-	5.22	NP	0.00	166.46	161.24

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/08/95	<100	<0.5	<0.5	<0.5	<1	-	6.94	NP	0.00	166.46	159.52
06/15/95	260	0.8	0.6	<0.5	3.2	-	5.72	NP	0.00	166.46	160.74
09/05/95	330	2.1	<0.5	2.1	9.6	-	5.96	NP	0.00	166.46	160.50
11/21/95	660	13	1.3	<0.3	4.0	-	6.04	NP	0.00	166.46	160.42
03/11/96	660	0.94	0.77	<0.3	8.1	-	3.60	NP	0.00	166.46	162.86
06/19/96	120	0.53	<0.3	<0.3	2.3	-	4.80	NP	0.00	166.46	161.66
09/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.10	NP	0.00	166.46	161.36
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	4.92	NP	0.00	166.46	161.54
03/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.50	NP	0.00	166.46	161.96
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
09/16/97	690	0.97	<0.3	<0.3	<0.5	<20	4.55	NP	0.00	166.46	161.91
12/09/97	640	150	0.64	<0.3	5.2	1,300	5.60	NP	0.00	166.46	160.86
03/03/98	<50	<0.3	0.57	<0.3	<0.5	<20	4.13	NP	0.00	166.46	162.33
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	6.35	NP	0.00	166.46	160.11
12/30/98	<50	1.1	<0.3	<0.3	<0.5	<5	6.40	NP	0.00	166.46	160.06
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.35	NP	0.00	166.46	160.11
06/22/99	<50	<0.3	<0.3	<0.3	<0.5	53	4.95	NP	0.00	166.46	161.51
09/08/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.80	NP	0.00	166.46	161.66
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	3.64	NP	0.00	166.46	162.82
03/23/00	<50	0.5	0.5	1.1	<0.5	<5	4.03	NP	0.00	166.46	162.43
06/08/00	<50	<5	<5	<5	<5	<5	4.40	NP	0.00	166.46	162.06
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.73	NP	0.00	166.46	161.73
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.01	NP	0.00	166.46	162.45
03/22/01	600	<0.18	1.3	<0.18	<0.26	*1,010 / 1,970	6.32	NP	0.00	166.46	160.14
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.32	NP	0.00	166.46	160.14
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.32	NP	0.00	166.46	160.14
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.02	NP	0.00	166.46	160.44
03/13/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.30	NP	0.00	166.46	160.16
06/12/02	1,320	1	1	<0.18	2	2,060	6.30	NP	0.00	166.46	160.16
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.06	NP	0.00	166.46	159.40
12/18/02	113	<0.18	1.1	<0.18	<0.26	89	6.30	NP	0.00	166.46	160.16
03/19/03	<15	<0.04	2.2	<0.02	2.7	<0.03	6.35	NP	0.00	166.46	160.11
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	6.35	NP	0.00	166.46	160.11

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.90	NP	0.00	166.46	160.56
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	3.38	NP	0.00	165.95	162.57
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.51	NP	0.00	165.95	160.44
06/09/04	<15	<0.14	<0.16	<0.18	<0.45	<0.22	5.35	NP	0.00	165.95	160.60
09/02/04	133	<0.14	2.4	<0.18	1.9	<0.22	6.33	NP	0.00	165.95	159.62
12/08/04	<15	<0.14	1.3	<0.18	<0.45	<0.22	4.59	NP	0.00	165.95	161.36
03/16/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.90	NP	0.00	165.95	160.05
06/01/05	49,300	1,540	3,990.0	154	6,190	69,000	4.81	NP	0.00	165.95	161.14
09/14/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	4.74	NP	0.00	165.95	161.21
12/06/05	272	6.6	1.5 J	5.1	9.6	217	4.35	NP	0.00	165.95	161.60
03/15/06	35,500	<3.2	<1.0	<2.4	862	28,500	4.79	NP	0.00	165.95	161.16
MONITORING WELL PW-2 <i>Screen Interval = 5 to 15 feet (Est.)</i>											
04/11/88	-	-	-	-	-	-	-	-	-	-	-
04/09/90	600,000	1,300	11,000	4,600	4,300	-	5.81	NP	0.00	166.18	160.37
10/30/90	48,000	310	51	10	480	-	6.95	NP	0.00	166.18	159.23
01/18/91	86,000	230	1,400	350	8,300	-	6.92	NP	0.00	166.18	159.26
02/12/91	160,000	680	1,300	250	7,000	-	6.78	NP	0.00	166.18	159.40
03/20/91	17,000	34	50	ND	1,100	-	5.54	NP	0.00	166.18	160.64
05/22/91	14,000	57	2,100	500	8,200	-	6.07	NP	0.00	166.18	160.11
06/19/91	-	-	-	-	-	-	6.37	FILM	0.00	166.18	159.81
07/17/91	-	-	-	-	-	-	6.38	FILM	0.00	166.18	159.80
08/07/91	-	-	-	-	-	-	6.63	FILM	0.00	166.18	159.55
09/24/91	-	-	-	-	-	-	6.42	FILM	0.00	166.18	159.76
10/23/91	-	-	-	-	-	-	7.25	FILM	0.00	166.18	158.93
11/06/91	-	-	-	-	-	-	6.44	FILM	0.00	166.18	159.74
12/04/91	-	-	-	-	-	-	6.65	FILM	0.00	166.18	159.53
01/29/92	-	-	-	-	-	-	6.17	FILM	0.00	166.18	160.01
02/26/92	-	-	-	-	-	-	5.90	FILM	0.00	166.18	160.28
03/19/92	-	-	-	-	-	-	5.80	FILM	0.00	166.18	160.38
04/22/92	-	-	-	-	-	-	5.88	FILM	0.00	166.18	160.30
05/21/92	-	-	-	-	-	-	6.03	FILM	0.00	166.18	160.15
06/25/92	-	-	-	-	-	-	6.57	FILM	0.00	166.18	159.61

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/30/92	-	-	-	-	-	-	6.20	FILM	0.00	166.18	159.98
08/20/92	-	-	-	-	-	-	6.64	FILM	0.00	166.18	159.54
09/30/92	-	-	-	-	-	-	6.88	FILM	0.00	166.18	159.30
12/23/92	-	-	-	-	-	-	6.08	FILM	0.00	166.18	160.10
03/10/93	-	-	-	-	-	-	5.95	FILM	0.00	166.18	160.23
06/09/93	3,400	24	22	<0.5	240	-	5.38	NP	0.00	166.18	160.80
09/14/93	4,900	190	15	6.8	480	-	6.26	NP	0.00	166.18	159.92
12/14/93	1,700	4.2	<0.3	<0.3	<0.5	-	5.22	NP	0.00	166.18	160.96
03/02/94	-	-	-	-	-	-	5.75	FILM	0.00	166.18	160.43
06/06/94	980	25	1.2	<0.3	42	-	5.25	NP	0.00	166.18	160.93
09/06/94	3,200	95	3.0	<1.7	76	-	6.80	NP	0.00	166.18	159.38
12/07/94	510	1.8	<0.3	<0.5	1.7	-	5.57	NP	0.00	166.18	160.61
03/08/95	1,900	<0.5	<0.5	1.4	35	-	4.10	NP	0.00	166.18	162.08
06/15/95	1,700	5.6	<0.5	<0.5	1.6	-	5.44	NP	0.00	166.18	160.74
09/05/95	2,500	33	1.0	0.86	18	-	6.13	NP	0.00	166.18	160.05
11/21/95	2,800	130	59	18	190	-	6.23	NP	0.00	166.18	159.95
03/11/96	13,000	330	460	<15	3,800	-	4.48	NP	0.00	166.18	161.70
06/19/96	1,400	<0.3	<0.3	<0.3	<0.5	-	5.38	NP	0.00	166.18	160.80
09/16/96	3,500	<0.3	<0.3	<0.3	<0.5	5,900	5.21	NP	0.00	166.18	160.97
12/10/96	2,100	<0.3	<0.3	<0.3	<0.5	4,700	4.87	NP	0.00	166.18	161.31
03/12/97	600	1.6	<0.3	<0.3	5.8	1,100	4.43	NP	0.00	166.18	161.75
06/12/97	270	<0.3	<0.3	<0.3	<0.5	630	-	-	-	-	-
09/10/97	220	<0.3	<0.3	<0.3	<0.5	320	4.07	NP	0.00	166.18	162.11
12/09/97	120	<0.3	0.73	<0.3	<0.5	420	5.20	NP	0.00	166.18	160.98
03/03/98	<50	0.43	0.48	<0.3	<0.5	47	3.30	NP	0.00	166.18	162.88
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.15	NP	0.00	166.18	161.03
12/30/98	<50	1.1	<0.3	<0.3	<0.5	<5	4.75	NP	0.00	166.18	161.43
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.40	NP	0.00	166.18	161.78
06/22/99	-	-	-	-	-	-	4.50	NP	0.00	166.18	161.68
09/08/99	100	<0.3	<0.3	<0.3	<0.5	230	3.99	NP	0.00	166.18	162.19
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	3.62	NP	0.00	166.18	162.56
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	2.93	NP	0.00	166.18	163.25
06/08/00	<50	<5	<5	<5	<5	<5	3.60	NP	0.00	166.18	162.58

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.61	NP	0.00	166.18	162.57
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.60	NP	0.00	166.18	162.58
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.14	NP	0.00	166.18	161.04
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.13	NP	0.00	166.18	161.05
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.90	NP	0.00	166.18	160.28
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.20	NP	0.00	166.18	159.98
03/13/02	-	-	-	-	-	-	5.14	NP	0.00	166.18	161.04
06/12/02	-	-	-	-	-	-	-	-	-	-	-
09/18/02	-	-	-	-	-	-	-	-	-	-	-
12/18/02	-	-	-	-	-	-	-	-	-	-	-
03/19/03	-	-	-	-	-	-	-	-	-	-	-
06/11/03	-	-	-	-	-	-	-	-	-	-	-
09/04/03	-	-	-	-	-	-	-	-	-	-	-
12/04/03	-	-	-	-	-	-	3.20	NP	0.00	165.61	162.41
03/18/04	-	-	-	-	-	-	5.12	NP	0.00	165.61	160.49
06/09/04	-	-	-	-	-	-	4.72	NP	0.00	165.61	160.89
09/02/04	-	-	-	-	-	-	6.95	NP	0.00	165.61	158.66
12/08/04	-	-	-	-	-	-	3.63	NP	0.00	165.61	161.98
03/16/05	-	-	-	-	-	-	5.12	NP	0.00	165.61	160.49
06/01/05	-	-	-	-	-	-	4.00	NP	0.00	165.61	161.61
09/14/05	-	-	-	-	-	-	3.97	NP	0.00	165.61	161.64
12/06/05	-	-	-	-	-	-	3.97	NP	0.00	165.61	161.64
03/15/06	-	-	-	-	-	-	4.00	NP	0.00	165.61	161.61
MONITORING WELL #RE-1 <i>Screen Interval = 5 to 17 feet</i>											
04/11/88	37,000	1,900	8,400	1,200	15,000	-	-	-	-	-	-
04/09/90	45,000	6,100	7,000	2,000	8,800	-	4.99	NP	0.00	166.82	161.83
10/30/90	72,000	7,700	5,300	1,800	8,900	-	5.95	NP	0.00	166.82	160.87
01/18/91	150,000	11,000	14,000	1,800	4,300	-	5.17	NP	0.00	166.82	161.65
02/12/91	140,000	11,000	12,000	1,600	13,000	-	4.16	NP	0.00	166.82	162.66
03/20/91	53,000	3,100	4,200	400	5,500	-	4.75	NP	0.00	166.82	162.07
05/22/91	85,000	8,700	10,000	1,800	12,000	-	4.42	NP	0.00	166.82	162.40
06/19/91	110,000	8,500	9,600	2,600	16,000	-	4.93	NP	0.00	166.82	161.89

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/17/91	5,500	950	ND	26	ND	-	5.19	NP	0.00	166.82	161.63
08/07/91	-	6,700	5,000	ND	7,100	-	5.12	NP	0.00	166.82	161.70
09/24/91	60,000	6,800	4,300	640	6,900	-	5.87	NP	0.00	166.82	160.95
10/23/91	79,000	7,900	8,300	450	7,100	-	5.81	NP	0.00	166.82	161.01
11/06/91	130,000	14,000	15,000	1,100	8,800	-	5.56	NP	0.00	166.82	161.26
12/04/91	50,000	8,000	4,700	520	4,100	-	5.35	NP	0.00	166.82	161.47
01/29/92	21,000	10,300	11,000	780	6,000	-	4.50	NP	0.00	166.82	162.32
02/26/92	38000	8,400	10,500	720	7,100	-	5.27	NP	0.00	166.82	161.55
03/19/92	48,000	6,200	9,700	780	7,200	-	4.47	NP	0.00	166.82	162.35
04/22/92	-	-	-	-	-	-	4.62	NP	0.00	166.82	162.20
05/21/92	20,000	7,600	10,100	830	6,900	-	4.98	NP	0.00	166.82	161.84
06/25/92	-	-	-	-	-	-	5.14	FILM	0.00	166.82	161.68
07/30/92	-	-	-	-	-	-	5.30	FILM	0.00	166.82	161.52
08/20/92	-	-	-	-	-	-	5.28	FILM	0.00	166.82	161.54
09/30/92	-	-	-	-	-	-	5.66	FILM	0.00	166.82	161.16
12/23/92	-	-	-	-	-	-	4.81	FILM	0.00	166.82	162.01
03/10/93	-	-	-	-	-	-	4.13	FILM	0.00	166.82	162.69
06/09/93	-	-	-	-	-	-	4.48	FILM	0.00	166.82	162.34
09/14/93	19,000	3,600	1,100	740	4,300	-	5.35	NP	0.00	166.82	161.47
12/14/93	38,000	4,300	1,300	<6.6	11	-	4.38	NP	0.00	166.82	162.44
03/02/94	-	-	-	-	-	-	4.22	FILM	0.00	166.82	162.60
06/06/94	-	-	-	-	-	-	2.16	FILM	0.00	166.82	164.66
09/06/94	74,000	3,300	3,900	1,200	6,100	-	5.00	NP	0.00	166.82	161.82
12/07/94	30,000	3,200	2,900	1,200	4,600	-	4.10	NP	0.00	166.82	162.72
03/08/95	28,000	4,200	2,300	810	7,800	-	3.92	NP	0.00	166.82	162.90
06/15/95	-	-	-	-	-	-	-	-	-	-	-
09/05/95	-	-	-	-	-	-	4.78	FILM	0.00	166.82	162.04
11/21/95	-	-	-	-	-	-	4.82	NP	0.00	166.82	162.00
03/11/96	270	2.4	6.0	4.5	19	-	3.32	NP	0.00	166.82	163.50
06/19/96	3,000	570	63	<1.5	400	-	4.20	NP	0.00	166.82	162.62
09/16/96	7,700	440	69	<1.5	680	230	4.68	NP	0.00	166.82	162.14
12/10/96	52	<0.3	<0.3	<0.3	<0.5	120	4.93	NP	0.00	166.82	161.89
03/12/97	8,700	180	5.4	40	1,100	130	4.10	NP	0.00	166.82	162.72
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	36	-	-	-	-	-

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/16/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.55	NP	0.00	166.82	162.27
12/09/97	<50	<0.3	0.44	<0.3	<0.5	<20	5.30	NP	0.00	166.82	161.52
03/03/98	1,100	13	0.51	<0.3	<0.5	220	4.55	NP	0.00	166.82	162.27
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	60	<0.3	<0.3	<0.3	<0.5	180	6.05	NP	0.00	166.82	160.77
12/30/98	<50	1.1	<0.3	<0.3	<0.5	<5	5.65	NP	0.00	166.82	161.17
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.68	NP	0.00	166.82	161.14
06/22/99	880	14	0.98	<0.3	8.1	260	4.95	NP	0.00	166.82	161.87
09/08/99	72	<0.3	<0.3	<0.3	<0.5	120	4.46	NP	0.00	166.82	162.36
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.08	NP	0.00	166.82	162.74
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	3.68	NP	0.00	166.82	163.14
06/08/00	<50	<5	<5	<5	<5	<5	4.07	NP	0.00	166.82	162.75
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.07	NP	0.00	166.82	162.75
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.06	NP	0.00	166.82	162.76
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.22	NP	0.00	166.82	161.60
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.99	NP	0.00	166.82	160.83
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.84	NP	0.00	166.82	161.98
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.80	NP	0.00	166.82	162.02
03/13/02	-	-	-	-	-	-	5.18	NP	0.00	166.82	161.64
06/12/02	-	-	-	-	-	-	-	-	-	-	-
09/18/02	-	-	-	-	-	-	-	-	-	-	-
12/18/02	-	-	-	-	-	-	-	-	-	-	-
03/19/03	-	-	-	-	-	-	-	-	-	-	-
06/11/03	-	-	-	-	-	-	-	-	-	-	-
09/04/03	-	-	-	-	-	-	-	-	-	-	-
12/04/03	-	-	-	-	-	-	4.50	NP	0.00	166.46	161.96
03/18/04	-	-	-	-	-	-	5.64	NP	0.00	166.46	160.82
06/09/04	-	-	-	-	-	-	5.65	NP	0.00	166.46	160.81
09/02/04	-	-	-	-	-	-	5.45	NP	0.00	166.46	161.01
12/08/04	-	-	-	-	-	-	4.64	NP	0.00	166.46	161.82
03/16/05	-	-	-	-	-	-	6.79	NP	0.00	166.46	159.67
06/01/05	-	-	-	-	-	-	4.43	NP	0.00	166.46	162.03
09/14/05	-	-	-	-	-	-	5.64	NP	0.00	166.46	160.82
12/06/05	-	-	-	-	-	-	5.64	NP	0.00	166.46	160.82

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/15/06	-	-	-	-	-	-	4.44	NP	0.00	166.46	162.02
MONITORING WELL #RE-2 <i>Screen Interval = 5 to 17 feet</i>											
04/11/88	-	-	-	-	-	-	-	-	-	-	-
04/09/90	850	5.8	0.5	4.8	1.1	-	4.90	NP	0.00	167.19	162.29
10/30/90	440	2.8	0.91	13	3.14	-	5.34	NP	0.00	167.19	161.85
01/18/91	1,100	8.4	3.1	ND	10	-	4.90	NP	0.00	167.19	162.29
02/12/91	1,100	5.9	ND	1.77	ND	-	4.94	NP	0.00	167.19	162.25
03/20/91	550	4.3	ND	ND	ND	-	4.32	NP	0.00	167.19	162.87
05/22/91	1,000	5.3	3.6	4.4	8.9	-	4.43	NP	0.00	167.19	162.76
06/19/91	700	2.1	1.4	3.8	3.5	-	6.43	NP	0.00	167.19	160.76
07/17/91	880	12	8.0	4.3	28	-	4.75	NP	0.00	167.19	162.44
08/07/91	-	3.8	1.6	ND	ND	-	4.87	NP	0.00	167.19	162.32
09/24/91	670	7.2	7.1	ND	23	-	5.50	NP	0.00	167.19	161.69
10/23/91	2,700	52	60	22	130	-	5.63	NP	0.00	167.19	161.56
11/06/91	1,900	18	61	9.1	83	-	5.14	NP	0.00	167.19	162.05
12/04/91	1,100	26	47	4.3	42	-	5.26	NP	0.00	167.19	161.93
01/29/92	900	14	24	5.3	19	-	5.11	NP	0.00	167.19	162.08
02/26/92	500	3.4	3.5	2.7	2.7	-	4.31	NP	0.00	167.19	162.88
03/19/92	1,200	14	20	15	18	-	4.45	NP	0.00	167.19	162.74
04/22/92	200	ND	ND	ND	ND	-	4.78	NP	0.00	167.19	162.41
05/21/92	500	7.5	6.8	3.9	7.4	-	5.02	NP	0.00	167.19	162.17
06/25/92	ND	ND	0.9	0.7	ND	-	5.13	NP	0.00	167.19	162.06
07/30/92	500	7.7	8.6	3.2	1.7	-	5.19	NP	0.00	167.19	162.00
08/20/92	1,100	6.6	4.5	2.7	2.0	-	5.27	NP	0.00	167.19	161.92
09/30/92	500	5.4	2.4	1.8	4.5	-	5.45	NP	0.00	167.19	161.74
12/23/92	800	1.9	ND	ND	2.3	-	4.60	NP	0.00	167.19	162.59
03/10/93	1,200	ND	1.4	ND	2.1	-	4.18	NP	0.00	167.19	163.01
06/09/93	200	ND	ND	ND	ND	-	4.53	NP	0.00	167.19	162.66
09/17/93	360	1.6	1.1	3.2	8.9	-	5.26	NP	0.00	167.19	161.93
12/14/93	260	5.6	3.9	<0.3	21.0	-	2.75	NP	0.00	167.19	164.44
03/02/94	410	<0.3	<0.3	<0.3	<0.5	-	4.27	NP	0.00	167.19	162.92
06/06/94	760	4.6	<0.3	0.32	1.3	-	4.88	NP	0.00	167.19	162.31
09/06/94	1,300	43	45	8.9	69	-	5.16	NP	0.00	167.19	162.03
12/07/94	-	-	-	-	-	-	4.16	NP	0.00	167.19	163.03

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/08/95	<100	<0.5	<0.5	<0.5	<1	-	3.96	NP	0.00	167.19	163.23
06/15/95	130	<0.5	<0.5	<0.5	<1	-	4.52	NP	0.00	167.19	162.67
09/05/95	210	<0.5	<0.5	<0.5	<1	-	4.76	NP	0.00	167.19	162.43
11/21/95	160	0.65	<0.3	0.35	0.95	-	4.83	NP	0.00	167.19	162.36
03/11/96	<50	<0.3	<0.3	<0.3	<0.5	-	3.36	NP	0.00	167.19	163.83
06/19/96	<50	<0.3	<0.3	<0.3	<0.5	-	4.68	NP	0.00	167.19	162.51
09/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.10	NP	0.00	167.19	162.09
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	4.47	NP	0.00	167.19	162.72
03/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.05	NP	0.00	167.19	163.14
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.08	NP	0.00	167.19	163.11
12/09/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.40	NP	0.00	167.19	162.79
03/03/98	<50	<0.3	<0.3	<0.3	<0.5	<20	3.30	NP	0.00	167.19	163.89
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	15	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	4.93	NP	0.00	167.19	162.26
12/30/98	460	0.92	<0.3	<0.3	<0.5	1,400	4.20	NP	0.00	167.19	162.99
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.20	NP	0.00	167.19	162.99
06/22/99	2,900	7.4	<0.3	0.43	4.1	4,500	3.70	NP	0.00	167.19	163.49
09/08/99	1,400	<3	<3	<3	<5	3,200	3.96	NP	0.00	167.19	163.23
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	3.58	NP	0.00	167.19	163.61
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	3.19	NP	0.00	167.19	164.00
06/08/00	<50	<5	<5	<5	<5	<5	3.18	NP	0.00	167.19	164.01
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.58	NP	0.00	167.19	163.61
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	3.58	NP	0.00	167.19	163.61
03/22/01	575	<0.18	1.3	<0.18	<0.26	*950 / 2,070	4.33	NP	0.00	167.19	162.86
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.10	NP	0.00	167.19	162.09
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.86	NP	0.00	167.19	161.33
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.81	NP	0.00	167.19	162.38
03/13/02	-	-	-	-	-	-	4.33	NP	0.00	167.19	162.86
06/12/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.86	NP	0.00	167.19	161.33
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.86	NP	0.00	167.19	161.33
12/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.48	NP	0.00	167.19	161.71
03/19/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.86	NP	0.00	167.19	161.33
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.86	NP	0.00	167.19	161.33

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.48	NP	0.00	167.19	161.71
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	3.20	NP	0.00	166.61	163.41
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	8.4	4.33	NP	0.00	166.61	162.28
06/09/04	<15	<0.14	<0.16	<0.18	<0.45	8.4	4.32	NP	0.00	166.61	162.29
09/02/04	877	2.3	2.2	5.8	4.0	*743 / 516	5.12	NP	0.00	166.61	161.49
12/08/04	194,000	1,960	26,900	4,660	23,200	*10,700 / 13,000	3.65	NP	0.00	166.61	162.96
03/16/05	50,600	901	10,100	130 J	12,100	4,040	5.47	NP	0.00	166.61	161.14
06/01/05	23,300	519	3,370	<7	7,180	3,800	3.95	NP	0.00	166.61	162.66
09/14/05	14,000	22	15 J	<2.4	3,930	2,420	4.32	NP	0.00	166.61	162.29
12/06/05	140	<0.32	<0.10	<0.24	<0.3	34	3.55	NP	0.00	166.61	163.06
03/15/06	57	<0.32	<0.10	<0.24	<0.30	31	3.95	NP	0.00	166.61	162.66

MONITORING WELL #RE-3											
<i>Screen Interval = 5 to 18 feet</i>											
04/11/88	70,000	6,600	5,300	800	13,000	-	-	-	-	-	-
04/09/90	370,000	2,300	4,900	3,200	31,000	-	7.15	NP	0.00	167.39	160.24
10/30/90	13,000	860	660	220	2,210	-	7.84	NP	0.00	167.39	159.55
01/18/91	42,000	4,700	4,500	21	7,700	-	6.90	NP	0.00	167.39	160.49
02/12/91	72,000	3,600	4,500	ND	7,600	-	6.62	NP	0.00	167.39	160.77
03/20/91	65,000	2,400	9,400	50	9,800	-	5.87	NP	0.00	167.39	161.52
05/22/91	-	-	-	-	-	-	5.98	FILM	0.00	167.39	161.41
06/19/91	-	-	-	-	-	-	6.84	FILM	0.00	167.39	160.55
07/17/91	-	-	-	-	-	-	7.10	FILM	0.00	167.39	160.29
08/07/91	-	-	-	-	-	-	7.30	FILM	0.00	167.39	160.09
09/24/91	-	-	-	-	-	-	7.84	FILM	0.00	167.39	159.55
10/23/91	-	-	-	-	-	-	8.07	FILM	0.00	167.39	159.32
11/06/91	-	-	-	-	-	-	7.63	FILM	0.00	167.39	159.76
12/04/91	-	-	-	-	-	-	7.83	FILM	0.00	167.39	159.56
01/29/92	-	-	-	-	-	-	7.17	FILM	0.00	167.39	160.22
02/26/92	-	-	-	-	-	-	5.56	FILM	0.00	167.39	161.83
03/19/92	-	-	-	-	-	-	5.44	FILM	0.00	167.39	161.95
04/22/92	-	-	-	-	-	-	6.56	FILM	0.00	167.39	160.83
05/21/92	-	-	-	-	-	-	6.90	FILM	0.00	167.39	160.49
06/25/92	-	-	-	-	-	-	7.18	FILM	0.00	167.39	160.21

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/30/92	-	-	-	-	-	-	6.80	FILM	0.00	167.39	160.59
08/20/92	-	-	-	-	-	-	7.25	FILM	0.00	167.39	160.14
09/30/92	-	-	-	-	-	-	7.68	FILM	0.00	167.39	159.71
12/23/92	-	-	-	-	-	-	6.07	FILM	0.00	167.39	161.32
03/10/93	-	-	-	-	-	-	5.66	FILM	0.00	167.39	161.73
06/09/93	-	-	-	-	-	-	6.66	FILM	0.00	167.39	160.73
09/14/93	40,000	2,900	1,500	180	6,900	-	7.30	NP	0.00	167.39	160.09
12/14/93	-	-	-	-	-	-	5.95	NP	0.00	167.39	161.44
03/02/94	-	-	-	-	-	-	5.08	NP	0.00	167.39	162.31
06/06/94	-	-	-	-	-	-	6.35	FILM	0.00	167.39	161.04
09/06/94	11,000	260	26	<6.6	1,000	-	7.50	NP	0.00	167.39	159.89
12/07/94	-	-	-	-	-	-	5.48	FILM	0.00	167.39	161.91
03/08/95	-	-	-	-	-	-	5.18	FILM	0.00	167.39	162.21
06/15/95	-	-	-	-	-	-	-	-	-	-	-
09/05/95	-	-	-	-	-	-	6.84	FILM	0.00	167.39	160.55
11/21/95	10,000	210	<3	4.5	330	-	7.38	NP	0.00	167.39	160.01
03/11/96	1,600	640	15	10	46	-	4.85	NP	0.00	167.39	162.54
06/19/96	2,100	280	<3	<3	120	-	5.80	NP	0.00	167.39	161.59
09/16/96	140	<0.3	<0.3	<0.3	<0.5	110	4.50	NP	0.00	167.39	162.89
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.35	NP	0.00	167.39	162.04
03/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	3.48	NP	0.00	167.39	163.91
06/12/97	<50	<0.3	<0.3	<0.3	0.58	<20	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	3.10	NP	0.00	167.39	164.29
12/09/97	3,600	1,000	1,000	<6	570	260	4.55	NP	0.00	167.39	162.84
03/03/98	2,800	20	0.65	0.39	16	5,600	2.30	NP	0.00	167.39	165.09
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	23	4.95	NP	0.00	167.39	162.44
12/30/98	<50	1.1	<0.3	<0.3	<0.5	<5	4.55	NP	0.00	167.39	162.84
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.15	NP	0.00	167.39	163.24
06/22/99	670	17	1.2	0.36	1.7	340	3.85	NP	0.00	167.39	163.54
09/08/99	140	0.72	<0.3	<0.3	<0.5	230	2.63	NP	0.00	167.39	164.76
12/01/99	95	<0.3	<0.3	<0.3	<0.5	200	2.63	NP	0.00	167.39	164.76
03/23/00	315	<0.25	<0.25	<0.25	<0.5	*293/422	2.25	NP	0.00	167.39	165.14
06/08/00	<100	<5	<5	<5	<5	201	3.02	NP	0.00	167.39	164.37

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/27/00	154	<0.18	<0.14	<0.18	<0.26	*254 / 160	3.01	NP	0.00	167.39	164.38
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	*124 / 111	3.02	NP	0.00	167.39	164.37
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	*90 / 57	4.54	NP	0.00	167.39	162.85
06/15/01	649	28	2.4	3.1	9	*1,790 / 2,560	4.92	NP	0.00	167.39	162.47
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.80	NP	0.00	167.39	159.59
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.35	NP	0.00	167.39	160.04
03/13/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.53	NP	0.00	167.39	162.86
06/12/02	969	<0.18	1.0	<0.18	<0.26	1,430	4.90	NP	0.00	167.39	162.49
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.28	NP	0.00	167.39	162.11
12/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.52	NP	0.00	167.39	162.87
03/19/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.67	NP	0.00	167.39	161.72
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.67	NP	0.00	167.39	161.72
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.26	NP	0.00	167.39	162.13
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	2.59	NP	0.00	166.69	164.10
03/18/04	57	<0.22	1.7 J	<0.31	<0.4	13	4.50	NP	0.00	166.69	162.19
06/09/04	7,950	39	21	<1.8	20	4,590	5.85	NP	0.00	166.69	160.84
09/02/04	9,560	982	65	77	86	*5,950 / 4,360	6.30	NP	0.00	166.69	160.39
12/08/04	233	1.3	3.9	1.7	2.6	*72 / 80	4.48	NP	0.00	166.69	162.21
03/16/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.80	NP	0.00	166.69	159.89
06/01/05	1,710	3.7	<1.1	<0.7	9.2	20,100	2.62	NP	0.00	166.69	164.07
09/14/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	4.51	NP	0.00	166.69	162.18
12/06/05	<2.9	<0.32	<0.10	<0.24	<0.3	<0.63	4.88	NP	0.00	166.69	161.81
03/15/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	2.64	NP	0.00	166.69	164.05
MONITORING WELL #RE-4											
<i>Screen Interval = 5 to 15 feet</i>											
04/11/88	15,000	12,000	8,000	1,000	2,700	-	-	-	-	-	-
04/09/90	-	-	-	-	-	-	-	-	-	-	-
10/30/90	87,000	7,200	10,000	1,600	12,900	-	7.04	NP	0.00	166.94	159.90
01/18/91	70,000	5,000	5,400	790	9,900	-	11.62	NP	0.00	166.94	155.32
02/12/91	87,000	5,200	2,800	240	11,000	-	11.63	NP	0.00	166.94	155.31
03/20/91	6,500	370	230	17	670	-	11.61	NP	0.00	166.94	155.33
05/22/91	-	-	-	-	-	-	10.30	FILM	0.00	166.94	156.64
06/19/91	-	-	-	-	-	-	11.10	FILM	0.00	166.94	155.84

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/17/91	-	-	-	-	-	-	6.20	FILM	0.00	166.94	160.74
08/17/91	-	-	-	-	-	-	8.15	FILM	0.00	166.94	158.79
09/24/91	-	-	-	-	-	-	10.40	FILM	0.00	166.94	156.54
10/23/91	-	-	-	-	-	-	11.20	FILM	0.00	166.94	155.74
11/06/91	-	-	-	-	-	-	6.62	FILM	0.00	166.94	160.32
12/04/91	-	-	-	-	-	-	11.20	ILM	0.00	166.94	155.74
01/29/92	-	-	-	-	-	-	7.72	FILM	0.00	166.94	159.22
02/26/92	-	-	-	-	-	-	5.13	FILM	0.00	166.94	161.81
03/19/92	-	-	-	-	-	-	5.00	FILM	0.00	166.94	161.94
04/22/92	-	-	-	-	-	-	5.94	FILM	0.00	166.94	161.00
05/21/92	-	-	-	-	-	-	5.40	FILM	0.00	166.94	161.54
06/25/92	-	-	-	-	-	-	5.71	FILM	0.00	166.94	161.23
07/30/92	-	-	-	-	-	-	6.33	FILM	0.00	166.94	160.61
08/20/92	-	-	-	-	-	-	5.80	FILM	0.00	166.94	161.14
09/30/92	-	-	-	-	-	-	6.34	FILM	0.00	166.94	160.60
12/23/92	-	-	-	-	-	-	5.50	FILM	0.00	166.94	161.44
03/10/93	-	-	-	-	-	-	4.67	FILM	0.00	166.94	162.27
06/09/93	-	-	-	-	-	-	5.12	FILM	0.00	166.94	161.82
09/14/93	-	-	-	-	-	-	10.44	NP	0.00	166.94	156.50
12/14/93	-	-	-	-	-	-	7.52	NP	0.00	166.94	159.42
03/02/94	-	-	-	-	-	-	4.85	NP	0.00	166.94	162.09
06/06/94	-	-	-	-	-	-	5.20	FILM	0.00	166.94	161.74
09/06/94	-	-	-	-	-	-	9.85	FILM	0.00	166.94	157.09
12/07/94	-	-	-	-	-	-	5.20	FILM	0.00	166.94	161.74
03/08/95	-	-	-	-	-	-	4.98	FILM	0.00	166.94	161.96
06/15/95	-	-	-	-	-	-	-	-	-	-	-
09/05/95	-	-	-	-	-	-	13.72	FILM	0.00	166.94	153.22
11/21/95	32,000	46	21	66	340	-	12.53	NP	0.00	166.94	154.41
03/11/96	1,700	130	15	2.0	120	-	4.72	NP	0.00	166.94	162.22
06/19/96	1,700	230	30	0.35	100	-	5.40	NP	0.00	166.94	161.54
09/16/96	510	<0.3	0.73	<0.3	<0.5	800	5.18	NP	0.00	166.94	161.76
12/10/96	520	<0.3	<0.3	<0.3	<0.5	1,000	4.65	NP	0.00	166.94	162.29
03/12/97	420	3.2	<0.3	<0.3	11	370	3.87	NP	0.00	166.94	163.07
06/12/97	510	0.66	<0.3	<0.3	<0.5	1,600	-	-	-	-	-

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	5.40	NP	0.00	166.94	161.54
12/09/97	1,400	330	2.3	<0.3	1.5	2,500	4.60	NP	0.00	166.94	162.34
03/03/98	3,000	400	0.61	0.5	97	3,800	5.05	NP	0.00	166.94	161.89
07/08/98	650	<0.3	<0.3	<0.3	<0.5	1,800	-	-	-	-	-
09/10/98	2,700	<0.3	<0.3	<0.3	1.4	7,600	4.60	NP	0.00	166.94	162.34
12/30/98	530	<0.3	<0.3	<0.3	<0.5	1,500	4.20	NP	0.00	166.94	162.74
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	3.85	NP	0.00	166.94	163.09
06/22/99	1,200	23	1.5	<0.3	2.4	1,400	3.90	NP	0.00	166.94	163.04
09/08/99	590	1.5	<0.6	<0.6	<1	1,100	5.72	NP	0.00	166.94	161.22
12/01/99	540	<0.3	<0.3	<0.3	<0.5	880	5.34	NP	0.00	166.94	161.60
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	5.36	NP	0.00	166.94	161.58
06/08/00	67	<5	<5	<5	<5	<5	5.34	NP	0.00	166.94	161.60
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.35	NP	0.00	166.94	161.59
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.71	NP	0.00	166.94	161.23
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.19	NP	0.00	166.94	162.75
06/15/01	409	18	2	2	5	*1,060 / 1,480	4.57	NP	0.00	166.94	162.37
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.10	NP	0.00	166.94	160.84
12/12/01	<50	<0.18	<0.14	<0.18	3	*7 / 3.7	4.95	NP	0.00	166.94	161.99
03/13/02	511	3	3	<0.18	2	519	4.17	NP	0.00	166.94	162.77
06/12/02	380	2	2	1	2	479	4.93	NP	0.00	166.94	162.01
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.32	NP	0.00	166.94	161.62
12/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.93	NP	0.00	166.94	162.01
03/19/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.32	NP	0.00	166.94	161.62
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	5.32	NP	0.00	166.94	161.62
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	4.93	NP	0.00	166.94	162.01
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	4.93	NP	0.00	166.23	161.30
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	1.1	4.93	NP	0.00	166.23	161.30
06/09/04	<15	<0.14	<0.16	<0.18	<0.45	<0.22	4.56	NP	0.00	166.23	161.67
09/02/04	6,390	587	50	34	65	*4,150 / 2,650	6.00	NP	0.00	166.23	160.23
12/08/04	278,000	4,680	44,900	4,850	29,000	*54,800 / 43,400	4.93	NP	0.00	166.23	161.30
03/16/05	110,000	2,360	18,900	1,780	17,800	24,400	5.32	NP	0.00	166.23	160.91
06/01/05	40,800	1,530	6,890	39	6,880	25,800	5.7	NP	0.00	166.23	160.53
09/14/05	23,600	190	73	<2.4	3,460	14,200	5.32	NP	0.00	166.23	160.91
12/06/05	16,000	<3.2	<1.0	<2.4	<3	13,200	4.55	NP	0.00	166.23	161.68

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/15/06	4,910	37	<1.0	65	15 J	4,940	5.70	NP	0.00	166.23	160.53
MONITORING WELL #RE-5 <i>Screen Interval = 5 to 20 feet</i>											
04/11/88	14,000	1,300	1,100	100	2,600	-	-	-	-	-	-
04/09/90	3,000	690	190	40	270	-	4.79	NP	0.00	166.51	161.72
10/30/90	3,400	910	48	87	249	-	5.86	NP	0.00	166.51	160.65
01/18/91	1,400	180	8.6	0.52	48	-	4.40	NP	0.00	166.51	162.11
02/12/91	1,000	ND	ND	0.65	ND	-	4.76	NP	0.00	166.51	161.75
03/20/91	3,000	250	53	ND	110	-	5.08	NP	0.00	166.51	161.43
05/22/91	2,500	330	7.8	5.6	200	-	4.52	NP	0.00	166.51	161.99
01/19/91	2,000	59	1.6	5.1	110	-	4.39	NP	0.00	166.51	162.12
07/17/91	-	-	-	-	-	-	5.05	FILM	0.00	166.51	161.46
08/07/91	-	-	-	-	-	-	5.02	FILM	0.00	166.51	161.49
09/24/91	-	-	-	-	-	-	5.86	FILM	0.00	166.51	160.65
10/23/91	-	-	-	-	-	-	5.84	FILM	0.00	166.51	160.67
11/06/91	9,900	2,300	37	260	160	-	5.48	NP	0.00	166.51	161.03
12/04/91	4,500	1,000	27	ND	180	-	5.43	NP	0.00	166.51	161.08
01/29/92	600	6.1	2.3	ND	47	-	5.12	NP	0.00	166.51	161.39
02/26/92	500	5.4	2.7	1.2	14	-	4.93	NP	0.00	166.51	161.58
03/19/92	ND	1.7	1.1	ND	5.5	-	4.45	NP	0.00	166.51	162.06
04/22/92	1,600	240	2.2	ND	160	-	4.63	NP	0.00	166.51	161.88
05/21/92	1,200	410	37	ND	118	-	4.90	NP	0.00	166.51	161.61
06/25/92	ND	1.0	0.8	0.8	0.4	-	5.15	NP	0.00	166.51	161.36
07/30/92	ND	2.0	1.8	1.9	6.4	-	5.30	NP	0.00	166.51	161.21
08/20/92	300	1.7	3.3	0.7	12	-	5.44	NP	0.00	166.51	161.07
09/30/92	1,900	140	ND	19	35	-	5.73	NP	0.00	166.51	160.78
12/23/92	400	8.0	ND	ND	ND	-	4.75	NP	0.00	166.51	161.76
03/10/93	1,100	290	9.7	ND	75	-	4.14	NP	0.00	166.51	162.37
06/09/93	400	1.5	0.5	ND	12	-	5.42	NP	0.00	166.51	161.09
09/14/93	240	6.9	8.8	1.4	67	-	5.53	NP	0.00	166.51	160.98
12/14/93	3,300	510	5.4	4.1	55	-	4.78	NP	0.00	166.51	-311.49
03/02/94	2,400	270	4.5	<0.3	13	-	4.20	NP	0.00	166.51	162.31
06/06/94	730	<0.3	<0.3	0.70	22	-	5.13	NP	0.00	166.51	161.38
09/06/94	2,400	180	28	2.3	76	-	5.45	NP	0.00	166.51	161.06
12/07/94	540	5.6	<0.3	<0.5	6.9	-	4.13	NP	0.00	166.51	162.38

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/08/95	1,500	220	5.5	<0.5	83	-	5.20	NP	0.00	166.51	161.31
06/15/95	3,200	820	53	6.2	74	-	4.93	NP	0.00	166.51	161.58
09/05/95	4,400	440	22	<2.5	57	-	5.03	NP	0.00	166.51	161.48
11/21/95	660	3.4	<0.3	<0.3	0.6	-	5.23	NP	0.00	166.51	161.28
03/11/96	1,000	76	2.2	<0.3	130	-	4.16	NP	0.00	166.51	162.35
06/09/96	90	<0.3	<0.3	<0.3	<0.5	-	5.42	NP	0.00	166.51	161.09
09/16/96	1,900	5.8	<0.3	<0.3	5.9	1,100	5.20	NP	0.00	166.51	161.31
12/10/96	740	<0.3	<0.3	<0.3	<0.5	1,300	5.27	NP	0.00	166.51	161.24
03/12/97	2,000	600	59	5.1	54	1,300	3.85	NP	0.00	166.51	162.66
06/12/97	230	<0.3	<0.3	<0.3	<0.5	720	-	-	-	-	-
09/10/97	210	<0.3	<0.3	<0.3	<0.5	210	4.10	NP	0.00	166.51	162.41
12/09/97	11,000	2,500	2,700	<6	1,500	510	5.20	NP	0.00	166.51	161.31
03/03/98	<50	<0.3	<0.3	<0.3	<0.5	<20	3.70	NP	0.00	166.51	162.81
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	6.77	NP	0.00	166.51	159.74
12/30/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.95	NP	0.00	166.51	160.56
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.25	NP	0.00	166.51	161.26
06/22/99	110	<0.3	<0.3	<0.3	<0.5	200	4.50	NP	0.00	166.51	162.01
09/08/99	68	<0.3	<0.3	<0.3	<0.5	110	4.43	NP	0.00	166.51	162.08
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	3.66	NP	0.00	166.51	162.85
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	4.06	NP	0.00	166.51	162.45
06/08/00	<50	<5	<5	<5	<5	<5	4.43	NP	0.00	166.51	162.08
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.06	NP	0.00	166.51	162.45
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.80	NP	0.00	166.51	161.71
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.33	NP	0.00	166.51	160.18
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.79	NP	0.00	166.51	161.72
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.54	NP	0.00	166.51	160.97
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.21	NP	0.00	166.51	161.30
03/13/02	-	-	-	-	-	-	6.32	NP	0.00	166.51	160.19
06/12/02	-	-	-	-	-	-	-	-	-	-	-
09/18/02	-	-	-	-	-	-	-	-	-	-	-
12/18/02	-	-	-	-	-	-	-	-	-	-	-
03/19/03	-	-	-	-	-	-	-	-	-	-	-
06/11/03	-	-	-	-	-	-	-	-	-	-	-

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/04/03	-	-	-	-	-	-	-	-	-	-	-
12/04/03	-	-	-	-	-	-	3.67	NP	0.00	166.56	162.89
03/18/04	-	-	-	-	-	-	5.20	NP	0.00	166.56	161.36
06/09/04	-	-	-	-	-	-	4.61	NP	0.00	166.56	161.95
09/02/04	-	-	-	-	-	-	4.93	NP	0.00	166.56	161.63
12/08/04	-	-	-	-	-	-	4.06	NP	0.00	166.56	162.50
03/16/05	-	-	-	-	-	-	5.56	NP	0.00	166.56	161.00
06/01/05	-	-	-	-	-	-	4.42	NP	0.00	166.56	162.14
09/14/05	-	-	-	-	-	-	4.41	NP	0.00	166.56	162.15
12/06/05	-	-	-	-	-	-	4.03	NP	0.00	166.56	162.53
03/15/06	-	-	-	-	-	-	4.42	NP	0.00	166.56	162.14
MONITORING WELL #RE-6 <i>Screen Interval = 5 to 15 feet</i>											
04/11/88	6,000	3,000	40	80	140	-	-	-	-	-	-
04/09/90	3,000	990	ND	70	ND	-	5.64	NP	0.00	166.51	160.87
10/30/90	3,400	1,000	28	ND	ND	-	6.68	NP	0.00	166.51	159.83
01/18/91	6,300	1,200	ND	3.0	15	-	6.61	NP	0.00	166.51	159.90
02/12/91	5,200	850	8.4	4.9	41	-	6.20	NP	0.00	166.51	160.31
03/20/91	5,800	680	12	8.0	16	-	5.62	NP	0.00	166.51	160.89
05/22/91	8,500	1,700	14	24	6.7	-	6.05	NP	0.00	166.51	160.46
06/19/91	-	-	-	-	-	-	6.12	FILM	0.00	166.51	160.39
07/17/91	120,000	9,300	13,000	2,400	16,000	-	6.20	NP	0.00	166.51	160.31
08/07/91	-	590	5.3	ND	14	-	6.27	NP	0.00	166.51	160.24
09/24/91	7,000	310	11	5.3	35	-	6.63	NP	0.00	166.51	159.88
10/23/91	-	-	-	-	-	-	6.36	FILM	0.00	166.51	160.15
11/06/91	4,000	710	18	29	49	-	6.15	NP	0.00	166.51	160.36
12/04/91	4,100	1,100	14	33	39	-	6.19	NP	0.00	166.51	160.32
01/29/92	2,600	790	14	ND	49	-	6.70	NP	0.00	166.51	159.81
02/26/92	3,100	950	21	30	33	-	5.44	NP	0.00	166.51	161.07
03/19/92	2,200	630	14	12	40	-	5.30	NP	0.00	166.51	161.21
04/22/92	-	730	2.2	ND	40	-	6.00	NP	0.00	166.51	160.51
05/21/92	1,500	840	7.8	7.1	34	-	6.25	NP	0.00	166.51	160.26
06/25/92	<2000	740	8.0	27	28	-	6.38	NP	0.00	166.51	160.13

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/30/92	-	-	-	-	-	-	6.42	FILM	0.00	166.51	160.09
08/20/92	2,800	630	17	23	22	-	6.50	NP	0.00	166.51	160.01
09/30/92	7,800	540	ND	12	29	-	6.66	NP	0.00	166.51	159.85
12/23/92	1,800	350	ND	7.7	11	-	5.83	NP	0.00	166.51	160.68
03/10/93	3,000	830	5.6	19	16	-	5.63	NP	0.00	166.51	160.88
06/09/93	4,800	920	6.2	3.2	12	-	6.01	NP	0.00	166.51	160.50
09/14/93	3,600	660	7.5	11	27	-	6.53	NP	0.00	166.51	159.98
12/14/93	1,500	200	<0.3	<0.3	8.8	-	3.58	NP	0.00	166.51	162.93
03/02/94	-	-	-	-	-	-	5.12	NP	0.00	166.51	161.39
06/06/94	2,400	290	4.6	1.3	24	-	1.85	NP	0.00	166.51	164.66
09/06/94	4,300	230	21	<6.6	130	-	6.40	NP	0.00	166.51	160.11
12/07/94	1,500	17	2.5	3.2	22	-	5.68	NP	0.00	166.51	160.83
03/08/95	2,500	460	5.5	2.1	51	-	5.12	NP	0.00	166.51	161.39
06/15/95	2,300	91	1.1	0.7	97	-	5.72	NP	0.00	166.51	160.79
09/05/95	3,300	60	<10	<10	74	-	5.94	NP	0.00	166.51	160.57
11/21/95	2,000	7.3	<0.3	0.56	8.7	-	6.24	NP	0.00	166.51	160.27
03/11/96	840	43	0.96	5.7	14	-	5.16	NP	0.00	166.51	161.35
06/19/96	1,800	160	2.7	9.9	25	-	5.80	NP	0.00	166.51	160.71
09/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.38	NP	0.00	166.51	161.13
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	5.62	NP	0.00	166.51	160.89
03/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	5.20	NP	0.00	166.51	161.31
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
09/10/97	440	<0.3	<0.3	<0.3	<0.5	320	5.20	NP	0.00	166.51	161.31
12/09/97	<50	<0.3	<0.3	<0.3	<0.5	<20	5.97	NP	0.00	166.51	160.54
03/03/98	400	7.0	<0.3	<0.3	4.3	65	4.45	NP	0.00	166.51	162.06
07/08/98	300	<0.3	<0.3	<0.3	1.0	35	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.90	NP	0.00	166.51	160.61
12/30/98	<50	<0.3	<0.3	<0.3	<0.5	<5	5.20	NP	0.00	166.51	161.31
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	8.4	4.82	NP	0.00	166.51	161.69
06/22/99	700	11	1.9	<0.3	3.9	140	6.00	NP	0.00	166.51	160.51
09/08/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.15	NP	0.00	166.51	161.36
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	12	4.02	NP	0.00	166.51	162.49
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	4.41	NP	0.00	166.51	162.10
06/08/00	<50	<5	<5	<5	<5	<5	4.78	NP	0.00	166.51	161.73

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.78	NP	0.00	166.51	161.73
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	4.77	NP	0.00	166.51	161.74
03/22/01	367	<0.18	<0.14	<0.18	<0.26	*581 / 674	5.54	NP	0.00	166.51	160.97
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.92	NP	0.00	166.51	160.59
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.93	NP	0.00	166.51	160.58
12/12/01	138	<0.18	<0.14	<0.18	<0.26	*7 / <0.6	6.20	NP	0.00	166.51	160.31
03/13/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.55	NP	0.00	166.51	160.96
06/12/02	895	<0.18	1.0	<0.18	<0.26	1,360	5.93	NP	0.00	166.51	160.58
09/18/02	759	<0.18	<0.14	<0.18	<0.26	644	6.03	NP	0.00	166.51	160.48
12/18/02	531	<0.18	<0.14	<0.18	<0.26	441	5.65	NP	0.00	166.51	160.86
03/19/03	955	<0.04	<0.02	<0.02	<0.06	585	6.34	NP	0.00	166.51	160.17
06/11/03	945	<0.04	<0.02	<0.02	<0.06	328	6.34	NP	0.00	166.51	160.17
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.92	NP	0.00	166.51	160.59
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	4.00	NP	0.00	166.15	162.15
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	5.54	NP	0.00	166.15	160.61
06/10/04	340	2.6	1.5	<0.18	1.8	283	6.12	NP	0.00	166.15	160.03
09/02/04	1,720	4.9	8.2	8.7	7.7	*633 / 410	6.50	NP	0.00	166.15	159.65
12/09/04	297,000	1,620	38,500	9,470	56,000	*6,660 / 8,870	4.48	NP	0.00	166.15	161.67
03/16/05	55,000	630	9,470	1,590	10,100	4,480	6.67	NP	0.00	166.15	159.48
06/01/05	19,400	380	4,350	864	4,850	3,140	5.14	NP	0.00	166.15	161.01
09/14/05	1,730	31	1.2 J	<0.24	126	1,090	3.99	NP	0.00	166.15	162.16
12/06/05	8,040	143	30 J	113	218	4,410	4.38	NP	0.00	166.15	161.77
03/15/06	166	<0.32	<0.10	<0.24	<0.30	117	5.12	NP	0.00	166.15	161.03
MONITORING WELL #RE-7 <i>Screen Interval = 5 to 15 feet</i>											
04/11/88	<50,000	17,000	4,400	600	8,400	-	-	-	-	-	-
04/09/90	16,000	7,000	1,200	640	1,600	-	5.93	NP	0.00	166.04	160.11
10/30/90	31,000	14,000	ND	ND	ND	-	8.21	NP	0.00	166.04	157.83
01/18/91	-	-	-	-	-	-	11.80	NP	0.00	166.04	154.24
02/12/91	-	-	-	-	-	-	10.80	FILM	0.00	166.04	155.24
03/20/91	120,000	12,000	2,800	490	6,600	-	9.96	NP	0.00	166.04	156.08
05/22/91	-	-	-	-	-	-	11.70	FILM	0.00	166.04	154.34
06/19/91	-	-	-	-	-	-	11.50	FILM	0.00	166.04	154.54

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
07/17/91	-	-	-	-	-	-	7.80	FILM	0.00	166.04	158.24
08/07/91	-	-	-	-	-	-	9.88	0.03	9.85	166.04	163.60
09/24/91	-	-	-	-	-	-	9.85	0.03	9.82	166.04	163.60
10/23/91	-	-	-	-	-	-	9.96	FILM	0.00	166.04	156.08
11/06/91	-	-	-	-	-	-	6.77	FILM	0.00	166.04	159.27
12/04/91	-	-	-	-	-	-	10.80	FILM	0.00	166.04	155.24
01/29/92	-	-	-	-	-	-	8.64	FILM	0.00	166.04	157.40
02/26/92	-	-	-	-	-	-	6.00	FILM	0.00	166.04	160.04
03/19/92	-	-	-	-	-	-	5.55	FILM	0.00	166.04	160.49
04/22/92	-	-	-	-	-	-	6.12	FILM	0.00	166.04	159.92
05/21/92	-	-	-	-	-	-	6.40	FILM	0.00	166.04	159.64
06/25/92	-	-	-	-	-	-	6.73	0.02	6.71	166.04	164.38
07/30/92	-	-	-	-	-	-	6.73	FILM	0.00	166.04	159.31
08/20/92	-	-	-	-	-	-	6.82	FILM	0.00	166.04	159.22
09/30/92	-	-	-	-	-	-	7.26	FILM	0.00	166.04	158.78
12/23/92	-	-	-	-	-	-	6.22	FILM	0.00	166.04	159.82
03/10/93	-	-	-	-	-	-	5.82	FILM	0.00	166.04	160.22
06/09/93	-	-	-	-	-	-	6.17	FILM	0.00	166.04	159.87
09/14/93	-	-	-	-	-	-	11.33	NP	0.00	166.04	154.71
12/14/93	-	-	-	-	-	-	8.40	NP	0.00	166.04	157.64
03/02/94	-	-	-	-	-	-	6.82	NP	0.00	166.04	159.22
06/06/94	-	-	-	-	-	-	10.95	FILM	0.00	166.04	155.09
09/06/94	-	-	-	-	-	-	11.30	FILM	0.00	166.04	154.74
12/07/94	-	-	-	-	-	-	5.63	FILM	0.00	166.04	160.41
03/08/95	-	-	-	-	-	-	5.06	FILM	0.00	166.04	160.98
06/15/95	-	-	-	-	-	-	-	-	-	-	-
09/05/95	-	-	-	-	-	-	7.98	FILM	0.00	166.04	158.06
11/21/95	20,000	8,800	110	<30	310	-	7.32	NP	0.00	166.04	158.72
03/11/96	4,800	2,200	38	26	120	-	5.62	NP	0.00	166.04	160.42
06/19/96	4,400	3,300	49	5.8	70	-	6.40	NP	0.00	166.04	159.64
09/19/96	7,200	510	83	<0.3	710	130	6.20	NP	0.00	166.04	159.84
12/10/96	700	<0.3	<0.3	<0.3	<0.5	1,400	5.92	NP	0.00	166.04	160.12
03/12/97	660	0.31	<0.3	<0.3	<0.5	1,400	5.62	NP	0.00	166.04	160.42
06/12/97	320	<0.3	0.45	<0.3	<0.5	850	-	-	-	-	-

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/10/97	780	<0.3	<0.3	<0.3	<0.5	930	7.45	NP	0.00	166.04	158.59
12/09/97	14,000	3,500	3,700	<15	2,100	1,100	7.10	NP	0.00	166.04	158.94
03/03/98	6,100	2,500	18	<6	110	270	6.70	NP	0.00	166.04	159.34
07/08/98	1,300	8.7	<0.3	<0.3	<0.5	350	-	-	-	-	-
09/10/98	690	2.2	<0.3	<0.3	<0.5	350	7.04	NP	0.00	166.04	159.00
12/30/98	600	2.0	0.55	<0.3	<0.5	350	6.25	NP	0.00	166.04	159.79
03/15/99	350	0.71	<0.3	<0.3	<0.5	140	6.02	NP	0.00	166.04	160.02
06/22/99	5,900	2,100	16	4.6	48	170	6.35	NP	0.00	166.04	159.69
09/08/99	1,700	380	<3	<3	13	160	7.03	NP	0.00	166.04	159.01
12/01/99	930	3.7	<0.3	<0.3	<0.5	390	6.25	NP	0.00	166.04	159.79
03/23/00	581	5.4	5.3	1.9	7.3	*168/183	6.24	NP	0.00	166.04	159.80
06/08/00	<100	<5	<5	<5	<5	74	6.64	NP	0.00	166.04	159.40
09/27/00	236	<0.18	<0.14	<0.18	<0.26	*21 / 28	7.03	NP	0.00	166.04	159.01
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	*13 / 19.8	6.63	NP	0.00	166.04	159.41
03/22/01	504	<0.18	<0.14	<0.18	1	*666 / 1,420	7.02	NP	0.00	166.04	159.02
06/15/01	144	5.0	<0.14	0.5	2	*369 / 408	7.02	NP	0.00	166.04	159.02
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.79	NP	0.00	166.04	158.25
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.28	NP	0.00	166.04	158.76
03/13/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.02	NP	0.00	166.04	160.02
06/12/02	5,130	772	970	59	550	113	7.79	NP	0.00	166.04	158.25
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.40	NP	0.00	166.04	158.64
12/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.63	NP	0.00	166.04	159.41
03/19/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	7.40	NP	0.00	166.04	158.64
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	8.3	7.40	NP	0.00	166.04	158.64
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	7.39	NP	0.00	166.04	158.65
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	6.63	NP	0.00	165.33	158.70
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	6.63	NP	0.00	165.33	158.70
06/10/04	14,500	348	1,460	306	3,070	207	6.20	NP	0.00	165.33	159.13
09/02/04	35,900	2,390	174	1,250	8,020	*419 / 274	7.05	NP	0.00	165.33	158.28
12/08/04	276,000	4,380	34,800	5,370	25,000	*59,600 / 70,500	3.80	NP	0.00	165.33	161.53
03/16/05	114,000	2,840	19,400	2,760	14,400	29,300	6.64	NP	0.00	165.33	158.69
06/01/05	45,200	1,860	8,690	1,180	4,980	38,000	7.06	NP	0.00	165.33	158.27
09/14/05	33,900	770	943	<12	3,160	24,500	7.02	NP	0.00	165.33	158.31
12/06/05	25,600	<16	<5	<12	<15	22,300	3.96	NP	0.00	165.33	161.37

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/15/06	11,700	73	<1.0	143	22 J	10,200	7.05	NP	0.00	165.33	158.28
MONITORING WELL #RS-8											
<i>Screen Interval = 5 to 25 feet</i>											
08/07/91	ND	ND	ND	ND	ND	-	9.68	NP	0.00	164.32	154.64
09/27/91	ND	ND	ND	ND	ND	-	9.89	NP	0.00	164.32	154.43
10/23/91	ND	ND	ND	ND	ND	-	10.05	NP	0.00	164.32	154.27
11/06/91	ND	ND	ND	ND	ND	-	9.71	NP	0.00	164.32	154.61
12/04/91	ND	ND	ND	ND	ND	-	10.00	NP	0.00	164.32	154.32
01/29/92	ND	2.1	1.0	2.5	3.6	-	9.28	NP	0.00	164.32	155.04
02/26/92	ND	ND	0.7	ND	0.7	-	7.05	NP	0.00	164.32	157.27
03/19/92	ND	0.5	1.0	1.5	2.7	-	7.30	NP	0.00	164.32	157.02
04/22/92	ND	ND	ND	ND	ND	-	8.60	NP	0.00	164.32	155.72
05/21/92	ND	ND	ND	ND	ND	-	9.22	NP	0.00	164.32	155.10
06/25/92	ND	ND	ND	ND	ND	-	9.49	NP	0.00	164.32	154.83
07/30/92	ND	1.1	4.2	ND	3.0	-	9.55	NP	0.00	164.32	154.77
08/20/92	ND	2.0	4.7	ND	5.7	-	9.63	NP	0.00	164.32	154.69
09/30/92	ND	ND	ND	ND	ND	-	9.90	NP	0.00	164.32	154.42
12/23/92	ND	ND	ND	ND	ND	-	9.96	NP	0.00	164.32	154.36
05/10/93	ND	ND	ND	ND	ND	-	8.95	NP	0.00	164.32	155.37
06/09/93	ND	ND	ND	ND	ND	-	9.00	NP	0.00	164.32	155.32
09/14/93	200	0.3	ND	ND	ND	-	9.50	NP	0.00	164.32	154.82
12/14/93	ND	ND	ND	ND	ND	-	8.75	NP	0.00	164.32	155.57
03/02/94	<50	<0.3	<0.3	<0.3	<0.5	-	7.52	NP	0.00	164.32	156.80
06/06/94	54	<0.3	<0.3	<0.3	2.4	-	9.00	NP	0.00	164.32	155.32
09/06/94	<50	<0.3	<0.3	<0.3	<0.5	-	9.26	NP	0.00	164.32	155.06
12/07/94	130	2.5	1.9	1.3	3.6	-	8.67	NP	0.00	164.32	155.65
03/08/95	<100	<0.5	<0.5	<0.5	<1	-	8.34	NP	0.00	164.32	155.98
06/15/95	<100	1.0	<0.5	<0.5	<1	-	9.12	NP	0.00	164.32	155.20
09/05/95	<100	<0.5	<0.5	<0.5	<1	-	9.56	NP	0.00	164.32	154.76
11/21/95	<50	0.44	<0.3	<0.3	1.5	-	9.28	NP	0.00	164.32	155.04
03/11/96	<50	1.3	<0.3	<0.3	0.6	-	7.52	NP	0.00	164.32	156.80
06/19/96	640	72	20	34	150	-	7.80	NP	0.00	164.32	156.52
09/16/96	<50	<0.3	<0.3	<0.3	<0.5	20	9.18	NP	0.00	164.32	155.14
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.08	NP	0.00	164.32	158.24
03/12/97	53	0.45	<0.3	<0.3	<0.5	140	8.65	NP	0.00	164.32	155.67

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	68	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	8.30	NP	0.00	164.32	156.02
12/09/97	<50	1.7	2.1	<0.3	1.4	82	9.98	NP	0.00	164.32	154.34
03/03/98	<50	<0.3	<0.3	<0.3	<0.5	84	8.33	NP	0.00	164.32	155.99
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	97	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	97	12.95	NP	0.00	164.32	151.37
12/30/98	<50	1.3	1.5	<0.3	0.86	19	11.35	NP	0.00	164.32	152.97
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	9.6	9.85	NP	0.00	164.32	154.47
06/22/99	66	0.39	<0.3	<0.3	<0.5	62	9.90	NP	0.00	164.32	154.42
09/08/99	<50	<0.3	<0.3	<0.3	<0.5	25	9.85	NP	0.00	164.32	154.47
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	30	8.30	NP	0.00	164.32	156.02
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	*13.6/18.2	6.76	NP	0.00	164.32	157.56
06/08/00	<50	<5	<5	<5	<5	10	8.30	NP	0.00	164.32	156.02
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	*6 / 4.9	8.30	NP	0.00	164.32	156.02
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	8.28	NP	0.00	164.32	156.04
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	12.89	NP	0.00	164.32	151.43
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	12.89	NP	0.00	164.32	151.43
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.82	NP	0.00	164.32	154.50
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.25	NP	0.00	164.32	155.07
03/13/02	-	-	-	-	-	-	12.89	NP	0.00	164.32	151.43
06/12/02	-	-	-	-	-	-	-	-	-	-	-
09/18/02	-	-	-	-	-	-	-	-	-	-	-
12/18/02	-	-	-	-	-	-	-	-	-	-	-
03/19/03	-	-	-	-	-	-	-	-	-	-	-
06/11/03	-	-	-	-	-	-	-	-	-	-	-
09/04/03	-	-	-	-	-	-	-	-	-	-	-
12/04/03	-	-	-	-	-	-	6.78	NP	0.00	164.03	157.25
03/18/04	-	-	-	-	-	-	9.65	NP	0.00	164.03	154.38
06/09/04	-	-	-	-	-	-	6.86	NP	0.00	164.03	157.17
09/02/04	-	-	-	-	-	-	8.23	NP	0.00	164.03	155.80
12/08/04	-	-	-	-	-	-	6.76	NP	0.00	164.03	157.27
03/16/05	-	-	-	-	-	-	8.29	NP	0.00	164.03	155.74
06/01/05	-	-	-	-	-	-	9.83	NP	0.00	164.03	154.20
09/14/05	-	-	-	-	-	-	6.76	NP	0.00	164.03	157.27

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
12/06/05	-	-	-	-	-	-	6.76	NP	0.00	164.03	157.27
03/15/06	-	-	-	-	-	-	9.83	NP	0.00	164.03	154.20
MONITORING WELL #RS-9 <i>Screen Interval = 5 to 15 feet</i>											
08/07/91	-	0.5	ND	330	1,200	-	2.28	NP	0.00	167.51	165.23
09/27/91	13,000	3.5	3.0	82	140	-	2.77	NP	0.00	167.51	164.74
10/23/91	11,000	ND	ND	39	340	-	3.53	NP	0.00	167.51	163.98
11/06/91	6,800	8.4	0.6	22	230	-	2.51	NP	0.00	167.51	165.00
12/04/91	6,500	6.5	0.7	87	200	-	3.20	NP	0.00	167.51	164.31
01/29/92	8,100	22	10	140	260	-	2.65	NP	0.00	167.51	164.86
02/26/92	13,000	40	16	220	600	-	3.42	NP	0.00	167.51	164.09
03/19/92	12,000	21	12	100	280	-	3.12	NP	0.00	167.51	164.39
04/22/92	8,600	ND	ND	20	37	-	3.24	NP	0.00	167.51	164.27
05/21/92	6,000	21	10	53	210	-	3.75	NP	0.00	167.51	163.76
06/25/92	370	2.3	1.5	0.7	4.3	-	2.65	NP	0.00	167.51	164.86
07/30/92	3,600	20	ND	39	80	-	2.70	NP	0.00	167.51	164.81
08/20/92	3,000	0.7	5.2	2.0	5.3	-	2.83	NP	0.00	167.51	164.68
09/30/92	9,200	4.8	6.5	12	91	-	2.80	NP	0.00	167.51	164.71
12/23/92	2,000	17	ND	8.2	18	-	2.45	NP	0.00	167.51	165.06
03/10/93	1,500	ND	2.6	21	12	-	2.40	NP	0.00	167.51	165.11
06/09/93	1,300	0.6	1.7	ND	7.5	-	3.55	NP	0.00	167.51	163.96
09/14/93	1,500	1.3	7.6	4.1	14	-	2.81	NP	0.00	167.51	164.70
12/14/93	560	ND	ND	ND	5.5	-	2.63	NP	0.00	167.51	164.88
03/02/94	1,100	<0.3	<0.3	<0.3	<0.5	-	2.60	NP	0.00	167.51	164.91
06/06/94	290	0.58	0.53	1.1	5.8	-	2.52	NP	0.00	167.51	164.99
09/06/94	890	<0.3	<0.3	<0.3	3.1	-	3.16	NP	0.00	167.51	164.35
12/07/94	940	22	23	10	32	-	5.18	NP	0.00	167.51	162.33
03/08/95	1,600	<0.5	<0.5	<0.5	2.3	-	4.57	NP	0.00	167.51	162.94
06/15/95	3,200	2.2	5.3	4.3	3.1	-	5.08	NP	0.00	167.51	162.43
09/05/95	1,100	<0.5	<0.5	<0.5	<1	-	5.72	NP	0.00	167.51	161.79
11/21/95	1,100	1.1	2.9	3.5	3.0	-	2.46	NP	0.00	167.51	165.05
03/11/96	440	0.7	0.34	<0.3	3.7	-	3.44	NP	0.00	167.51	164.07
06/19/96	580	3.8	0.49	1.2	<0.5	-	3.80	NP	0.00	167.51	163.71

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/16/96	490	<0.3	1.6	<0.3	<0.5	<20	3.80	NP	0.00	167.51	163.71
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	2.76	NP	0.00	167.51	164.75
03/12/97	<50	<0.3	0.42	<0.3	1.5	<20	3.20	NP	0.00	167.51	164.31
06/12/97	<50	<0.3	<0.3	<0.3	0.51	<20	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	4.24	NP	0.00	167.51	163.27
12/09/97	<50	<0.3	0.48	<0.3	<0.5	<20	2.72	NP	0.00	167.51	164.79
03/03/98	190	<0.3	<0.3	0.38	<0.5	<20	1.90	NP	0.00	167.51	165.61
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	2.72	NP	0.00	167.51	164.79
12/30/98	<50	<0.3	<0.3	<0.3	<0.5	<5	1.20	NP	0.00	167.51	166.31
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	4.25	NP	0.00	167.51	163.26
06/22/99	1,300	4.2	1.2	0.69	0.74	<5	3.70	NP	0.00	167.51	163.81
09/08/99	<50	<0.3	<0.3	<0.3	<0.5	<5	2.71	NP	0.00	167.51	164.80
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	2.70	NP	0.00	167.51	164.81
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	2.70	NP	0.00	167.51	164.81
06/08/00	585	<5	<5	<5	<5	821	2.72	NP	0.00	167.51	164.79
09/27/00	592	<0.18	<0.14	<0.18	<0.26	*1,180 / 1,360	2.72	NP	0.00	167.51	164.79
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	*403 / 444	2.70	NP	0.00	167.51	164.81
03/22/01	425	<0.18	<0.14	<0.18	<0.26	*738 / 1,640	2.69	NP	0.00	167.51	164.82
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	2.68	NP	0.00	167.51	164.83
08/30/01	164	<0.18	<0.14	<0.18	<0.26	*396 / 284	2.68	NP	0.00	167.51	164.83
12/12/01	1,540	<0.18	<0.14	<0.18	<0.26	*4,370 / 2,480	2.41	NP	0.00	167.51	165.10
03/13/02	1,540	<0.18	<0.14	<0.18	<0.26	3,360	2.68	NP	0.00	167.51	164.83
06/12/02	2,020	1	3	1	3	3,280	4.21	NP	0.00	167.51	163.30
09/18/02	915	<0.18	<0.14	<0.18	<0.26	768	4.21	NP	0.00	167.51	163.30
12/18/02	1,070	<0.18	<0.14	<0.18	<0.26	960	2.68	NP	0.00	167.51	164.83
03/19/03	1,600	<0.04	<0.02	<0.02	<0.06	836	4.21	NP	0.00	167.51	163.30
06/11/03	1,960	<0.04	<0.02	<0.02	<0.06	583	4.21	NP	0.00	167.51	163.30
09/04/03	117	<0.22	<0.32	<0.31	13	8.3	4.21	NP	0.00	167.51	163.30
12/04/03	19,200	5,270	6,550	144	2,540	217	1.16	NP	0.00	167.05	165.89
03/18/04	193	7.5	18	1.4 J	6.1	127	2.68	NP	0.00	167.05	164.37
06/10/04	159	<0.14	3.3	1.9	2.5	<0.22	3.74	NP	0.00	167.05	163.31
09/02/04	<15	<0.14	<0.16	<0.18	<0.45	<0.22	3.68	NP	0.00	167.05	163.37
12/09/04	<15	1.2	2.1	<0.18	0.99	<0.22	1.20	NP	0.00	167.05	165.85

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/16/05	<15	<0.22	1.1 J	<0.31	<0.4	2.1	4.21	NP	0.00	167.05	162.84
06/01/05	<2.9	<0.17	<0.22	<0.14	0.94	2.97 J	2.71	NP	0.00	167.05	164.34
09/14/05	63	<0.32	<0.10	<0.24	<0.30	36	4.21	NP	0.00	167.05	162.84
12/06/05	<2.9	<0.32	<0.10	<0.24	<0.3	32	1.14	NP	0.00	167.05	165.91
03/15/06	<5.6	<0.32	<0.10	<0.24	1.6 J	17	2.71	NP	0.00	167.05	164.34
MONITORING WELL #RS-10 <i>Screen Interval = 5 to 25 feet</i>											
08/07/91	ND	ND	ND	ND	ND	-	6.16	NP	0.00	162.89	156.73
09/27/91	ND	ND	ND	ND	ND	-	6.48	NP	0.00	162.89	156.41
10/23/91	ND	ND	ND	ND	ND	-	7.37	NP	0.00	162.89	155.52
11/06/91	ND	ND	ND	ND	ND	-	6.44	NP	0.00	162.89	156.45
12/04/91	ND	ND	ND	ND	ND	-	7.02	NP	0.00	162.89	155.87
01/29/92	ND	ND	ND	ND	ND	-	6.78	NP	0.00	162.89	156.11
02/26/92	ND	ND	ND	ND	ND	-	8.33	NP	0.00	162.89	154.56
03/19/92	ND	ND	ND	ND	0.6	-	8.02	NP	0.00	162.89	154.87
04/22/92	ND	ND	ND	ND	ND	-	7.78	NP	0.00	162.89	155.11
05/21/92	ND	ND	0.6	ND	1.2	-	6.21	NP	0.00	162.89	156.68
06/25/92	ND	ND	ND	ND	ND	-	7.73	NP	0.00	162.89	155.16
07/30/92	ND	ND	0.5	ND	1.0	-	7.84	NP	0.00	162.89	155.05
08/20/92	ND	ND	ND	ND	ND	-	7.50	NP	0.00	162.89	155.39
09/30/92	ND	ND	ND	ND	ND	-	7.63	NP	0.00	162.89	155.26
12/23/92	ND	ND	ND	ND	ND	-	7.24	NP	0.00	162.89	155.65
03/10/93	ND	ND	ND	ND	ND	-	6.38	NP	0.00	162.89	156.51
06/09/93	ND	ND	ND	ND	ND	-	7.98	NP	0.00	162.89	154.91
09/14/93	ND	ND	ND	ND	ND	-	7.35	NP	0.00	162.89	155.54
03/02/94	<50	<0.3	<0.3	<0.3	<0.3	-	7.00	NP	0.00	162.89	155.89
06/06/94	<50	<0.3	<0.3	<0.3	<0.5	-	6.55	NP	0.00	162.89	156.34
09/06/94	<50	<0.3	<0.3	<0.3	<0.5	-	7.63	NP	0.00	162.89	155.26
12/07/94	56	<0.3	<0.3	<0.5	2.1	-	5.92	NP	0.00	162.89	156.97
03/08/95	<100	<0.5	<0.5	<0.5	<1	-	7.84	NP	0.00	162.89	155.05
06/15/95	<100	<0.5	<0.5	<0.5	<1	-	6.97	NP	0.00	162.89	155.92
09/05/95	<100	<0.5	<0.5	<0.5	<1	-	8.14	NP	0.00	162.89	154.75
11/21/95	<50	<0.3	<0.3	<0.3	<0.5	-	7.68	NP	0.00	162.89	155.21

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
03/11/96	<50	<0.3	<0.3	<0.3	<0.5	-	6.76	NP	0.00	162.89	156.13
06/19/96	<50	<0.3	<0.3	<0.3	<0.5	-	7.20	NP	0.00	162.89	155.69
09/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.30	NP	0.00	162.89	156.59
12/10/96	<50	<0.3	<0.3	<0.3	<0.5	<20	6.05	NP	0.00	162.89	156.84
03/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	7.56	NP	0.00	162.89	155.33
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	7.55	NP	0.00	162.89	155.34
12/09/97	1,900	610	510	<6	290	<20	7.55	NP	0.00	162.89	155.34
03/03/98	<50	2.0	<0.3	<0.3	<0.5	27	6.03	NP	0.00	162.89	156.86
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	72	7.55	NP	0.00	162.89	155.34
12/30/98	<50	1.1	<0.3	<0.3	<0.5	<5	4.45	NP	0.00	162.89	158.44
03/15/99	<50	<0.3	<0.3	<0.3	1.3	<5	4.50	NP	0.00	162.89	158.39
06/22/99	<50	<0.3	<0.3	<0.3	<0.5	<5	9.15	NP	0.00	162.89	153.74
09/08/99	<50	<0.3	<0.3	<0.3	<0.5	<5	7.51	NP	0.00	162.89	155.38
12/01/99	<50	<0.3	<0.3	<0.3	<0.5	<5	5.97	NP	0.00	162.89	156.92
03/23/00	<50	<0.25	<0.25	<0.25	<0.5	<5	4.47	NP	0.00	162.89	158.42
06/08/00	<50	<5	<5	<5	<5	<5	5.97	NP	0.00	162.89	156.92
09/27/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.50	NP	0.00	162.89	155.39
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	5.94	NP	0.00	162.89	156.95
03/22/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.51	NP	0.00	162.89	155.38
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.50	NP	0.00	162.89	155.39
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.05	NP	0.00	162.89	153.84
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.65	NP	0.00	162.89	155.24
03/13/02	-	-	-	-	-	-	9.05	NP	0.00	162.89	153.84
06/12/02	-	-	-	-	-	-	-	-	-	-	-
09/18/02	-	-	-	-	-	-	-	-	-	-	-
12/18/02	-	-	-	-	-	-	-	-	-	-	-
03/19/03	-	-	-	-	-	-	-	-	-	-	-
06/11/03	-	-	-	-	-	-	-	-	-	-	-
09/04/03	-	-	-	-	-	-	-	-	-	-	-
12/04/03	-	-	-	-	-	-	5.98	NP	0.00	162.43	156.45
03/18/04	-	-	-	-	-	-	8.85	NP	0.00	162.43	153.58
06/09/04	-	-	-	-	-	-	6.27	NP	0.00	162.43	156.16

TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
09/02/04	-	-	-	-	-	-	6.17	NP	0.00	162.43	156.26
12/08/04	-	-	-	-	-	-	6.00	NP	0.00	162.43	156.43
03/16/05	-	-	-	-	-	-	9.05	NP	0.00	162.43	153.38
06/01/05	-	-	-	-	-	-	7.49	NP	0.00	162.43	154.94
09/14/05	-	-	-	-	-	-	7.49	NP	0.00	162.43	154.94
12/06/05	-	-	-	-	-	-	5.96	NP	0.00	162.43	156.47
03/15/06	-	-	-	-	-	-	7.52	NP	0.00	162.43	154.91
MONITORING WELL #RS-11 <i>Screen Interval = 5 to 25 feet</i>											
09/21/95	110	<0.5	<0.5	<0.5	<1	-	9.37	NP	0.00	163.28	153.91
11/21/95	-	-	-	-	-	-	-	-	-	-	-
03/11/96	-	-	-	-	-	-	-	-	-	-	-
06/19/96	-	-	-	-	-	-	-	-	-	-	-
09/16/96	-	-	-	-	-	-	-	-	-	-	-
03/12/97	74	9.5	<0.3	<0.3	0.57	<20	7.75	NP	0.00	163.28	155.53
06/12/97	<50	<0.3	<0.3	<0.3	<0.5	<20	-	-	-	-	-
09/10/97	<50	<0.3	<0.3	<0.3	<0.5	<20	9.50	NP	0.00	163.28	153.78
12/09/97	<50	0.79	1.2	<0.3	<0.5	<20	9.50	NP	0.00	163.28	153.78
03/03/98	140	22	0.63	<0.3	<0.5	<20	7.93	NP	0.00	163.28	155.35
07/08/98	<50	<0.3	<0.3	<0.3	<0.5	<5	-	-	-	-	-
09/10/98	<50	<0.3	<0.3	<0.3	<0.5	<5	9.48	NP	0.00	163.28	153.80
12/30/98	<50	1.3	0.87	<0.3	0.55	<5	7.95	NP	0.00	163.28	155.33
03/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5	6.40	NP	0.00	163.28	156.88
06/22/99	350	89	2.9	3.3	0.91	6.8	11.00	NP	0.00	163.28	152.28
09/08/99	99	9.1	0.37	<0.3	<0.5	<5	7.90	NP	0.00	163.28	155.38
12/01/99	82	9.7	0.44	<0.3	<0.5	<5	7.90	NP	0.00	163.28	155.38
03/23/00	73	5.8	2.3	<0.25	<0.5	*11.2 / 7.9	4.85	NP	0.00	163.28	158.43
06/08/00	306	<5	<5	<5	<5	<5	7.90	NP	0.00	163.28	155.38
09/27/00	<50	1	<0.14	<0.18	<0.26	3 J / 3.6	9.44	NP	0.00	163.28	153.84
12/13/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	6.34	NP	0.00	163.28	156.94
03/22/01	408	<0.18	<0.14	<0.18	<0.26	*664 / 941	7.96	NP	0.00	163.28	155.32
06/15/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.87	NP	0.00	163.28	155.41
08/30/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.41	NP	0.00	163.28	153.87

**TABLE 1
GROUNDWATER DATA
THRIFTY OIL STATION #054, CASTRO VALLEY, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO GROUNDWATER (feet)	DEPTH TO PRODUCT (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	EthylBenzene (ug/L)	XYLENE (ug/L)	MTBE (ug/L)					
12/12/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.86	NP	0.00	163.28	155.42
03/13/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	7.85	NP	0.00	163.28	155.43
06/12/02	<50	<0.18	1	<0.18	<0.26	<0.24	9.39	NP	0.00	163.28	153.89
09/18/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	9.38	NP	0.00	163.28	153.90
12/18/02	110	<0.18	<0.14	<0.18	<0.26	101	6.32	NP	0.00	163.28	156.96
03/19/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	9.39	NP	0.00	163.28	153.89
06/11/03	<15	<0.04	<0.02	<0.02	<0.06	20	9.39	NP	0.00	163.28	153.89
09/04/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	7.85	NP	0.00	163.28	155.43
12/04/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	6.32	NP	0.00	162.71	156.39
03/18/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	9.39	NP	0.00	162.71	153.32
06/10/04	1,080	48	3.8	30	1.8	68	6.87	NP	0.00	162.71	155.84
09/02/04	1,600	94	5.9	4.3	3.8	*185 / 78	7.07	NP	0.00	162.71	155.64
12/09/04	<15	1.2	1.3	<0.18	<0.45	*22 / <0.18	6.34	NP	0.00	162.71	156.37
03/16/05	<15	<0.22	<0.32	<0.31	<0.4	16	7.85	NP	0.00	162.71	154.86
06/01/05	<2.9	0.97	1.4	<0.14	2	22	7.88	NP	0.00	162.71	154.83
09/14/05	133	<0.32	<0.10	<0.24	<0.30	79	7.84	NP	0.00	162.71	154.87
12/06/05	905	16.00	3.1 J	11.0	23	578	6.32	NP	0.00	162.71	156.39
03/15/06	426	<0.32	<0.10	<0.24	<0.30	336	7.89	NP	0.00	162.71	154.82

NOTE: ND = Nondetectable
 " - " = Not Analyzed / Not Available
 NP = No Free Product
 *MTBE 8020/8260
 BPOs = SFRWQCB's Basin Plan Objectives for Groundwater

Benzene, toluene, ethylbenzene, and xylene analyzed by EPA method 8020.
 Total petroleum hydrocarbons (TPH) analyzed by EPA method 8015 modified for gasoline
 Methyl-tert Butyl Ether (MTBE) analyzed by EPA method 8020
 On 3/16/05, 3/18/04, 9/4/03 & 6/8/00, BTEX and MTBE analyzed by EPA Method 8260B

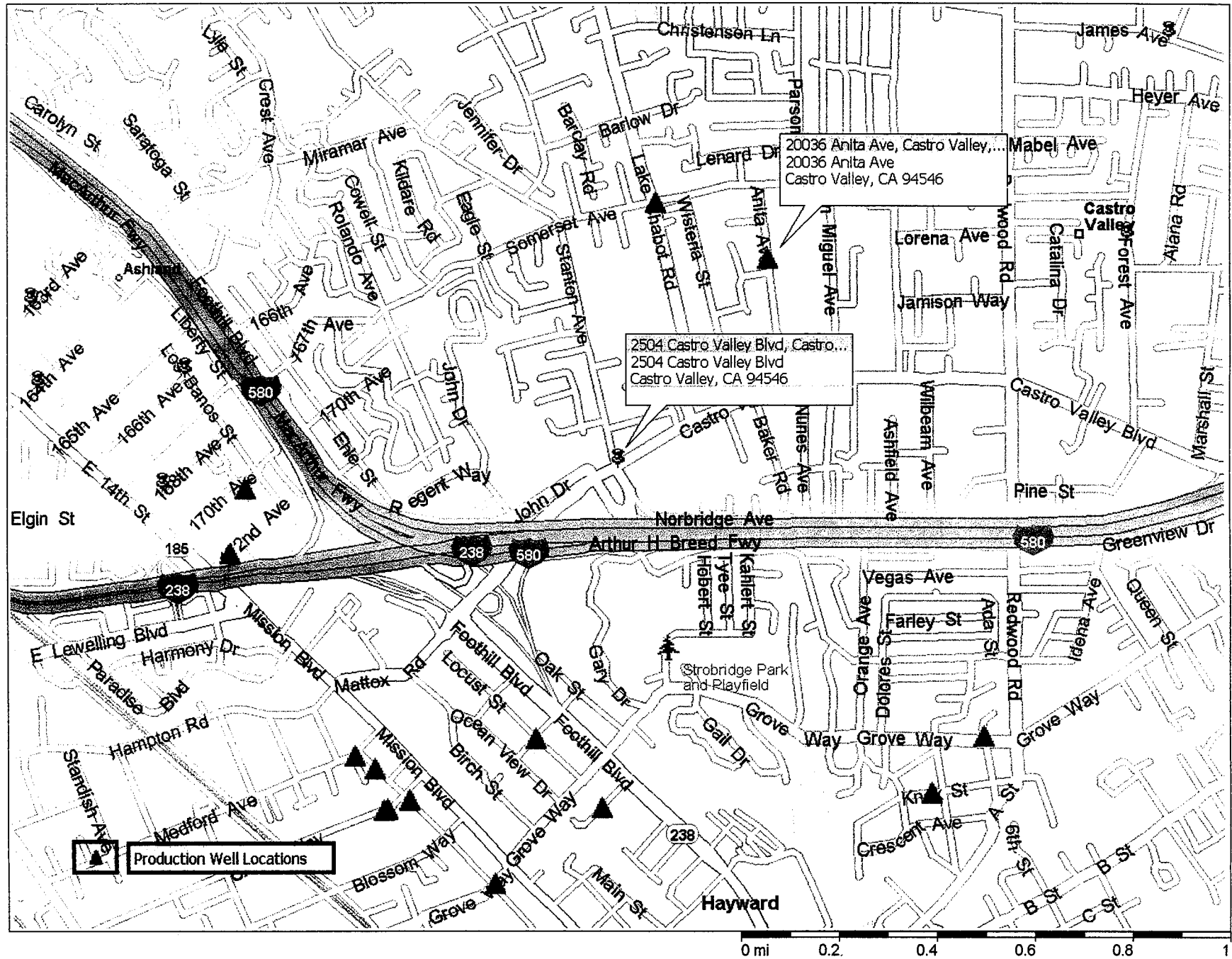
TABLE 3
WELL COMPLETION DETAILS
 Thrifty Oil Station #054 - Castro Valley, CA
 GHC - 1331

Well ID	Date Constructed	Total Depth	Casing Diameter	Screen Interval	TOC Elevation *
PW-1**	-	15 ft [^]	-	5-15 ft [^]	166.46
PW-2**	-	15 ft [^]	-	5-15 ft [^]	166.18
RE-1	02/15/88	17 ft	4 - inch	5-17 ft	166.82
RE-2	02/16/88	17 ft	4 - inch	5-17 ft	167.19
RE-3	02/14/88	18 ft	4 - inch	5-18 ft	167.39
RE-4	02/14/88	15 ft	4 - inch	5-15 ft	166.94
RE-5	02/17/88	20 ft	4 - inch	5-20 ft	166.51
RE-6	02/17/88	15 ft	4 - inch	5-15 ft	166.51
RE-7	02/17/88	15 ft	4 - inch	5-15 ft	166.04
RS-8	05/08/91	25 ft	2 - inch	5-25 ft	164.32
RS-9	05/08/91	15 ft	2 - inch	5-15 ft	167.51
RS-10	05/08/91	25 ft	2 - inch	5-25 ft	162.89
RS-11	09/21/95	25 ft	2 - inch	5-25 ft	163.28

- NOTES:**
- * Feet above mean sea level
 - = Not surveyed
 - **Wells PW-1 and PW-2: Data not available, constructed between 12/17/86 and 12/15/88
 - [^] = estimated

FIGURES

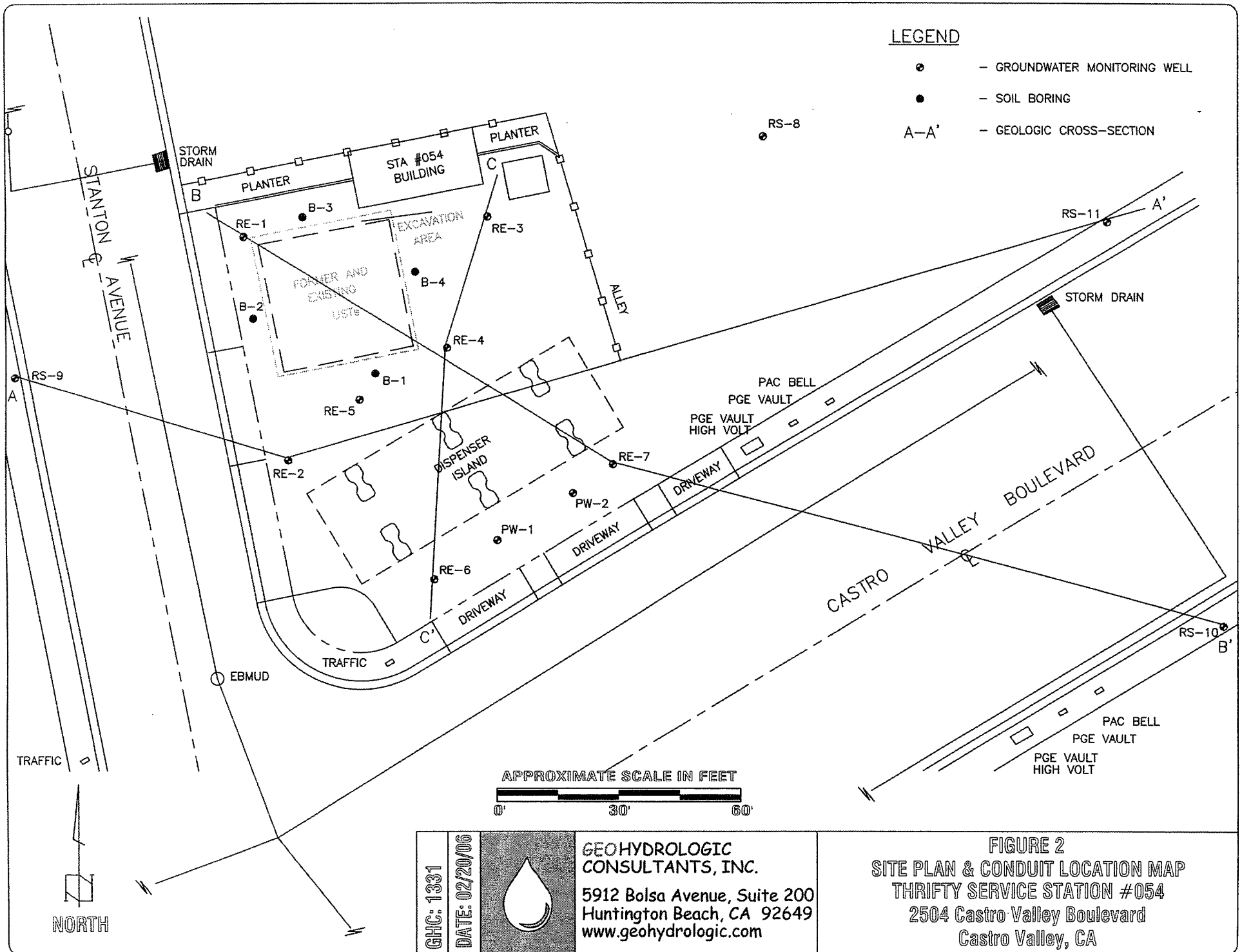
Figure 1-Site Vicinity with Production Well Locations



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LEGEND

- - GROUNDWATER MONITORING WELL
- - SOIL BORING
- A-A' - GEOLOGIC CROSS-SECTION




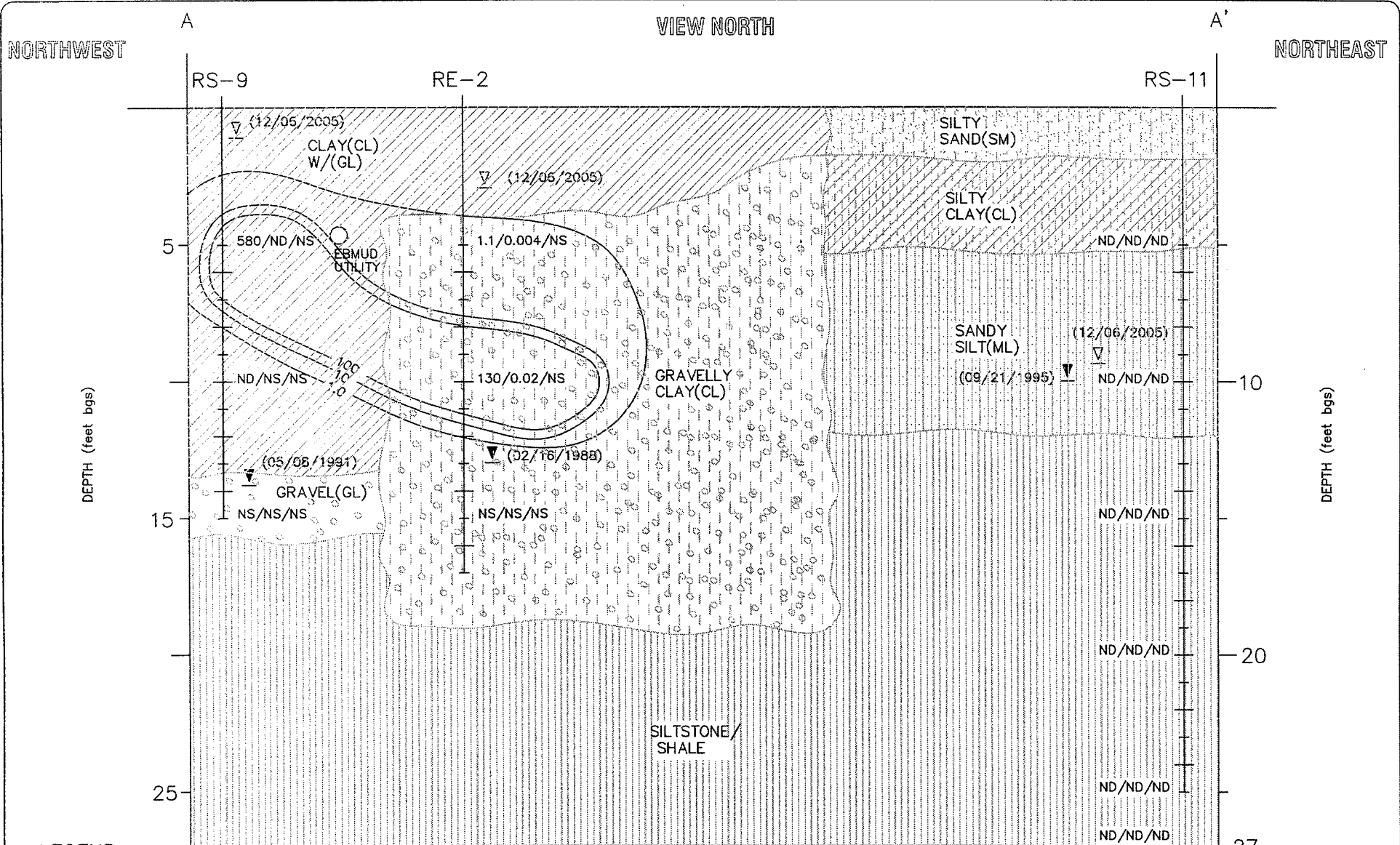
GHC: 1331	DATE: 02/20/06		<p>GEOHYDROLOGIC CONSULTANTS, INC.</p> <p>5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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FIGURE 2
SITE PLAN & CONDUIT LOCATION MAP
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA



LEGEND

- ▼ - WATER LEVEL AT TIME OF DRILLING (DATE)
- ▽ - MOST RECENT WATER LEVEL (DATE)
- ND/ND/ND - TPHg/BENZENE/MTBE CONCENTRATIONS in mg/Kg
- ND - NOT DETECTED ABOVE LABORATORY REPORTING LIMITS
- NS - NOT SAMPLED
- 100 — - TPHg IN SOIL CONTOUR IN mg/Kg

GHC: 1331	DATE: 04/28/06		<p style="margin: 0;">GEOHYDROLOGIC CONSULTANTS, INC.</p> <p style="margin: 0;">5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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FIGURE 3A
GEOLOGIC CROSS-SECTION A-A'
THRIFTY SERVICE STATION #054
2504 Castro Valley Boulevard
Castro Valley, CA

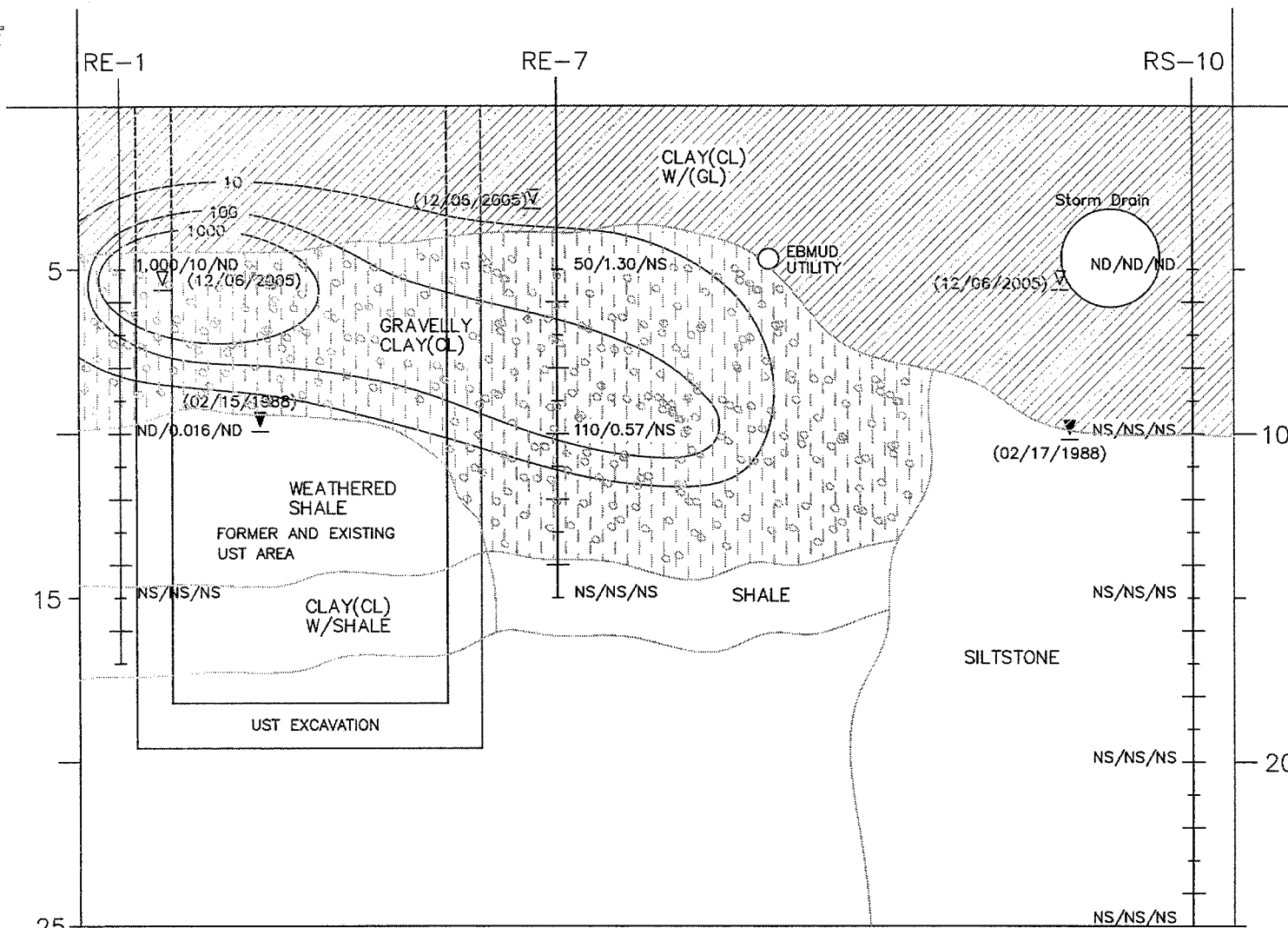
VIEW NORTH

NORTHWEST

NORTHEAST

DEPTH (feet bgs)

DEPTH (feet bgs)



LEGEND

- ▼ - WATER LEVEL AT TIME OF DRILLING (DATE)
- ▽ - MOST RECENT WATER LEVEL (DATE)
- ND/ND/ND - TPHg/BENZENE/MTBE CONCENTRATIONS in mg/Kg
- ND - NOT DETECTED ABOVE LABORATORY REPORTING LIMITS
- NS - NOT SAMPLED
- 100 — - TPHg IN SOIL CONTOUR IN mg/Kg

HORIZONTAL 1"=40'
VERTICAL 1"=5'
APPROXIMATE SCALE IN FEET




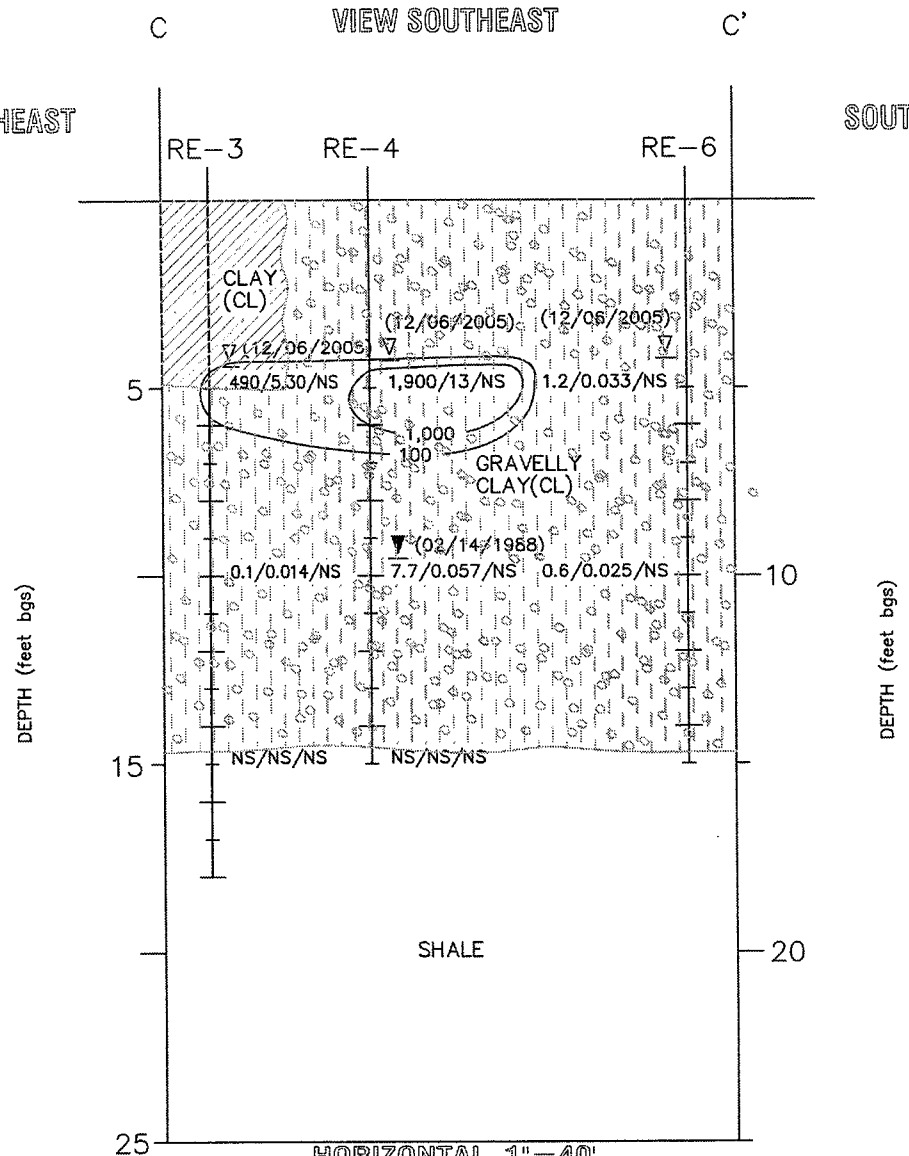
GHC: 1331	DATE: 02/20/06		<p>GEOHYDROLOGIC CONSULTANTS, INC.</p> <p>5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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FIGURE 3B
GEOLOGIC CROSS-SECTION B-B'
THRIFTY SERVICE STATION #054
2504 Castro Valley Boulevard
Castro Valley, CA



VIEW SOUTHEAST

NORTHEAST

SOUTH



LEGEND

-  - WATER LEVEL AT TIME OF DRILLING (DATE)
-  - MOST RECENT WATER LEVEL (DATE)
- ND/ND/ND - TPHg/BENZENE/MTBE CONCENTRATIONS in mg/Kg
- ND - NOT DETECTED ABOVE LABORATORY REPORTING LIMITS
- NS - NOT SAMPLED
- 100 - - TPHg IN SOIL CONTOUR IN mg/Kg


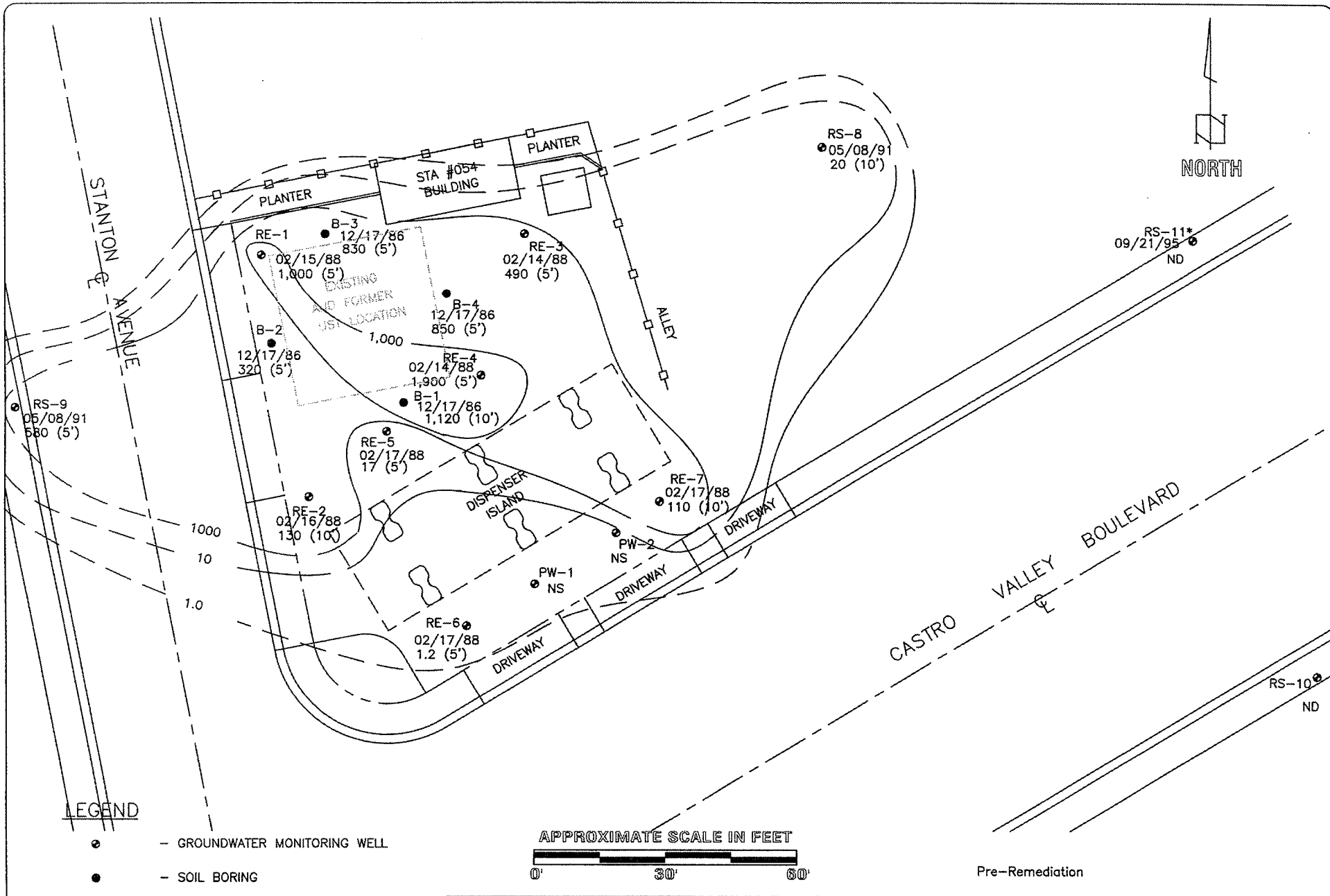
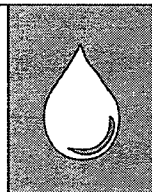
GHC: 1331	DATE: 02/20/06		GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com

FIGURE 3C
GEOLOGIC CROSS-SECTION C-C'
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA

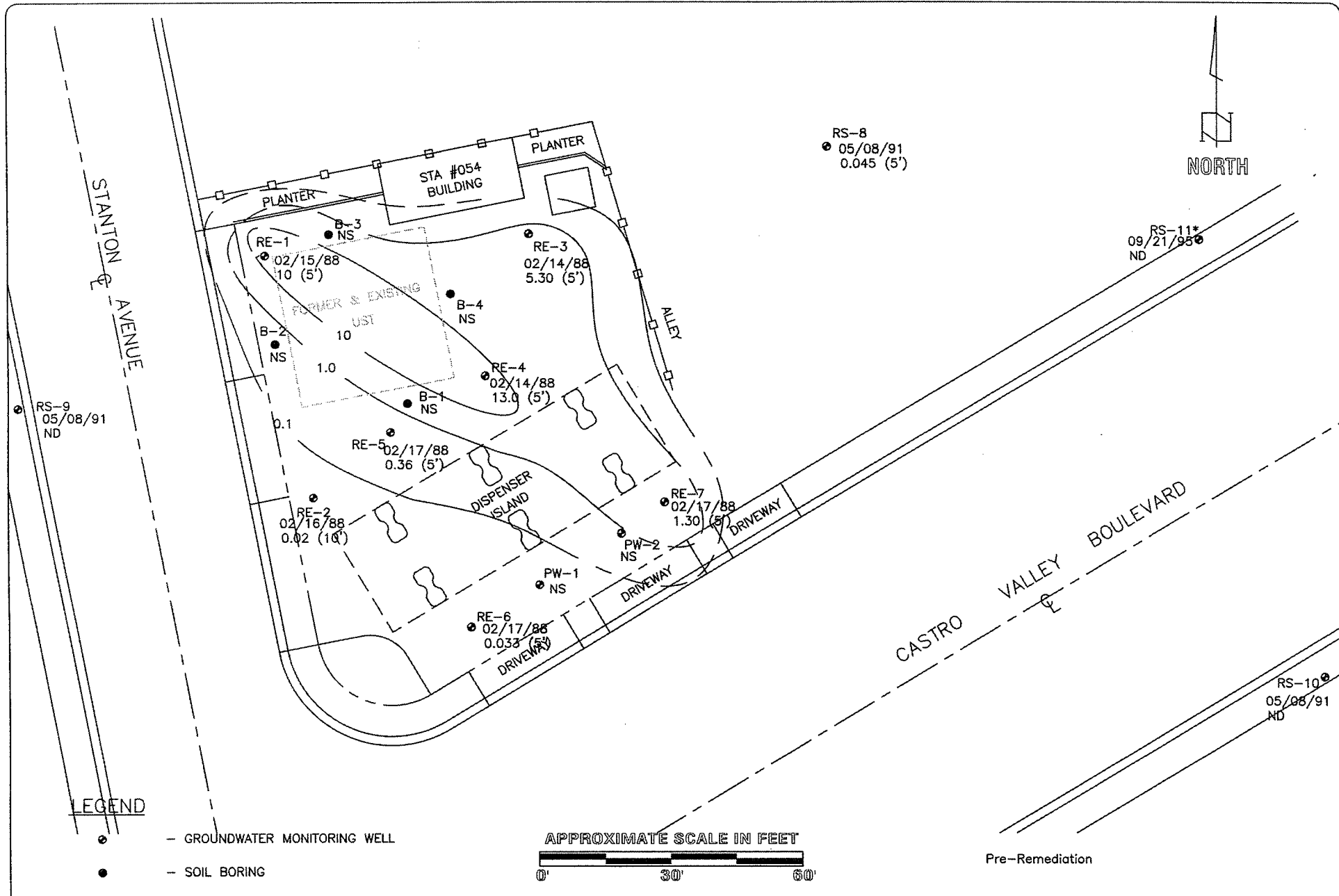


GHC: 1331
DATE: 02/20/06



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FIGURE 4A
DISTRIBUTION OF TPHg IN SOIL
THRIFTY SERVICE STATION #054
2504 Castro Valley Boulevard
Castro Valley, CA




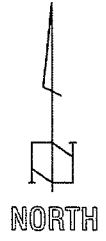
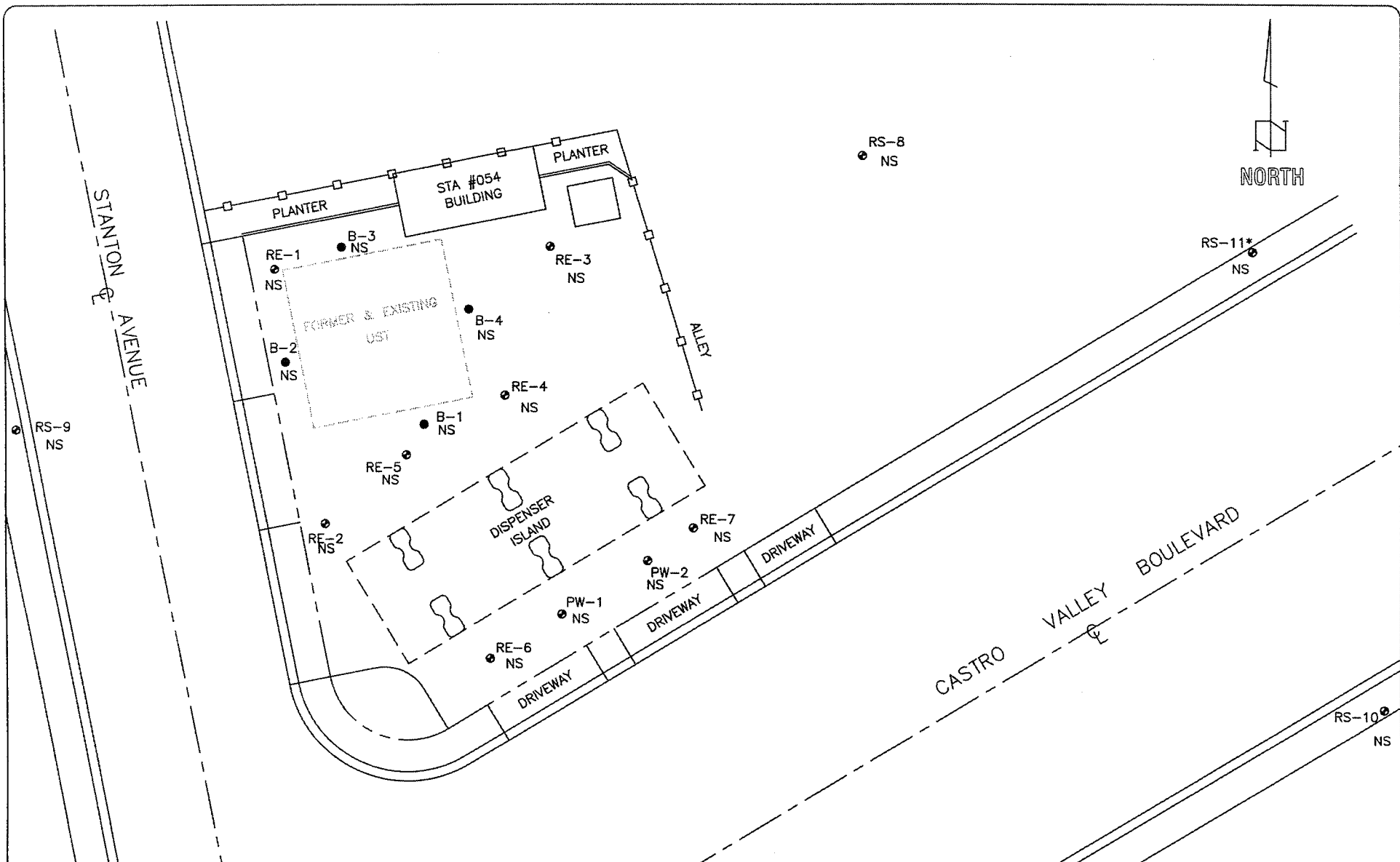
GHC: 1331	DATE: 02/20/06		GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com

FIGURE 4B
DISTRIBUTION OF BENZENE IN SOIL
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA



LEGEND

- - GROUNDWATER MONITORING WELL
- - SOIL BORING
- 02/14/88 5.30 (5') - DATE SAMPLED, MTBE CONCENTRATION IN mg/Kg, DEPTH OF SAMPLE
- NS - NOT SAMPLED
- * - POST-REMEDATION DATA



Pre-Remediation


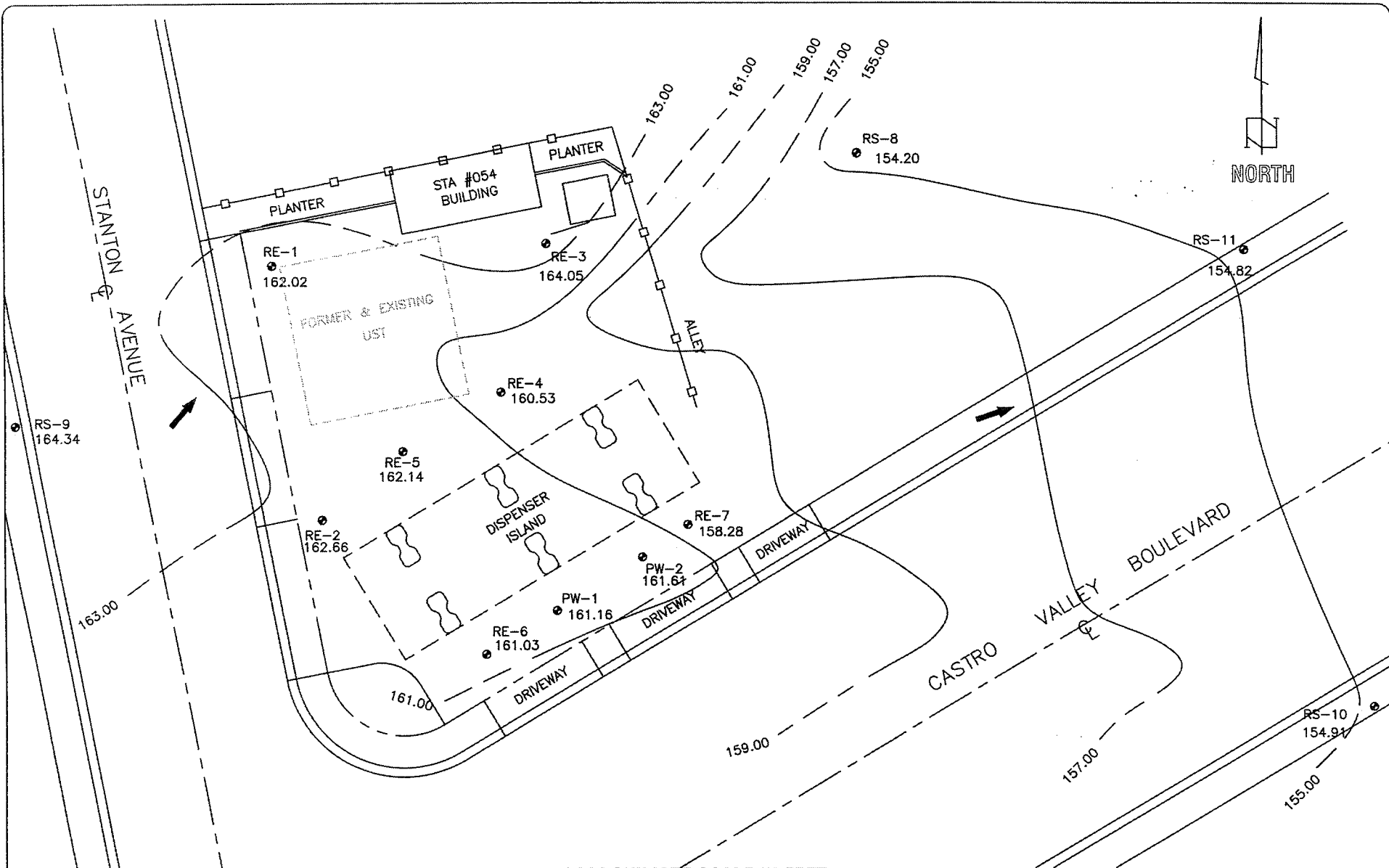
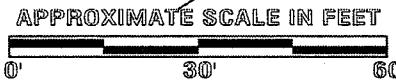
GHC: 1331	DATE: 02/20/06		<p>GEOHYDROLOGIC CONSULTANTS, INC.</p> <p>5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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FIGURE 4C
DISTRIBUTION OF MTBE IN SOIL
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA



LEGEND

- - GROUNDWATER MONITORING WELL
- 160.53 - FEET ABOVE MEAN SEA LEVEL (GROUNDWATER)
- 165.00 - GROUNDWATER ELEVATION IN FT. ABOVE MEAN SEA LEVEL
- ↖ - APPROXIMATE DIRECTION OF GROUNDWATER FLOW



March 15, 2006


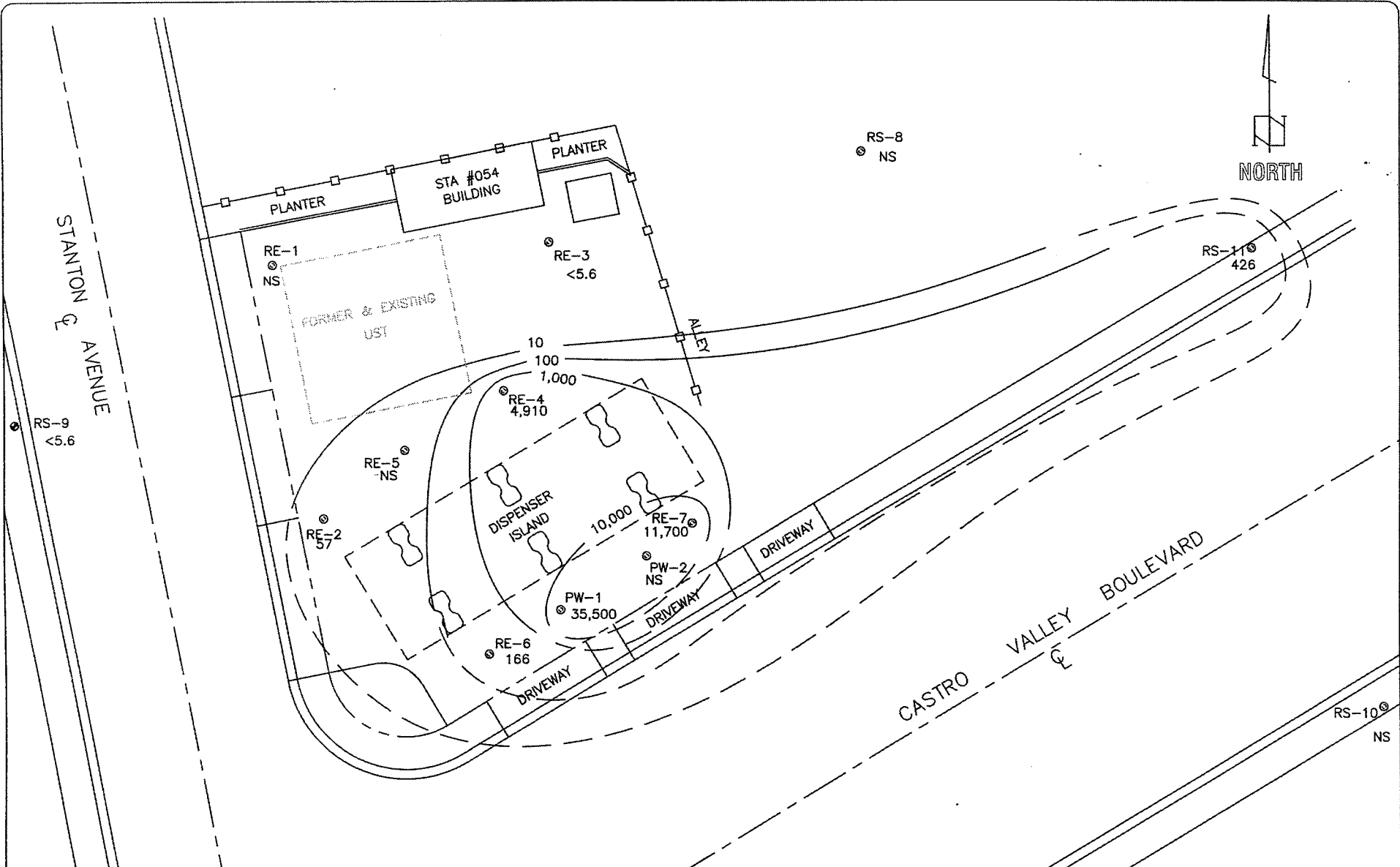
GHC: 1331	DATE: 02/20/06		<p>GEOHYDROLOGIC CONSULTANTS, INC.</p> <p>5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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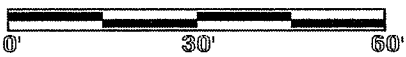
FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA




LEGEND

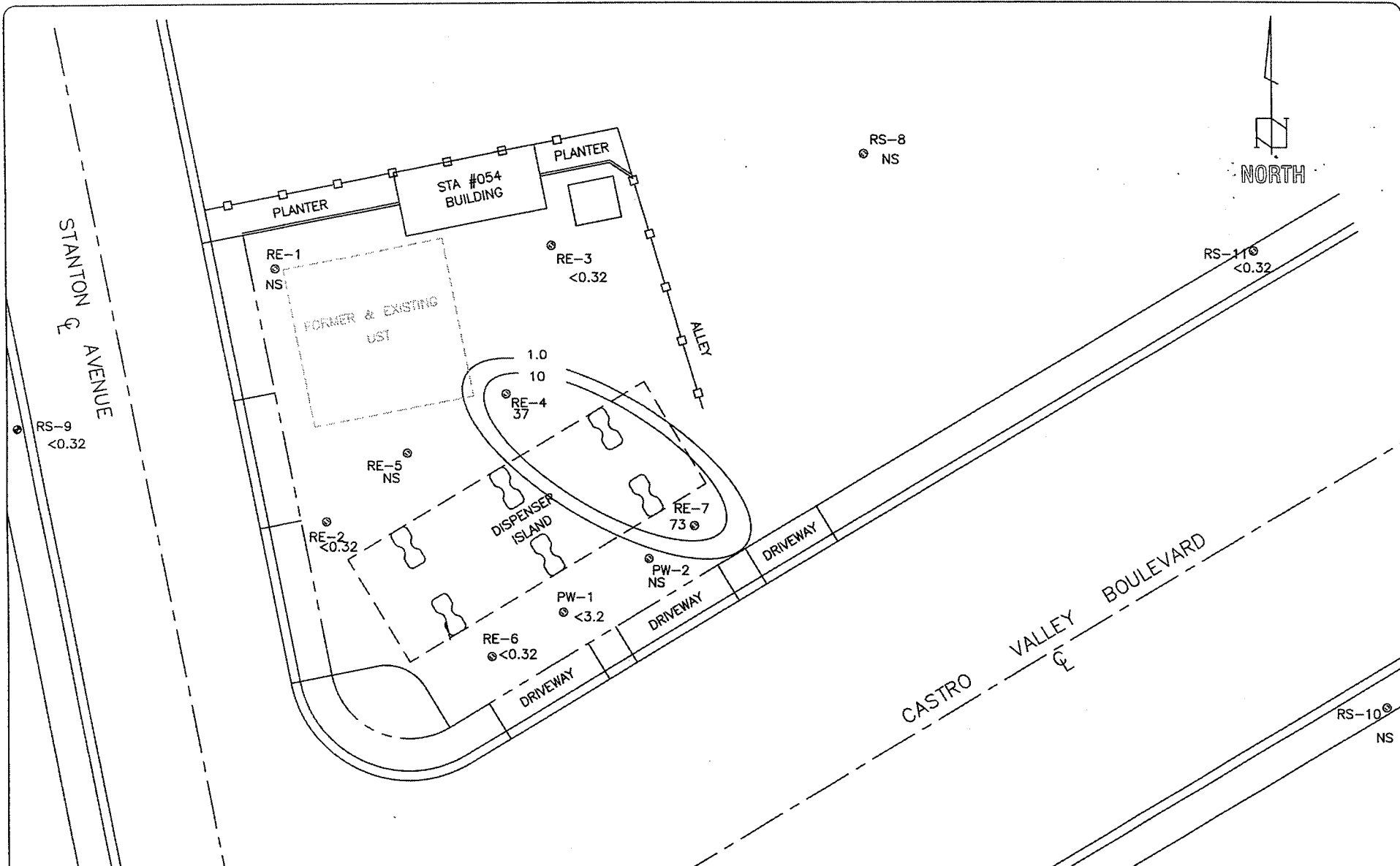
- - GROUNDWATER MONITORING WELL
- 166 - TPHg GROUNDWATER CONCENTRATIONS in $\mu\text{g/L}$
- 100 - TPHg GROUNDWATER CONTOUR in $\mu\text{g/L}$
- NS - NOT SAMPLED

APPROXIMATE SCALE IN FEET



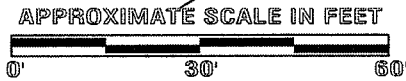
MARCH 15, 2006

<p>GHC: 1331 DATE: 02/20/06</p>		<p>GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>	<p>FIGURE 6A DISTRIBUTION OF TPHg IN GROUNDWATER THRIFTY SERVICE STATION #054 2504 Castro Valley Boulevard Castro Valley, CA</p>
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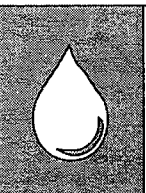


LEGEND

- ⊙ - GROUNDWATER MONITORING WELL
- 73 - BENZENE GROUNDWATER CONCENTRATIONS in µg/L
- 10 - BENZENE GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED



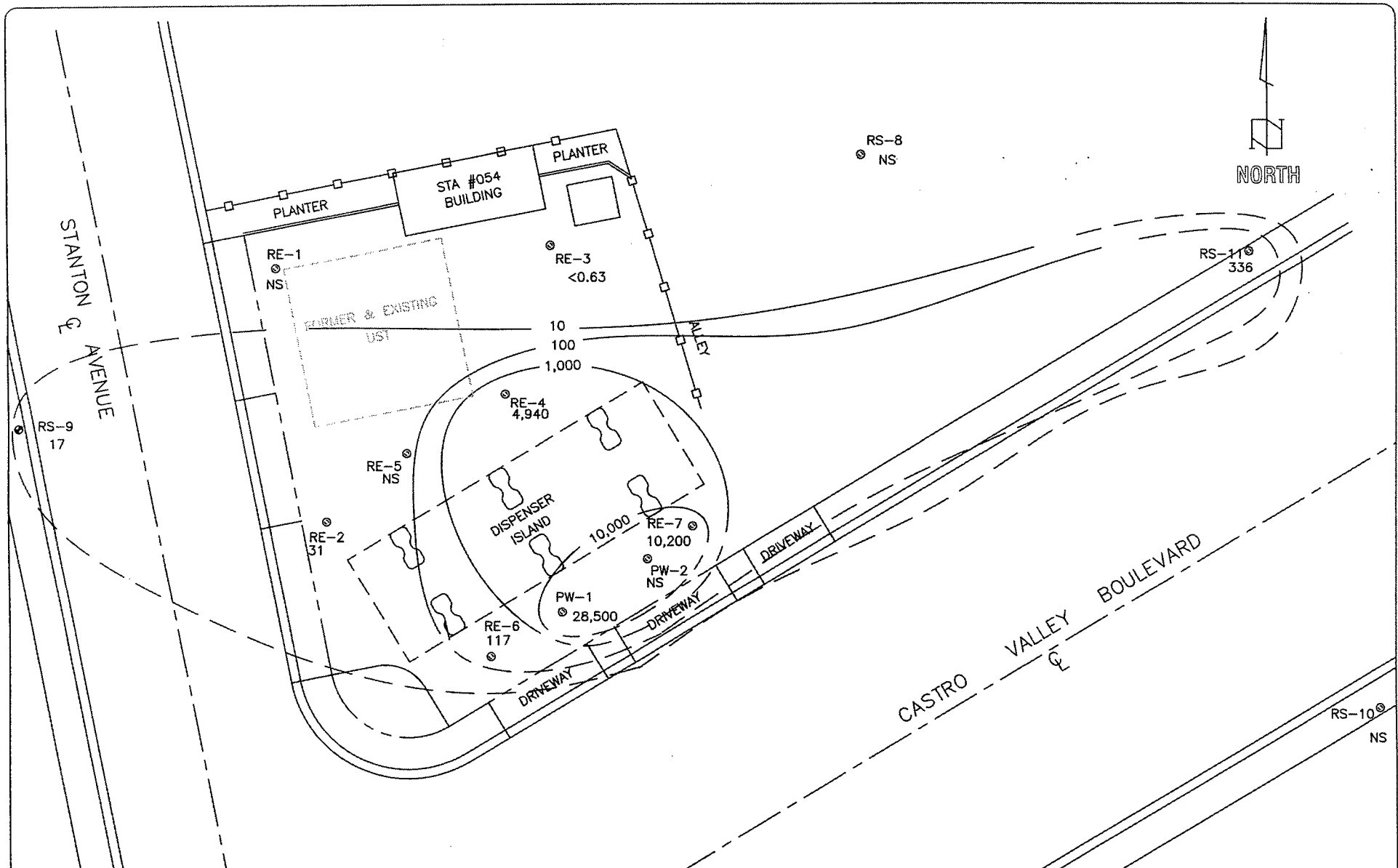
GHC: 1331
 DATE: 02/20/06



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FIGURE 6B
DISTRIBUTION OF BENZENE IN GROUNDWATER
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA

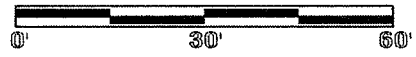
MARCH 15, 2006




LEGEND

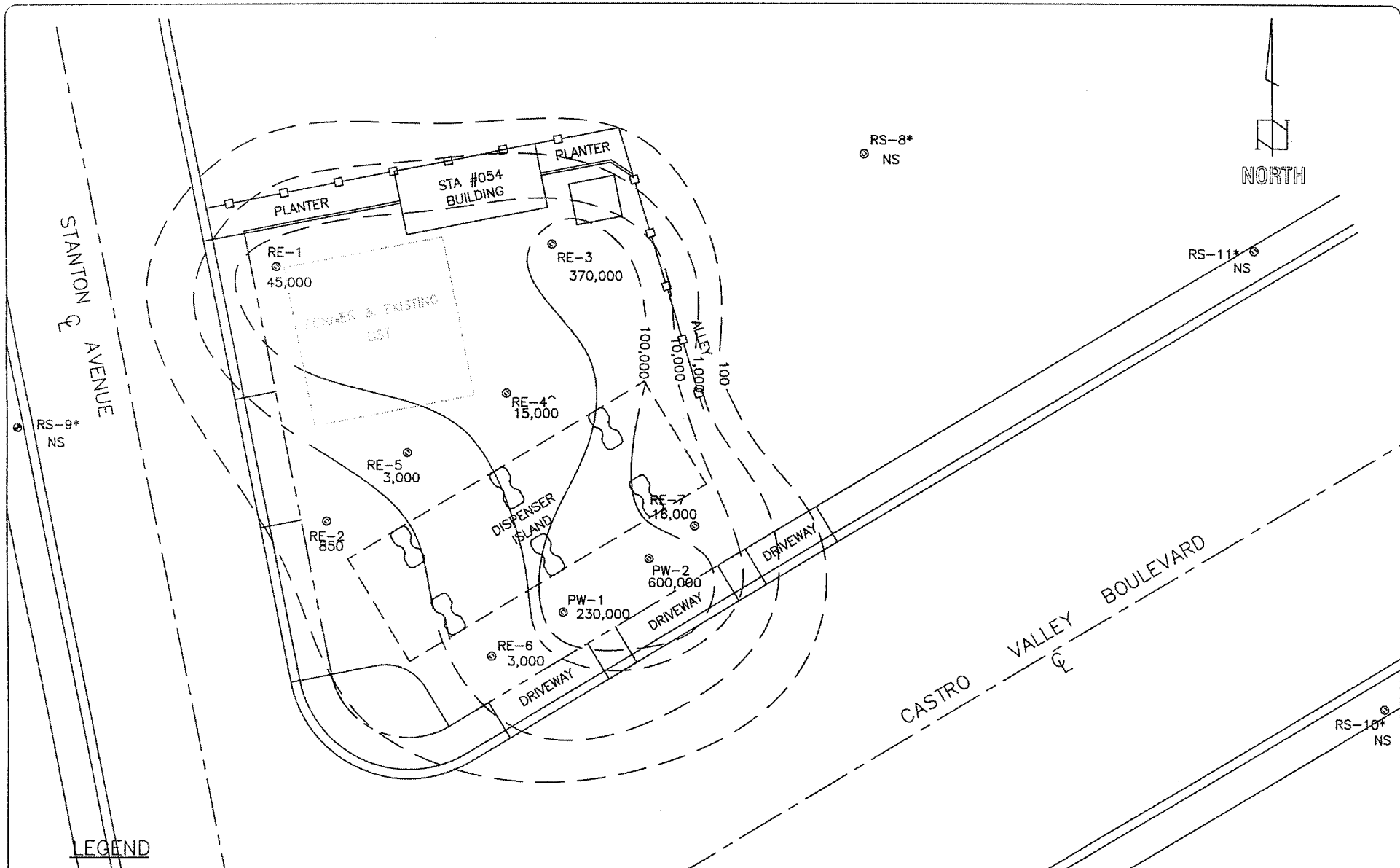
- - GROUNDWATER MONITORING WELL
- 117 - MTBE GROUNDWATER CONCENTRATIONS in µg/L
- 100 — - MTBE GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED

APPROXIMATE SCALE IN FEET



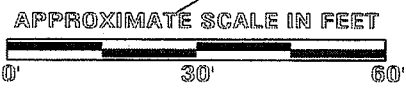
MARCH 15, 2006


<p>GHC: 1331 DATE: 02/20/06</p>		<p>GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>	<p>FIGURE 6C DISTRIBUTION OF MTBE IN GROUNDWATER THRIFTY SERVICE STATION #054 2504 Castro Valley Boulevard Castro Valley, CA</p>
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LEGEND

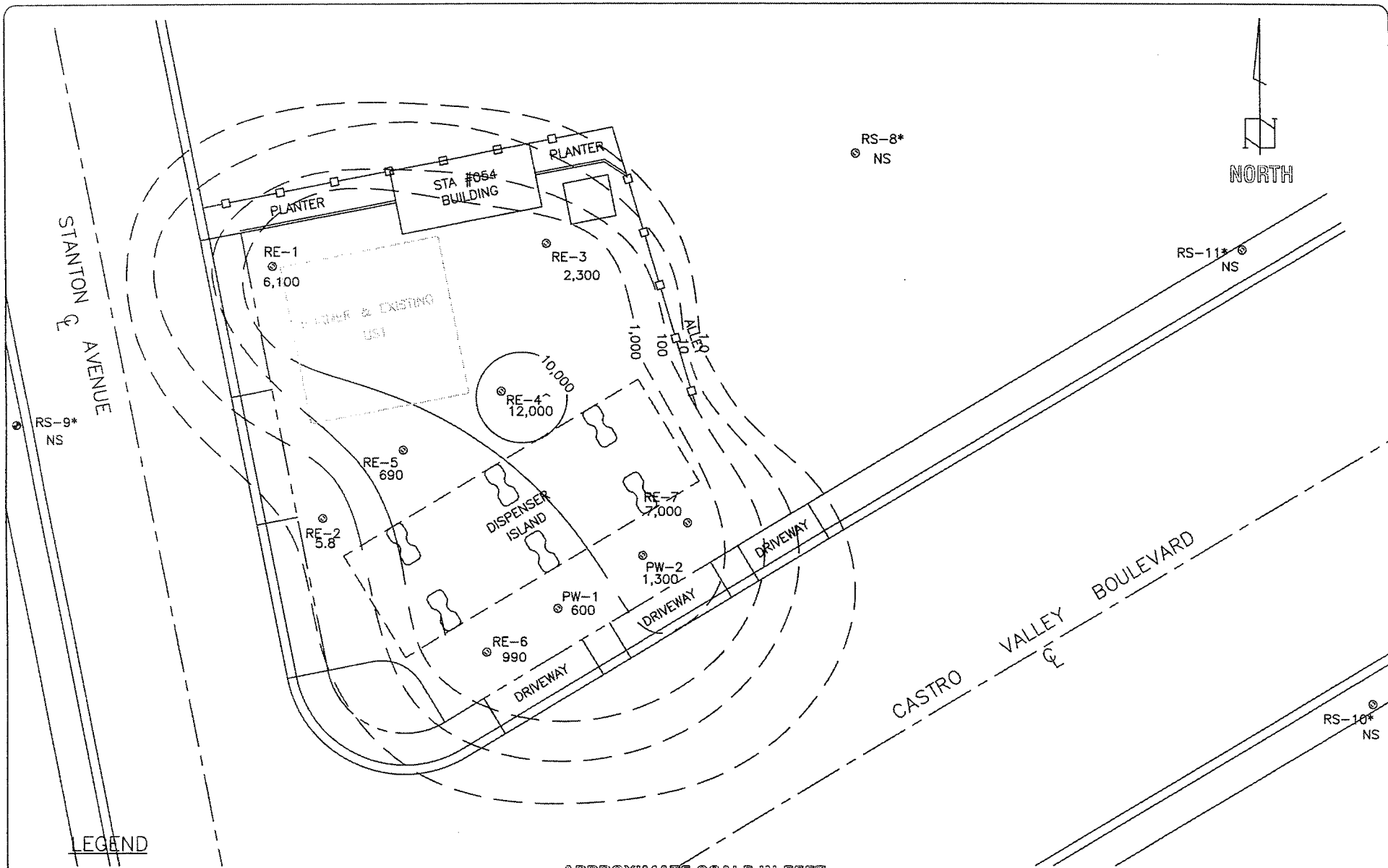
- - GROUNDWATER MONITORING WELL
- 850 - TPHg GROUNDWATER CONCENTRATIONS in µg/L
- 100 — - TPHg GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED
- RE-8* - NOT INSTALLED AS OF DATE
- RE-4^ - SAMPLED APRIL 11, 1988



GHC: 1331	DATE: 02/20/06		<p>GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com</p>
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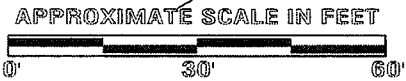
April 9, 1990 (Pre-Remediation)

FIGURE 6D
DISTRIBUTION OF TPHg IN GROUNDWATER
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA

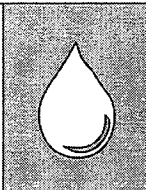


LEGEND

- ⊙ - GROUNDWATER MONITORING WELL
- 600 - BENZENE GROUNDWATER CONCENTRATIONS in µg/L
- 100 — - BENZENE GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED
- RE-8* - NOT INSTALLED AS OF DATE
- RE-4~ - SAMPLED APRIL 11, 1988



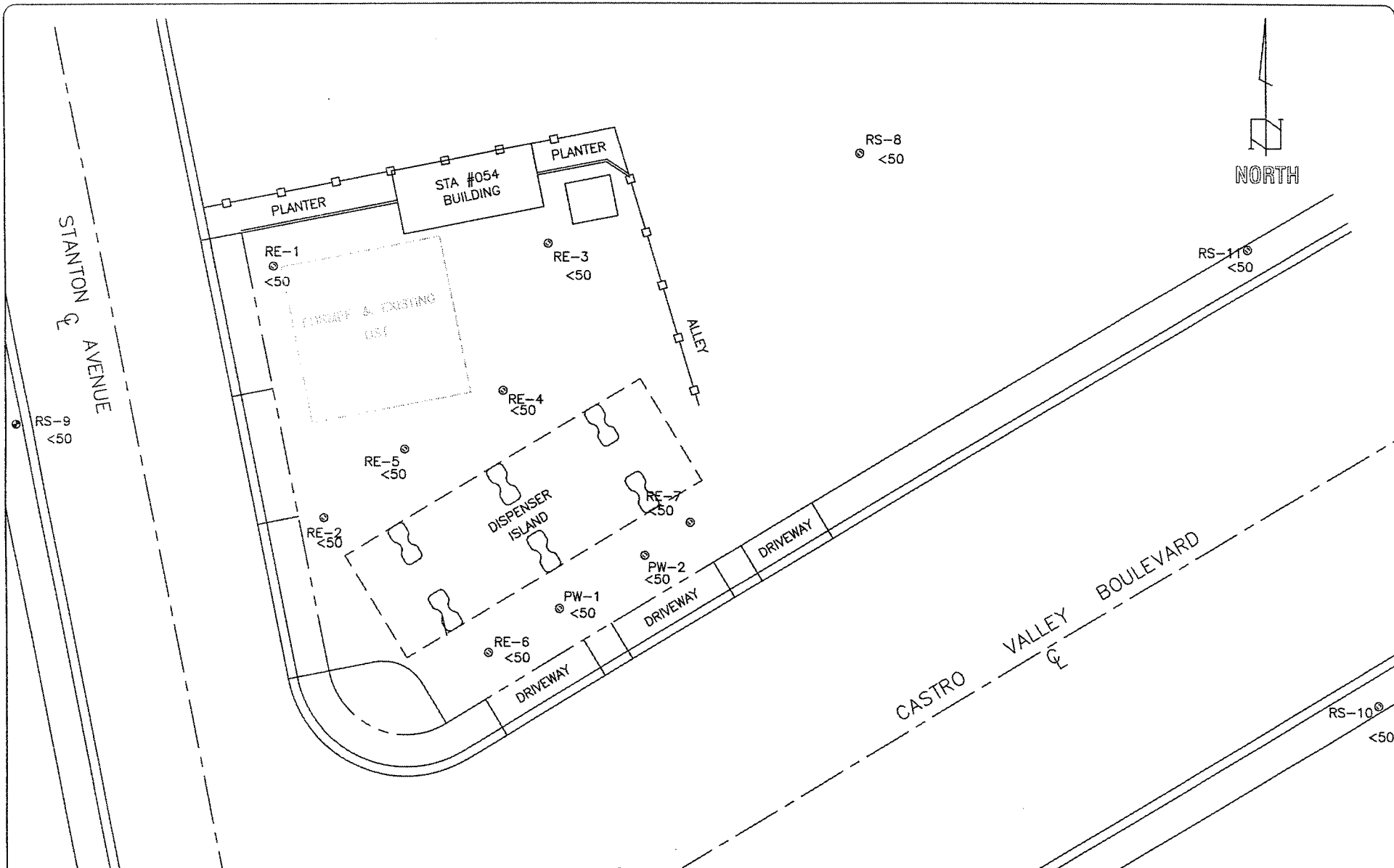
GHC: 1331
DATE: 02/20/06



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FIGURE 6E
DISTRIBUTION OF BENZENE IN GROUNDWATER
THRIFTY SERVICE STATION #054
2504 Castro Valley Boulevard
Castro Valley, CA

April 9, 1990 (Pre-Remediation)



LEGEND

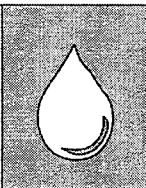
- - GROUNDWATER MONITORING WELL
- <50 - TPHg GROUNDWATER CONCENTRATIONS in µg/L
- 100 - TPHg GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED

APPROXIMATE SCALE IN FEET



DECEMBER 13, 2000 (Post-Remediation)

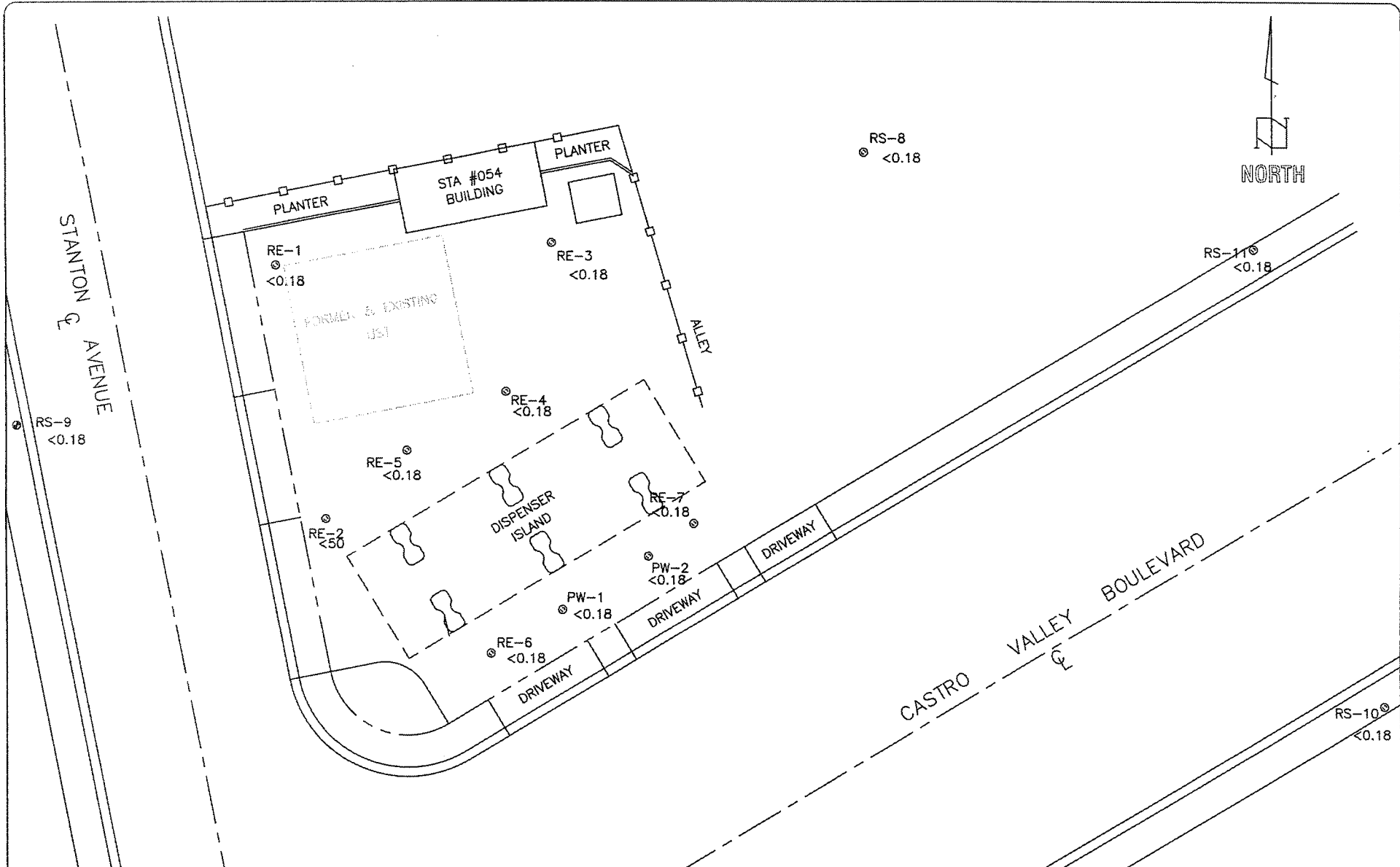
GHC: 1331
DATE: 02/20/06



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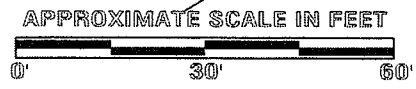
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Huntington Beach, CA 92649
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FIGURE 6F
DISTRIBUTION OF TPHg IN GROUNDWATER
THRIFTY SERVICE STATION #054
2504 Castro Valley Boulevard
Castro Valley, CA



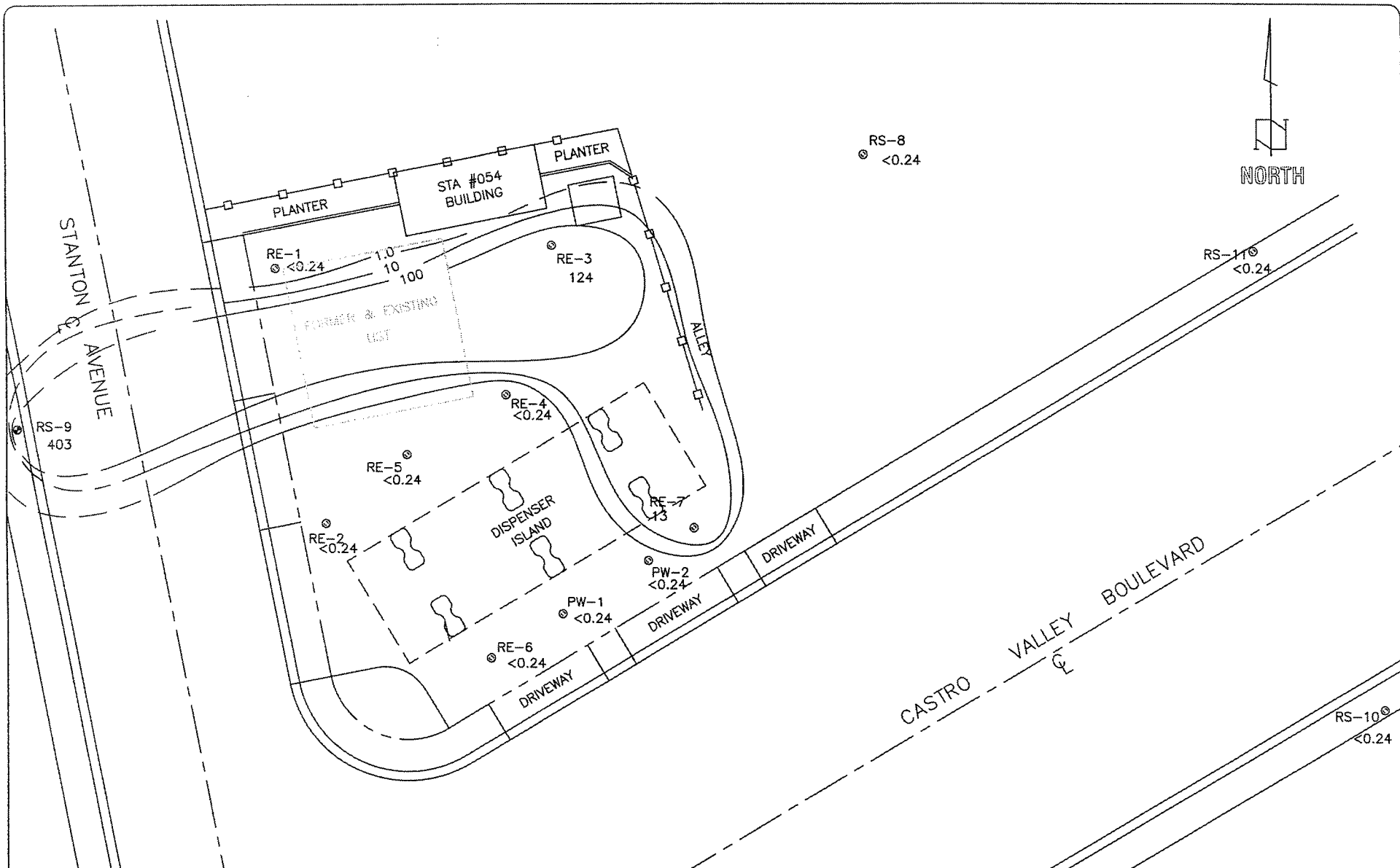
LEGEND

- ⊙ - GROUNDWATER MONITORING WELL
- <0.18 - BENZENE GROUNDWATER CONCENTRATIONS in µg/L
- 100 - BENZENE GROUNDWATER CONTOUR in µg/L
- NS - NOT SAMPLED



DECEMBER 13, 2000 (Post-Remediation)

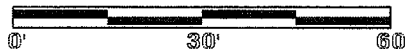
GHC: 1331	DATE: 02/20/06		GEOHYDROLOGIC CONSULTANTS, INC. 5912 Bolsa Avenue, Suite 200 Huntington Beach, CA 92649 www.geohydrologic.com
<p style="text-align: center;">FIGURE 6G DISTRIBUTION OF BENZENE IN GROUNDWATER THRIFTY SERVICE STATION #054 2504 Castro Valley Boulevard Castro Valley, CA</p>			



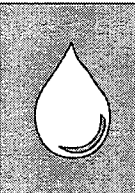
LEGEND

- ⊙ - GROUNDWATER MONITORING WELL
- <math><0.24</math> - BENZENE GROUNDWATER CONCENTRATIONS in $\mu\text{g/L}$
- 100 — - BENZENE GROUNDWATER CONTOUR in $\mu\text{g/L}$
- NS - NOT SAMPLED

APPROXIMATE SCALE IN FEET



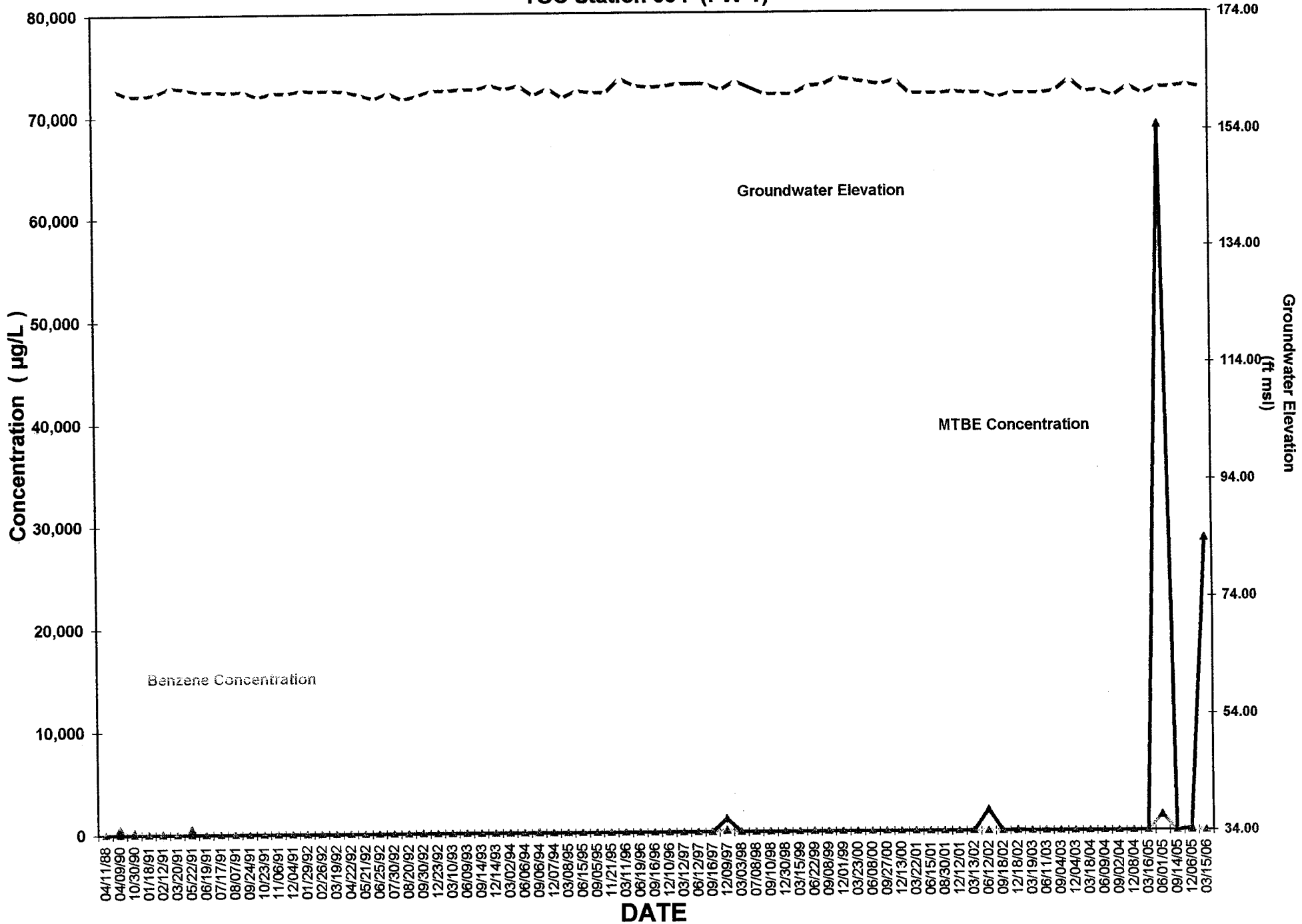
GHC: 1331
 DATE: 02/20/06



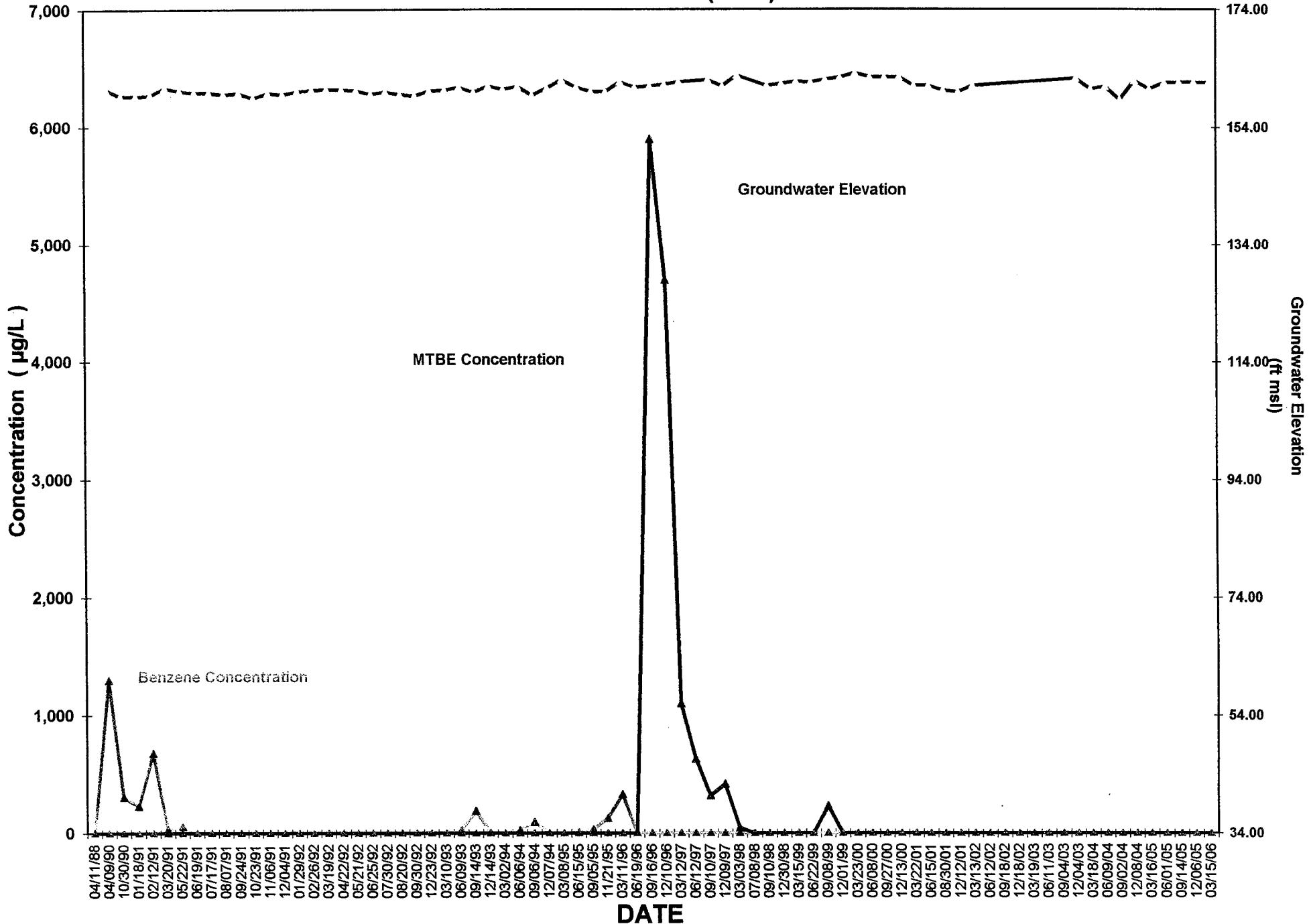
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DECEMBER 13, 2000 (Post-Remediation)
FIGURE 6H
DISTRIBUTION OF MTBE IN GROUNDWATER
THRIFTY SERVICE STATION #054
 2504 Castro Valley Boulevard
 Castro Valley, CA

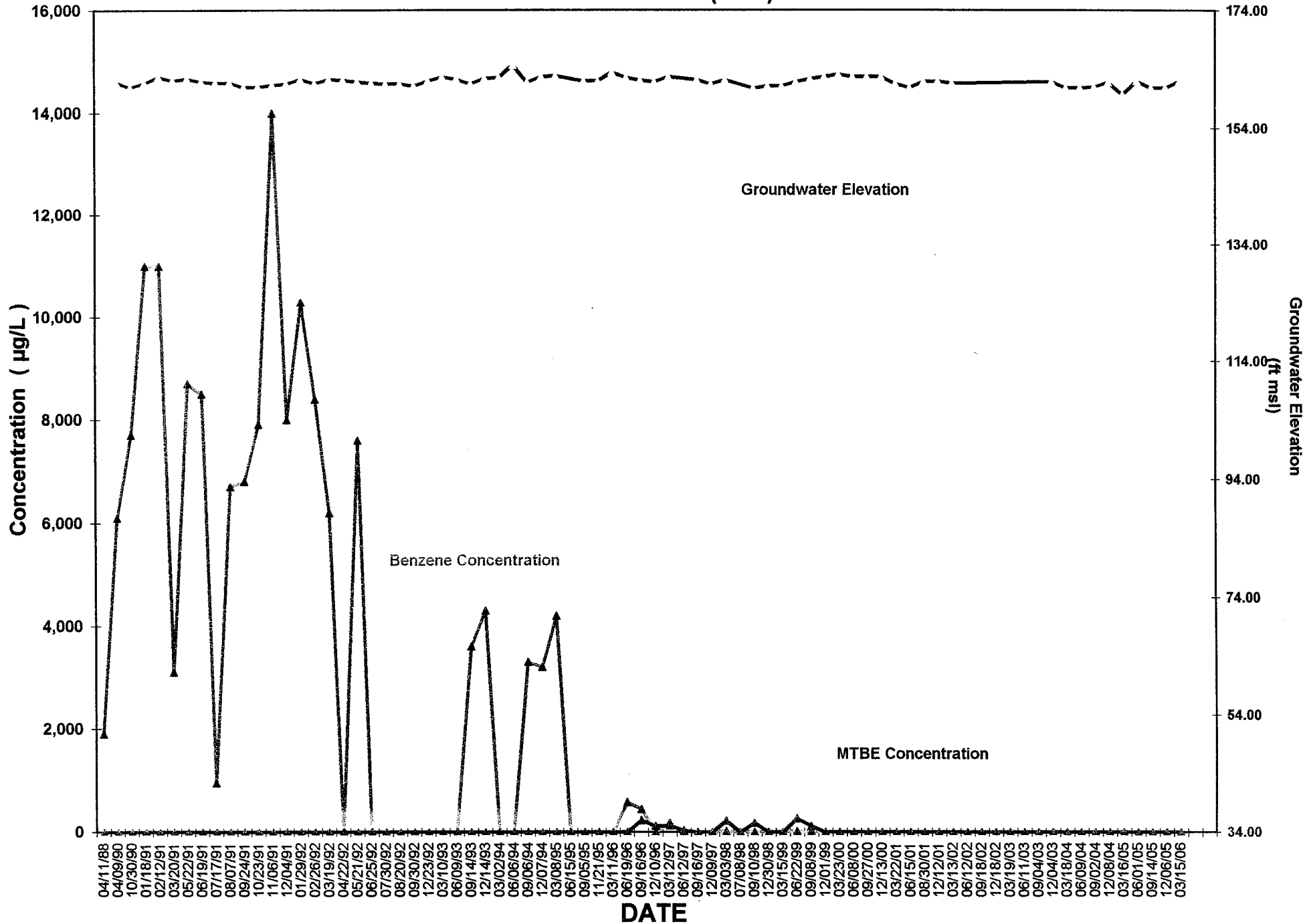
**FIGURE 7A: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (PW-1)**



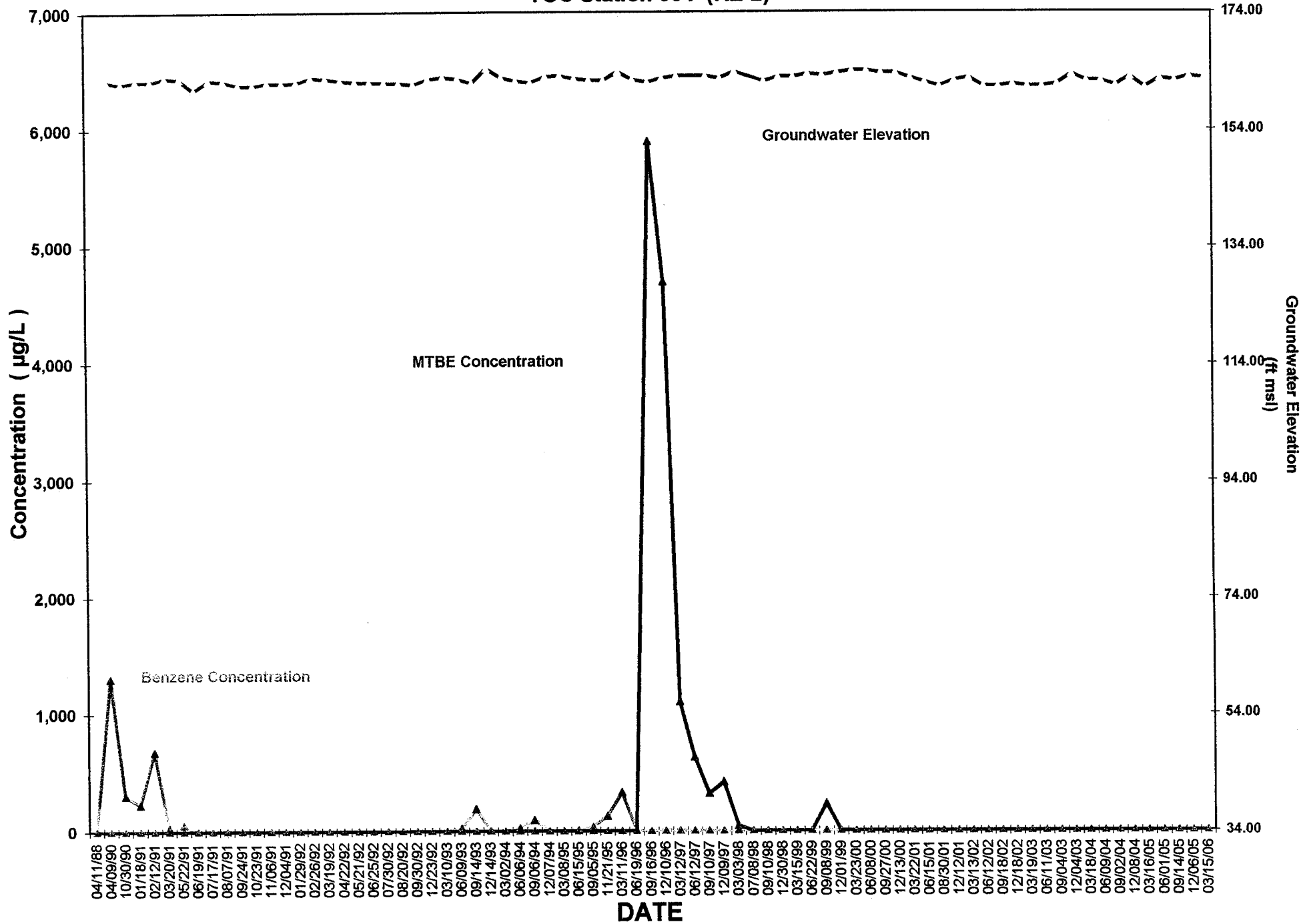
**FIGURE 7B: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (PW-2)**



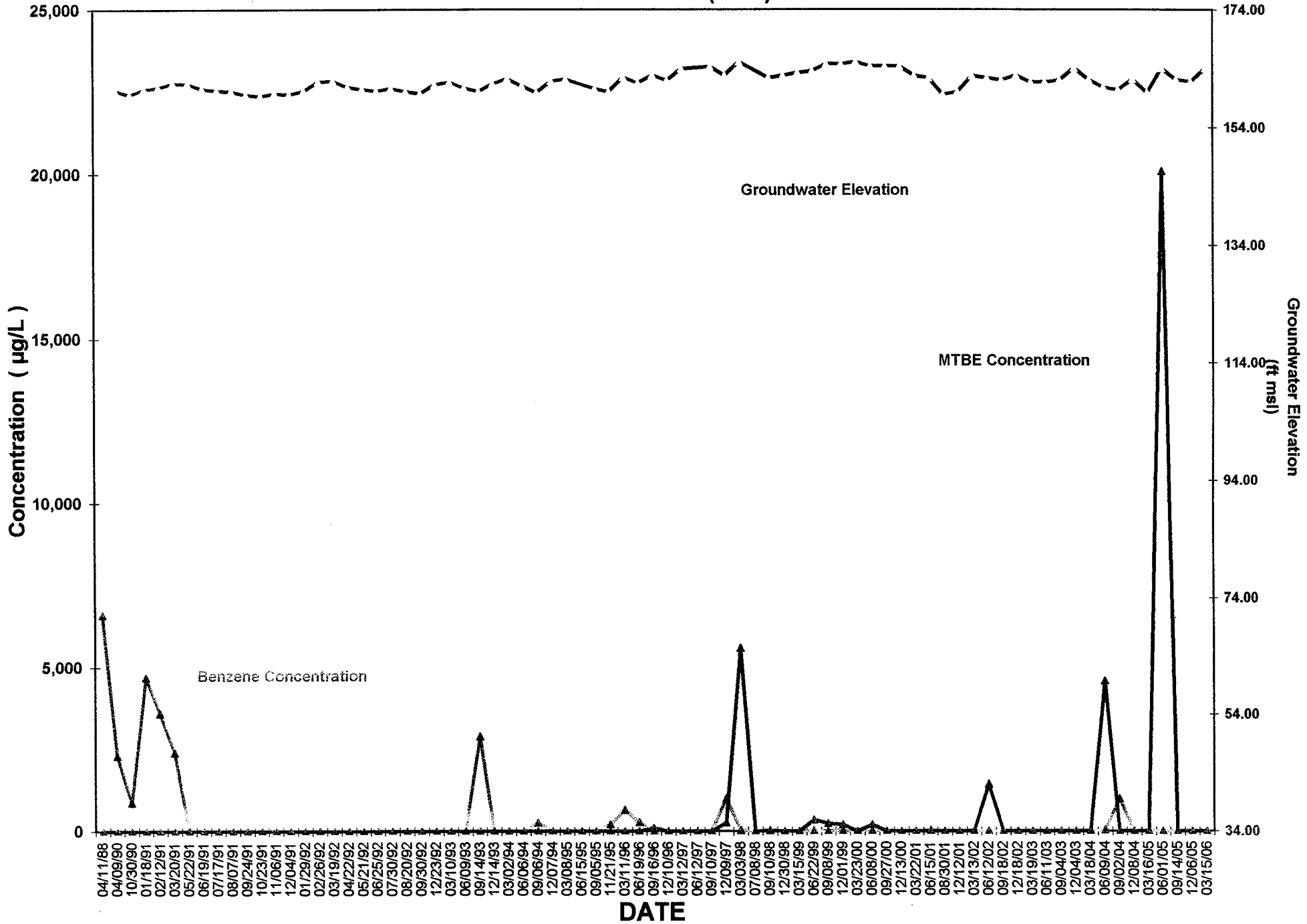
**FIGURE 7C: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-1)**



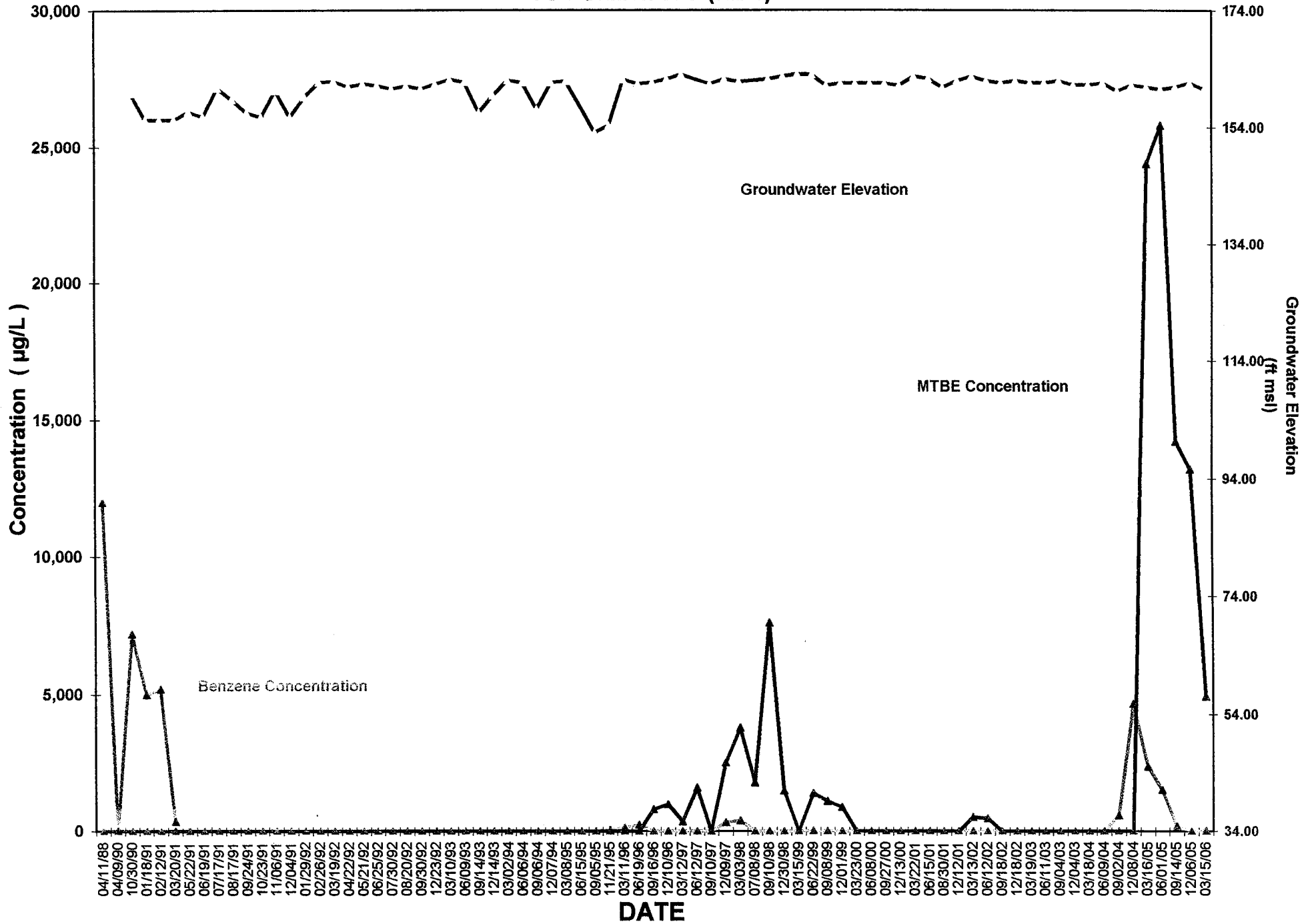
**FIGURE 7D: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-2)**



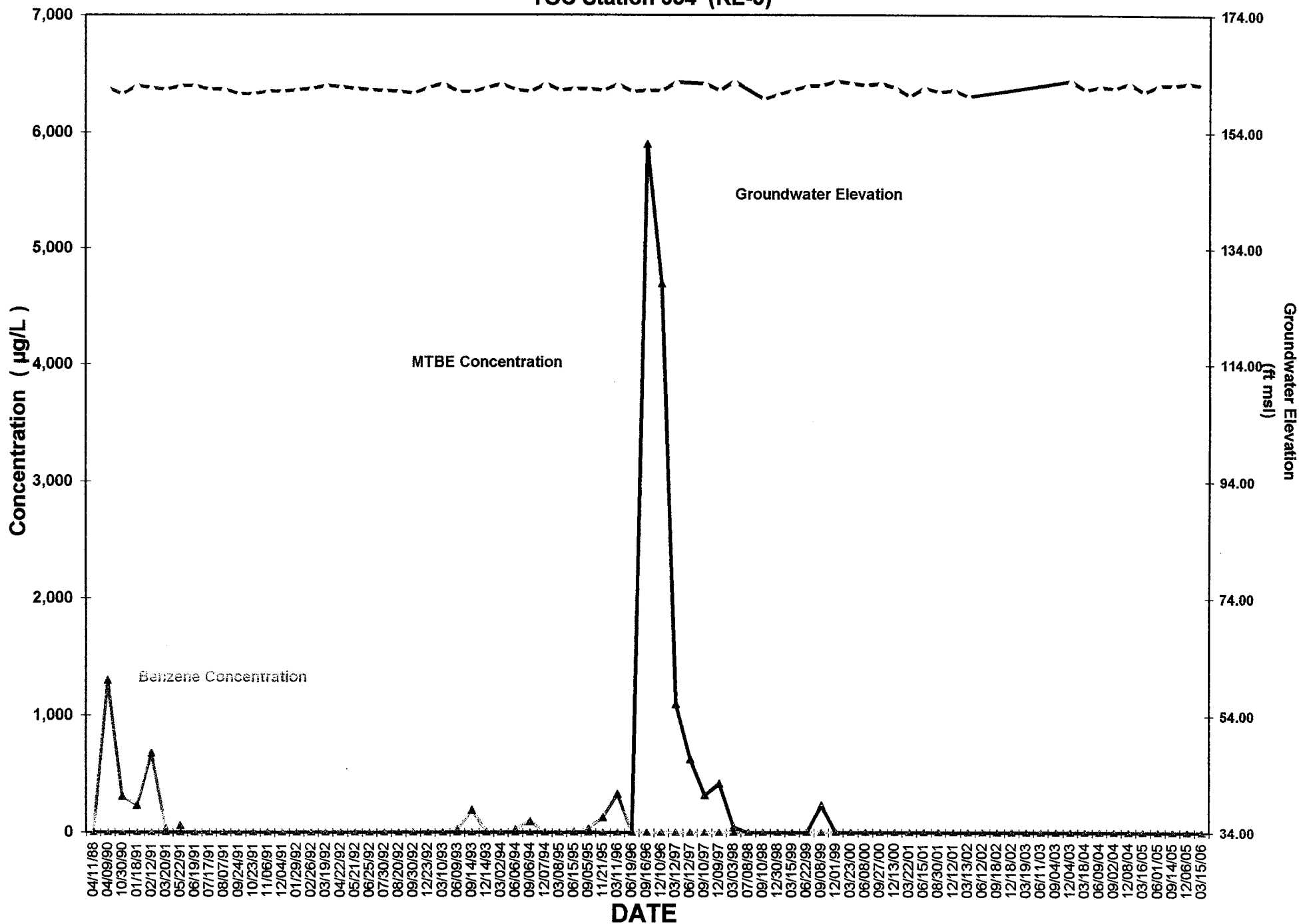
**FIGURE 7E: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-3)**



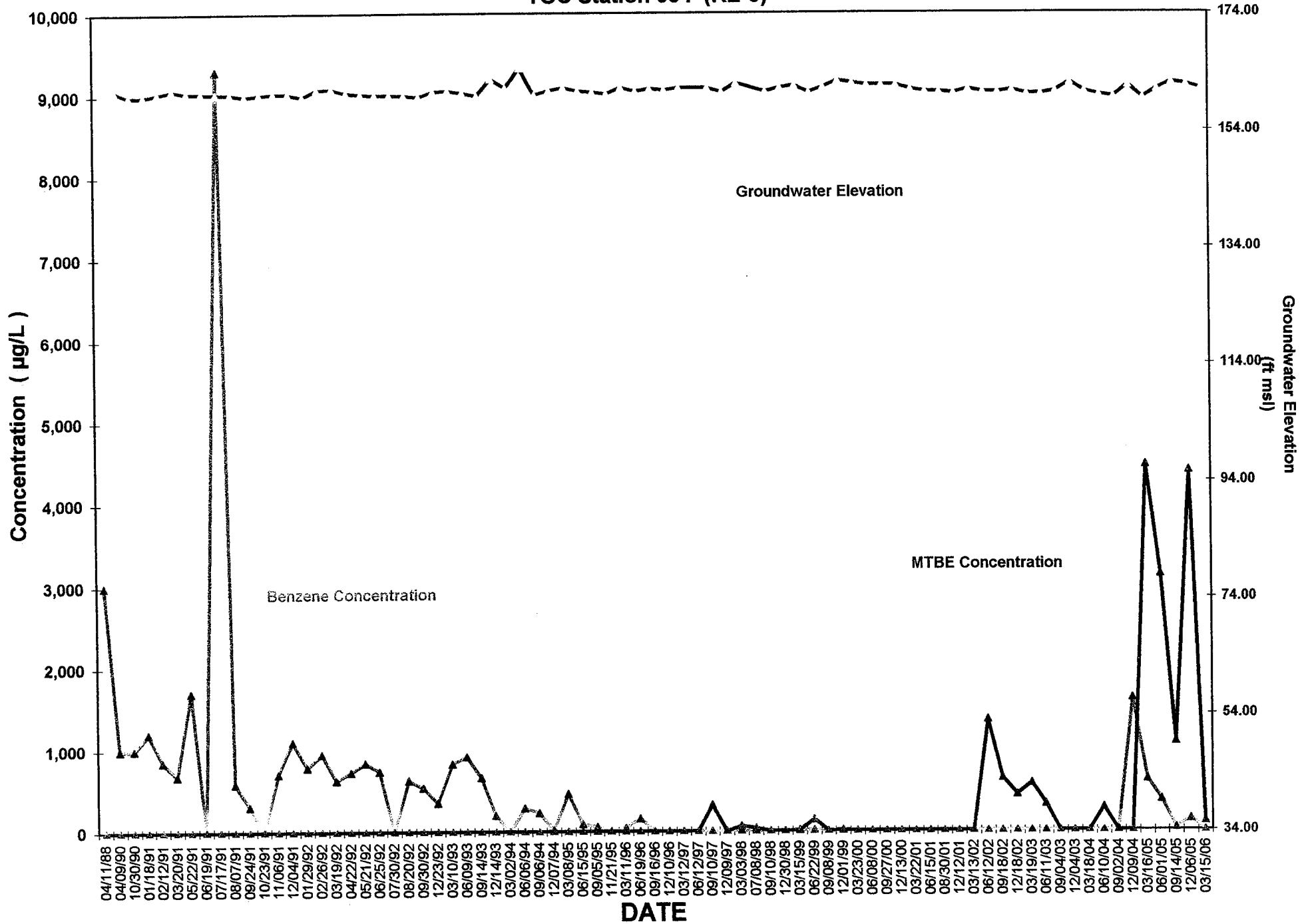
**FIGURE 7F: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-4)**



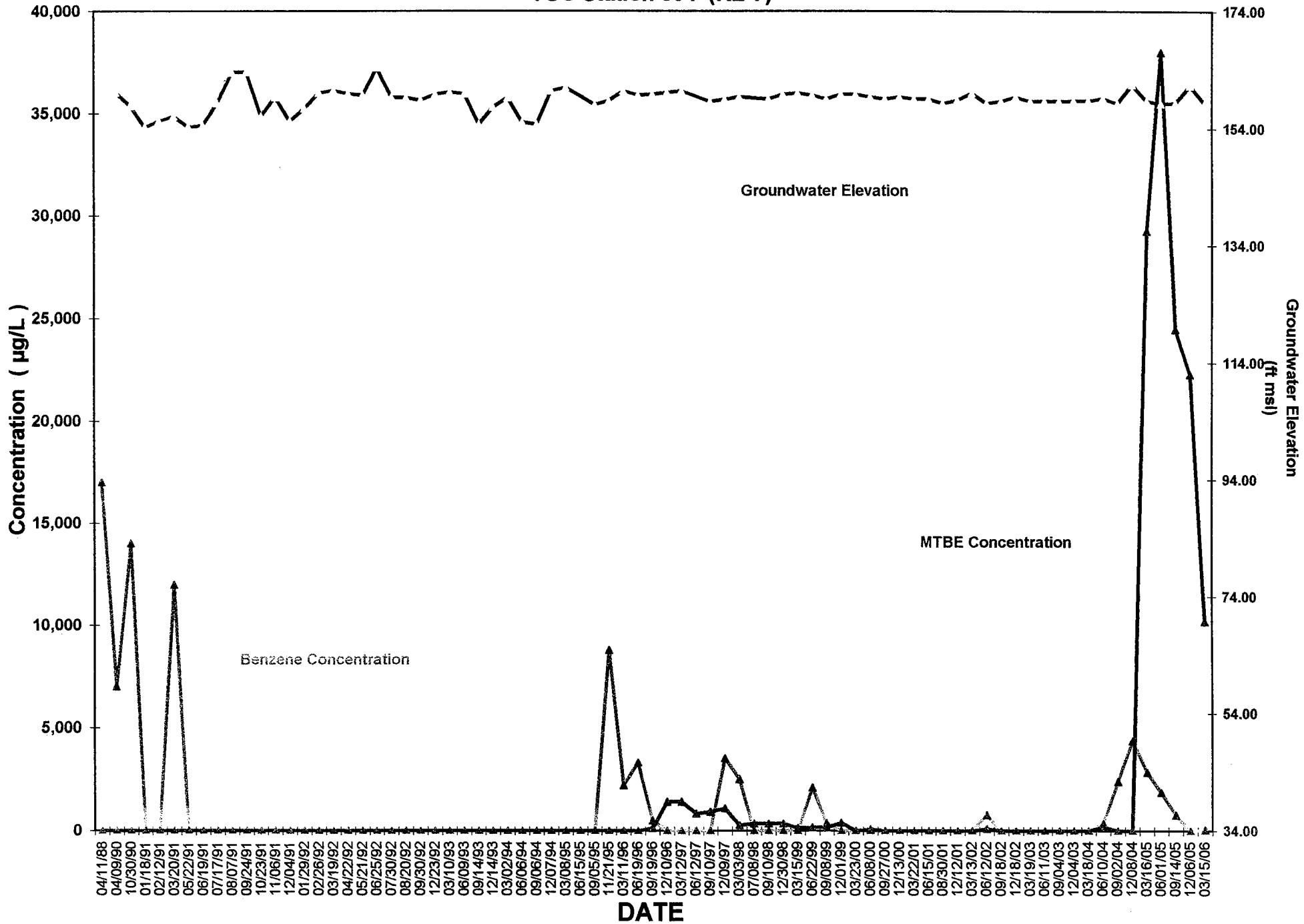
**FIGURE 7G: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-5)**



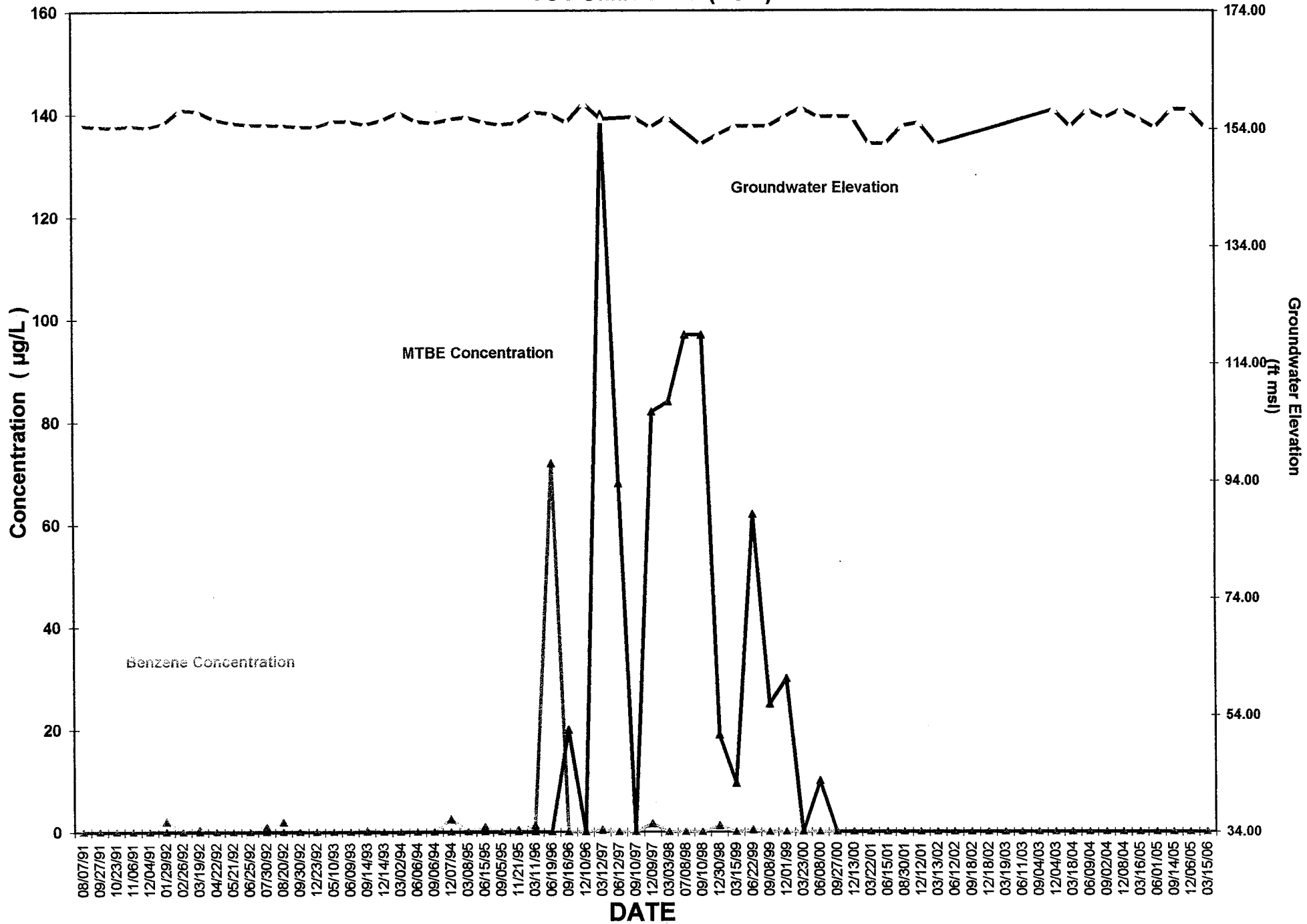
**FIGURE 7H: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-6)**



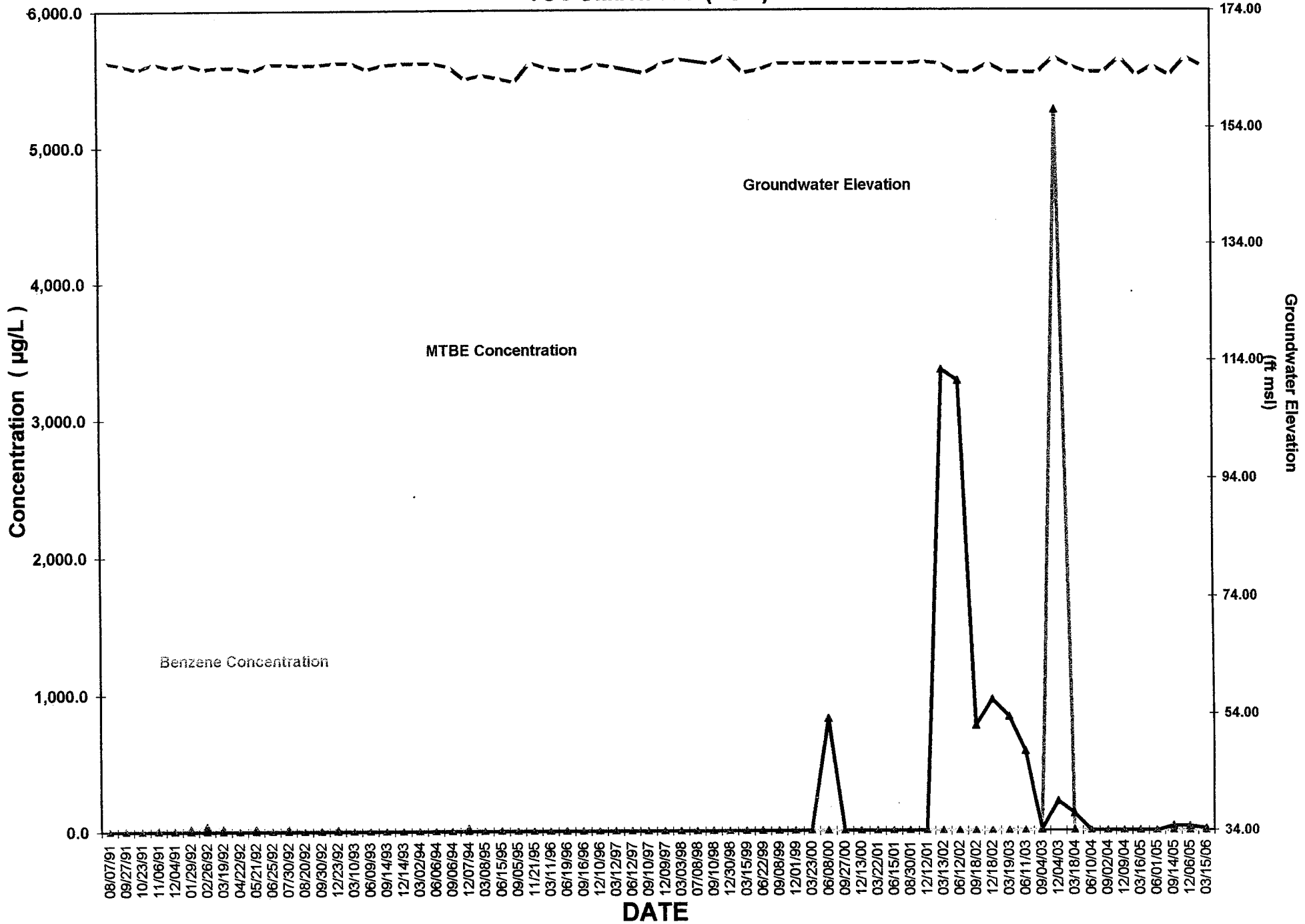
**FIGURE 7I: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RE-7)**



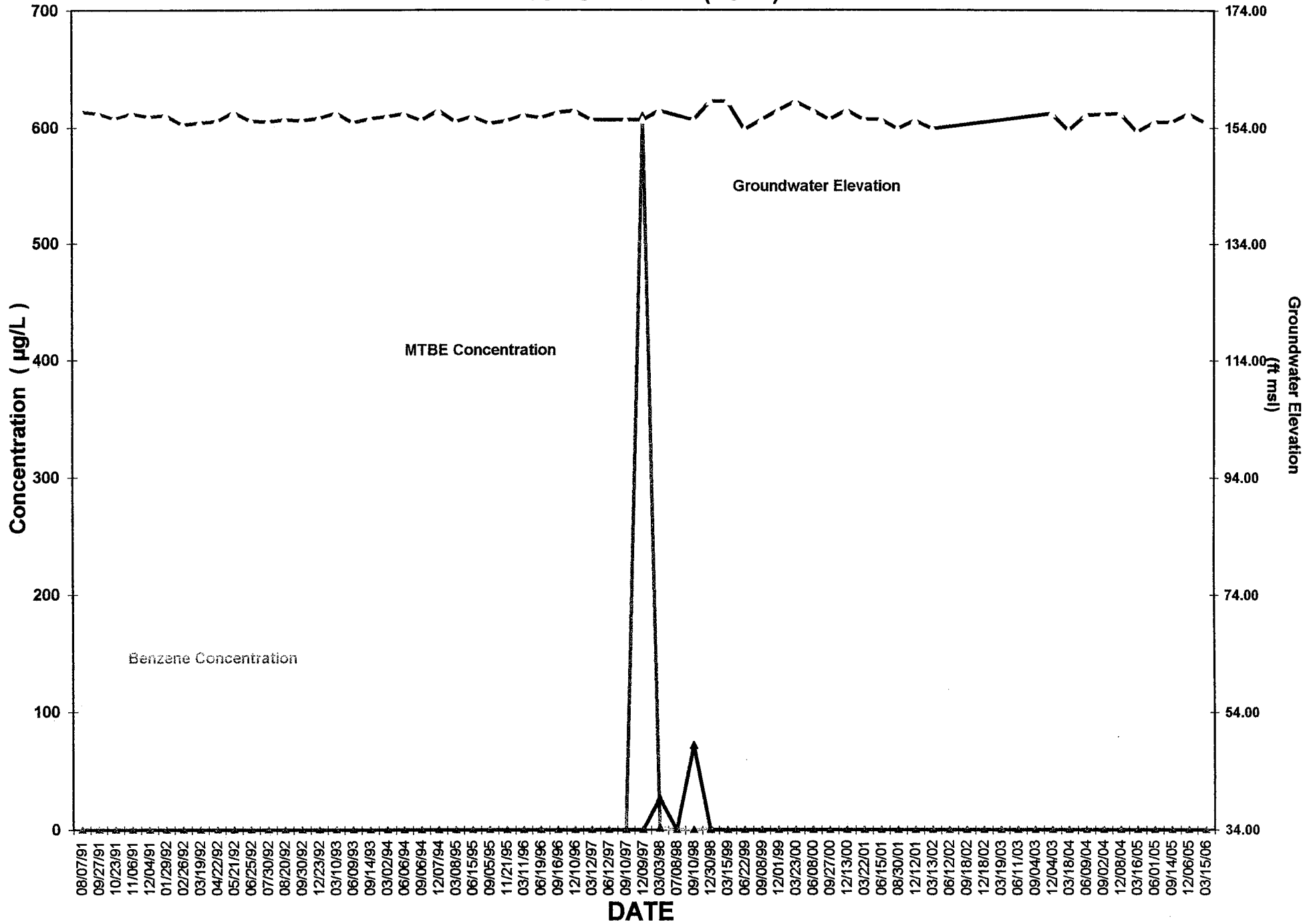
**FIGURE 7J: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RS-8)**



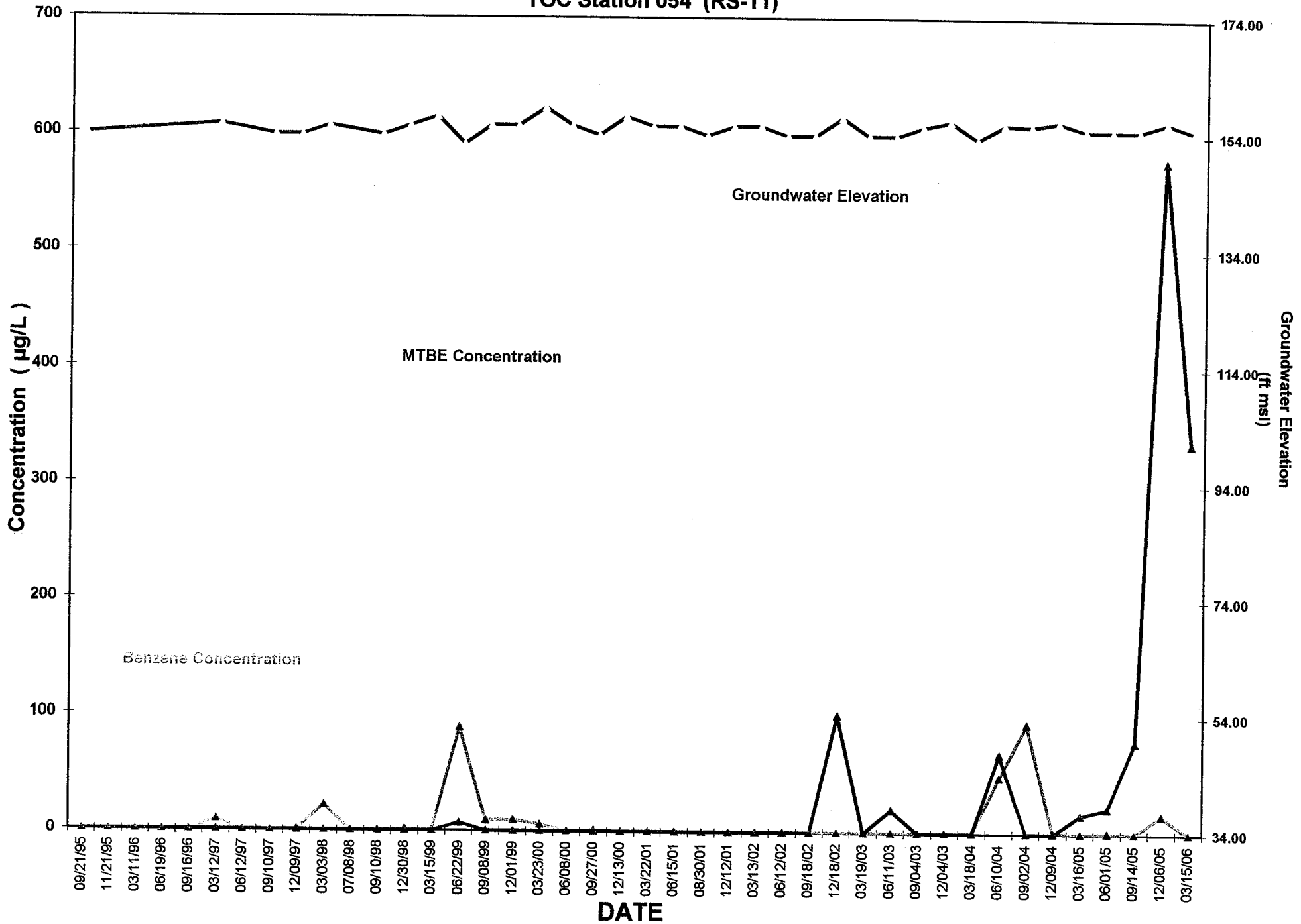
**FIGURE 7K: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RS-9)**



**FIGURE 7L: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RS-10)**



**FIGURE 7M: Benzene / MTBE Concentrations
and Groundwater Elevations vs. Time
TOC Station 054 (RS-11)**



APPENDICES

APPENDIX A

Historic Boring and Well Logs

Depth, feet	WELL CONSTRUCTION		LITHOLOGY		SAMPLE DATA	
	Type of Security:	Graphic Log	Description	NUMBER	INTERVAL	PENETRATION DATE (81 days/ft.)
0	Concrete	Neat Cement	Silty SAND (SM): light olive brown (2.5Y 5/4), silty, moist, very fine to medium, ≈ 15%-20% silt.			
0-5	2" Dia. Sch. 40 PVC Blank casing	Blank casing	Silty clay (CL): very dark grey (5.5Y 3/1), silty, moist, trace medium sand, trace chert nodules - 1/4" dia (angular), ≈ 50-60% silt, plastic; hard	11/5	11/7	RS-11-1
5-10	7" Dia. Sch. 40 PVC 0.010" slotted well screen	Well screen	SANDY SILT (ML): light yellowish brown (2.5Y 6/4), silty, moist, ≈ 30-40% angular medium to very coarse sand, trace gravel to 3/4" dia, appears to be weathered bedrock, trace caliche, hard green brown mottled, caliche, trace to little clay	9/14	1/20	RS-11-10
10-15	2" Dia. Sch. 40 PVC 0.010" slotted well screen	Well screen	Siltstone (ML): light yellowish brown, saturated fractures, weathered/fractured siltstone/shale bedrock, very dense	25	50	RS-11-15
15-20	2 1/2" Monterey Sand	Monterey Sand	extremely weathered and fractured, slightly moist to moist, trace grey nodules.	35	55	RS-11-2
20-25	and cap	cap	dark grey (2.5Y 4/1), dry, very dense, slightly weathered and fractured.	60	5"	RS-11-2
25-30			slightly moist to moist	50	5"	RS-11-2

Well Permit No.: _____
 Date well drilled: 9-21-45
 Date water level measured: _____
 Well elevation: _____

Drilling Company: West Hazmat
 Driller: Mike
 Sampling Method: CSG
 Hammer Weight: 140 lbs

Sketch of Well Location:
 Survey ref. RS-10 - 5.74'
 RS-11 - 5.35'

Geologist/Engineer: RAI

FIELD LOG OF WELL CONSTRUCTION AND LITHOLOGY FOR RS-11

Project No. TOC # 54

THRIFTY OIL CO. STATION #054

Castro Valley, CA
 Date: 5/8/91
 Time Started/Finished: 9:54/12:30
 Sampling Method: Split Spoon
 Rig Type: B-53
 Drilling Contractor: Kvilhaugh

BORING/MONITORING WELL: RS-8

Logged By: WJW
 Casing Size & Type: 2" PVC
 Screen Size & Type: 2" PVC; 0.010" Slots
 Filter Pack: #2 Sand
 Traffic Cover Elevation:
 Datum/Reference: Note: PID reading unreliable

DEPTH (FEET)	SAMPLE INT.	PID ppm	BLOWS PER HALF FOOT	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
0						
5	X	55	5, 7, 20		ML	SILT AND CLAY, TAN, WITH COARSE GRAINED SAND, DRY, NO ODOR OR STAIN. (8" SAMPLE CAUGHT)
10	X	55	6, 8, 10		CL	CLAY, TAN WITH GRAY AND BLACK MOTTLING, SOME PEBBLES, MOIST, VERY STIFF, NO ODOR OR STAIN. (12" SAMPLE)
15	X	150	10, 18, 35		CL	CLAY AND SILT, BROWN WITH GRAY AND BLACK MOTTLING, CRYSTALLINE ROCKS WITH 1" TO 2" PEBBLES OF HIGHLY INDURATED SILTSTONE, STIFF, MOIST, NO ODOR OR STAIN.
20	X	<1.0	30, 55, -		ML	SILTSTONE, HIGHLY INDURATED, NO CRYSTALLINE PEBBLES, VERY SLOW HARD DRILLING.
25		-			ML	TD 25 FEET. SET WELL, 0.5 HOUR LATER 0.5" WATER IN WELL.
30						
35						
40						
45						

THRIFTY OIL CO. STATION #054

Castro Valley, CA
 Date: 5/8/91
 Time Started/Finished: 12:40/1:55
 Sampling Method: Split Spoon
 Rig Type: B-53
 Drilling Contractor: Kvilhaugh

BORING/MONITORING WELL: RS-9

Logged By: WJW
 Casing Size & Type: 2" PVC
 Screen Size & Type: 2" PVC; 0.010" Slots
 Filter Pack: #2 Sand
 Traffic Cover Elevation:
 Datum/Reference:

DEPTH (FEET)	SAMPLE INT.	PID ppm	BLOWS PER HALF FOOT	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
0						TOP 2' DARK BLACK CLAY.
5	X	100	7, 14, 14		CL	CLAY, GRAY-GREEN WITH BLACK STREAKS, FEW PEBBLES, STIFF, MOIST, SOME HYDROCARBON ODOR.
10	X	10	5, 7, 9		CL	SAME AS ABOVE, BUT MORE AND LARGER PEBBLES, ORANGE STAIN, SOME HYDROCARBON ODOR.
15		—	55, --, --			3" SAMPLE, PEBBLES, DRY, STRONG ODOR ON SAMPLER. TD 15 FEET. EVIDENCE OF WATER AT 12-13 FEET.
20						
25						
30						
35						
40						
45						

THRIFTY OIL CO. STATION #054

Castro Valley, CA

Date: 5/8/91

Time Started/Finished: 2:15/4:50

Sampling Method: Split Spoon

Rig Type: B-53

Drilling Contractor: Kvilhaugh

BORING/MONITORING WELL: RS-10

Sheet 1 of 1

Logged By: WJW

Casing Size & Type: 2" PVC

Screen Size & Type: 2" PVC; 0.010" Slots

Filter Pack: #2 Sand

Traffic Cover Elevation:

Datum/Reference:

DEPTH (FEET)	SAMPLE INT.	PID ppm	BLOWS PER HALF FOOT	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
0						
5	X	<1.0	3, 5, 8		CL	CLAY, BLACK, SOME PEBBLES, STIFF, MOIST, NO ODOR, ONE SANDY CLAY STRINGER. (12" SAMPLE)
10		<1.0	7, 10, 12		CL	CLAY, BROWN WITH ORANGE AND BLACK MOTTLING, PEBBLES (ANGULAR), MOIST, NO ODOR. (5" SAMPLE)
15		—	25, 54, —		ML	SILTSTONE, HIGHLY INDURATED, BROWN. (3" SAMPLE)
20		—	10, 17, 20		ML	SAME AS ABOVE, BLACK. (4" SAMPLE)
25		—	20, 20, 35		ML	SAME AS ABOVE, BLACK. (5" SAMPLE)
30						TD 25 FEET.
35						
40						
45						



Castro Valley Logged By:DD
COMPANY Rig Type:HOLLOW STEM AUGER
RE-1 Elevation:
4" Screen Type:PVC Filter Pack:#3 SAND

SOIL DESCRIPTION AND NOTES

ling Notes

GRAY CLAY WITH GRAVEL, MOIST,
STRONG HYDROCARBON ODOR.

MOTTLED BROWN AND GRAY CLAY WITH
GRAVEL AT BASE, WET,
LIGHT HYDROCARBON ODOR.

LIGHT BROWN SLIGHTLY GRAVELLY (SHALE)
LAYER, MOIST - NOT WET,
HYDROCARBON ODOR.

BLACK WEATHERED SHALE, DRY,
HYDROCARBON ODOR.

BLACK CLAY WITH SHALE, MOIST,
HYDROCARBON ODOR.

AT 26 FEET. 2-15-88

GROUNDWATER AT 10 FEET

[Handwritten signature] AC 4342

*BLOWS PER HALF FOOT

RE

DEPTH (FEET)	SAMP INT	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
5	X	7	4, 16, 14		CL	GRAY-GREEN CLAY WITH SOME GRAVEL, VERY MOIST, SLIGHT HYDROCARBON ODOR.
10	X	110	13, 19, 18		CL	GREEN GRAVELLY (QUARTZITE) CLAY, VERY MOIST, STRONG HYDROCARBON ODOR. PERCHED GROUNDWATER.
15	X	50	8, 18, 37			GREEN CLAY, MOIST, WITH EVAPORITE CRYSTALS, VERY SLIGHT HYDROCARBON ODOR REFUSAL AT 17 FEET ON GRAVELLY CLAYEY SHALE WITH PLAGIOCLASE VEINS. T.D. AT 17 FEET. GROUNDWATER AT APPROXIMATELY 13 FEET. 2-16-88
20						
25						
30						
35						
40						
45						
50						

Clare ... 43412

*BLOWS PER HALF FOOT

DEPTH (FEET)	SAMP INT	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
0 - 5	X	140	17, 14, 21	ASPHALT		ASPHALT DARK GRAY-BLACK CLAY WITH WOOD, FILL MATERIAL.
5 - 10	X	140	13, 21, 33	BLACK ORGANIC CLAY	CL	BLACK ORGANIC CLAY, VERY MOIST, STRONG HYDROCARBON ODOR. GREEN-BROWN GRAVELLY CLAY, WEATHERED QUARTZITE GRAVEL WITH SAND AND CLAY, CLUMPS, MOIST, STRONG HYDROCARBON ODOR
10 - 15	X	<5	9, 11, 17	DARK OLIVE-BROWN GRAVELLY CLAY		DARK OLIVE-BROWN GRAVELLY CLAY, GRAVEL IS SHALE, WITH SAND, ROOTS, MOIST, NO HYDROCARBON ODOR. REFUSAL ON SHALE BEDROCK.
15 - 19				T.D. AT 19 FEET.		T.D. AT 19 FEET.
19 - 50				NO GROUNDWATER		NO GROUNDWATER 2-14-88. NOTE: AFTER WAITING OVERNIGHT, THE BORING (NOT SET AS A WELL YET) HAD WATER AT APPROXIMATELY 7 FEET. THE BORING WAS THEN REAMED, AND A 4 INCH WATER WELL WAS BUILT 2-15-88.

Handwritten signature and number: R.E. 4342

*BLOWS PER HALF FOOT

THRIFTY OIL COMPANY MONITORING WELLS LOG DRIEVE 17-88
 054 Castro Valley CA 2504 Castro Valley Logged By:DD
 Drilling Contractor:BEYLIK DRILLING COMPANY Rig Type:HOLLOW STEM AUGER
 Time Started:2:00 Boring/Well #:RE-4 Elevation:
 Sampling Method:DRIVE Casing Size:4" Screen Type:PVC Filter Pack:#3 SAND

DEPTH (FEET)	SAMP INT	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
5	X	125	6, 8, 17			GREEN GRAVELLY CLAY OVER BLACK CLAY, VERY MOIST, STRONG HYDROCARBON ODOR.
10	X	25	16, 17, 16		CL	GREEN GRAVELLY CLAY, WET, MODERATE HYDROCARBON ODOR.
15	X	<1	12, 50/2"			REFUSAL ON WEATHERED SHALE. SAMPLE IS GRAVELLY (SHALE) CLAY, WET, OVER DRY SHALE BEDROCK. T.D. AT 15.5 FEET. GROUNDWATER AT 10 FEET 2-16-88
20						
25						
30						
35						
40						
45						
50						

Alvin K... R.A. 4347

*BLOWS PER HALF FOOT

RESA

DEPTH (FEET)	SAMP INT	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
5	X	130	7, 12, 19			GREEN AND GRAY CLAY WITH GRAVEL (SANDSTONE) AT TOP, VERY MOIST, MODERATE HYDROCARBON ODOR.
10	X	120	12, 15, 21		CL	GREEN-BROWN CLAY WITH SOME GRAVELS AND WHITE EVAPORITE DEPOSITS, VERY MOIST, STRONG HYDROCARBON ODOR.
15	X	4	22, 43, 49			GREEN-BROWN WEATHERED SHALE, NO HYDROCARBON ODOR, WET.
20	X		50/6"			GREEN-BROWN SHALE, REFUSAL. T.D. AT 20.5 FEET. GROUNDWATER AT 10 FEET 2-17-88
25						
30						
35						
40						
45						
50						

Diane R. Henry R.G. 4342

*BLOWS PER HALF FOOT

54 Castro Valley CA 2504 Castro Valley Logged By:DD
 Drilling Contractor:BEYLIK DRILLING COMPANY Rig Type:HOLLOW STEM AUGER
 Time Started:1:10 Boring/Well #:RE-6 Elevation:
 Sampling Method:DRIVE Casing Size:4" Screen Type:PVC Filter Pack:#3 SAND

DEPTH FEET)	SAMP INT'	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
5		20	21, 22, 27		CL *	GRAY CLAY WITH WHITE EVAPORITE DEPOSITS, VERY MOIST, NO HYDROCARBON ODOR.
10		50	9, 17, 36			MOTTLED GRAY AND GREEN-BROWN GRAVELLY CLAY WITH EVAPORITE DEPOSITS, MORE GRAVEL AT BASE, VERY MOIST, NO HYDROCARBON ODOR.
15		5	50/3"			SHALE - REFUSAL. T.D. AT 15 FEET. NO GROUNDWATER FOUND DURING DRILLING 2-17-88. *AFTER BUILDING THE WELL AND WAITING SEVERAL HOURS, GROUNDWATER FILLED THE WELL TO 8 FEET.
20						
25						
30						
35						
40						
45						
50						

Drill A Castro Valley 2-17-88

*BLOWS PER HALF FOOT

BECA

THRIFTY OIL COMPANY MONITORING WELL LOG DATE: 2-17-88
 Castro Valley CA 2504 Castro Valley Logged By: DD
 Drilling Contractor: BEYLIK DRILLING COMPANY Rig Type: HOLLOW STEM AUGER
 Time Started: 10:00 Boring/Well #: RE-7 Elevation:
 Sampling Method: DRIVE Casing Size: 4" Screen Type: PVC Filter Pack: #3 SAND

DEPTH (FEET)	SAMP INT	PID ppm	BPF*	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
5	X	110	6, 9, 14			BLACK CLAY OVER GREEN CLAY WITH EVAPORITE DEPOSITS, VERY MOIST, STRONG HYDROCARBON ODOR.
10	X	150	12, 16, 19		CL	GREEN GRAVELLY (SHALE) AND CLAY, WET, STRONG HYDROCARBON ODOR.
15	X	18	43, 65/6"			SHALE - REFUSAL. T.D. AT 15 FEET. GROUNDWATER AT 10 FEET 2-17-88
20						
25						
30						
35						
40						
45						
50						
55						
60						
65						
70						
75						
80						
85						
90						
95						
100						

Signature

DATE OBSERVED: 12-17-86 METHOD OF DRILLING: Hollow Stem Auger

LOGGED BY: SAW GROUND ELEVATION: 180' LOCATION: See Plot Plan Station #054

DEPTH (FEET)	CLASSIFICATION	BLOWS/FOOT	UNDISTURBED SAMPLE	BULK SAMPLE	MOISTURE CONTENT (%)	IN PLACE DRY DENSITY (PCF)	BORING NO. <u>B-1</u>	SOIL TEST
							DESCRIPTION	
0	CL						ARTIFICIAL FILL: Dark gray to brown CLAY, moist, construction debris, brick, asphalt present, petroleum odor noted	Gastechtor Reading
5	CL	13	█				NATURAL GROUND: WEATHERED BEDROCK Gray to gray green, CLAY, moist stiff, petroleum odor noted	>500 ppm
10		25	█				@ 10' petroleum odor noted	>500 ppm
15		54	█				BEDROCK: Greenish brown SHALE, slightly moist, hard	50 ppm
20		44 6"	█					20 ppm
25							TOTAL DEPTH: 20 FEET NO GROUNDWATER	
30								
35								
40								

JOB NO.: 13-6782-002-34-00

LOG OF BORING

FIGURE: B-3

DATE OBSERVED: 12-17-86 METHOD OF DRILLING: Hollow Stem Auger

LOGGED BY: SAW GROUND ELEVATION: 180' LOCATION: See Plot Plan Station #054

DEPTH (FEET)	CLASSIFICATION	BLOWS/FOOT	UNDISTURBED SAMPLE	BULK SAMPLE	MOISTURE CONTENT (%)	IN PLACE DRY DENSITY (PCF)	BORING NO. <u>B-2</u>	SOIL TEST
							DESCRIPTION	
0							<u>NATURAL GROUND: WEATHERED BEDROCK</u>	Gastechtor Reading
5	CL	19	█				Greenish gray CLAY, slightly moist very stiff @ 5' petroleum odor noted	> 500 ppm
10		22	█				@ 10' color change to light brown	70 ppm
15		59	█				<u>BEDROCK:</u> Reddish brown fractured SHALE, dry hard	20 ppm
20							TOTAL DEPTH: 15 FEET NO GROUNDWATER	
25								
30								
35								
40								

JOB NO.: 13-6782-002-34-00

LOG OF BORING

FIGURE: B-4

DATE OBSERVED: 12-17-86 METHOD OF DRILLING: Hollow Stem Auger

LOGGED BY: SAW GROUND ELEVATION: 180' LOCATION: See Plot Plan #054

DEPTH (FEET)	CLASSIFICATION	BLOWS/FOOT	UNDISTURBED SAMPLE	BULK SAMPLE	MOISTURE CONTENT (%)	IN PLACE DRY DENSITY (PCF)	BORING NO. <u>B-3</u>	SOIL TEST
							DESCRIPTION	
0	CL						ARTIFICIAL FILL: Black CLAY, moist, stiff	Gastector Reading
5	CL	19	█				NATURAL GROUND: WEATHERED BEDROCK Green-brown CLAY, slightly moist, very stiff, shale fragments, petroleum odor noted	500 ppm
10		22	█				@ 10' slight petroleum odor noted	95 ppm
15		68	█				BEDROCK Yellowish brown SHALE, dry, hard, fractured	70 ppm
20							TOTAL DEPTH: 15 FEET NO GROUNDWATER	
25								
30								
35								
40								

JOB NO.: 13-6782-002-34-00

LOG OF BORING

FIGURE: B-5

DATE OBSERVED: 12-17-86 METHOD OF DRILLING: Hollow Stem Auger

LOGGED BY: SAW GROUND ELEVATION: 180' LOCATION: See Plot Plan Station #054

BORING NO. B-4

SOIL TEST

DESCRIPTION

DEPTH (FEET)	CLASSIFICATION	BLOWS/FOOT	UNDISTURBED SAMPLE	BULK SAMPLE	MOISTURE CONTENT (%)	IN PLACE DRY DENSITY (PCF)	DESCRIPTION	SOIL TEST
0	CL						ARTIFICIAL FILL:	Gastector Reading
5		16	■				NATURAL GROUND: WEATHERED BEDROCK Gray green CLAY, slightly moist, very stiff, petroleum odor noted	500 ppm
10		15	■				@ 10' slight petroleum odor noted	300 ppm
15		34 4"	■				@ 15' becomes hard, slight petroleum odor	75 ppm
20							TOTAL DEPTH: 15 FEET NO GROUNDWATER	
25								
30								
35								
40								

JOB NO.: 13-6782-002-34-00

LOG OF BORING

FIGURE: B-6

APPENDIX B

Groundwater Remediation System Data

TABLE 2
Vapor Extraction Operating Data
Thrifty Oil Station # 054, CASTRO VALLEY, CA

Month	Representative Date	Hour Meter Reading (hrs)	Operation Duration (hrs)	Inlet		Hydrocarbons Removed		Remark
				Average Flow (cfm)	Average FID Conc. (ppmV)	Period (lbs)	Cumulative (lbs)	
Jan-91	1/9/1991	929	0	30	est. 10,000	0.0	0	
Feb-91	2/6/1991	979	50	30	est. 10,000	38.0	38	
Mar-91	3/6/1991	1,028	49	5	est. 10,000	6.2	44	System off 4/91 - 9/91
Oct-91	10/23/1991	1,786	758	15	est. 10,000	288.0	332	
Nov-91	11/6/1991	1,789	3	14	est. 10,000	1.1	333	
Dec-91	12/4/1991	1,896	107	14	est. 10,000	37.9	371	
Jan-92	1/29/1992	2,025	129	14	est. 10,000	45.7	417	
Feb-92	2/26/1999	2,293	268	14	est. 10,000	95.0	512	System off 3/92 - 7/92
Aug-93	8/11/1993	2,293	0	18	est. 10,000	0.0	512	
Sep-93	9/8/1993	2,446	153	17	est. 10,000	65.9	578	
Oct-93	10/7/1993	2,960	514	18	est. 10,000	234.4	812	
Nov-93	11/3/1993	3,381	421	18	est. 10,000	191.9	1,004	
Dec-93	12/1/1993	3,705	324	18	est. 10,000	147.7	1,152	
Jan-94	1/3/1994	4,313	608	18	est. 10,000	277.2	1,429	
Feb-94	2/17/1994	4,849	536	17	10,000	230.8	1,660	
Mar-94	3/7/1994	5,196	347	20	10,000	175.8	1,836	
Apr-94	4/4/1994	5,597	401	16	10,000	162.5	1,998	
May-94	5/2/1994	6,003	406	17	est. 10,000	174.8	2,173	
Jun-94	6/6/1994	6,514	511	16	10,000	207.1	2,380	
Jul-94	7/18/1994	6,679	165	15	10,000	62.7	2,443	
Aug-94	8/1/1994	6,735	56	16	est. 10,000	22.7	2,466	
Sep-94	9/20/1994	7,340	605	16	est. 10,000	245.2	2,711	
Oct-94	10/5/1994	7,554	214	15	est. 10,000	81.3	2,792	
Dec-94	12/13/1994	7,656	102	15	est. 10,000	38.8	2,831	
Jan-95	1/6/1995	7,742	86	12	est. 10,000	26.1	2,857	
Feb-95	2/14/1995	7,906	164	13	est. 10,000	54.0	2,911	
Mar-95	3/2/1995	7,976	70	15	est. 10,000	26.6	2,938	
Apr-95	4/7/1995	8,009	33	8	est. 10,000	6.7	2,944	
May-95	5/5/1995	8,405	396	16	est. 10,000	160.5	3,105	
Jun-95	6/1/1995	8,436	31	16	est. 10,000	12.6	3,117	
Jul-95	7/7/1993	8,834	398	16	est. 10,000	161.3	3,279	
Aug-95	8/3/1995	8,910	76	16	10,000	30.8	3,309	
Sep-95	9/5/1995	9,068	158	16	est. 10,000	64.0	3,373	
Oct-95	10/24/1995	9,163	95	14	10,000	33.7	3,407	
Nov-95	11/2/1995	9,194	31	16	est. 10,000	12.6	3,420	
Jan-96	1/4/1996	8,930	0	9	est. 10,000	0.0	3,420	Replaced hour meter (8930)
Feb-96	2/1/1996	8,991	61	8	est. 10,000	12.4	3,432	System off 2/96 - 4/96
Apr-96	4/25/1996	9,084	93	8	210	0.4	3,432	
May-96	5/2/1996	9,124	40	12	220	0.3	3,433	
Jun-96	6/3/1996	9,279	155	9	1,000	3.5	3,436	
Jul-96	7/2/1996	9,370	91	17	420	1.6	3,438	
Aug-96	8/1/1996	9,391	21	9	340	0.2	3,438	
Sep-96	9/5/1996	9,721	330	17	est. 340	4.8	3,443	
Oct-96	10/24/1996	9,773	52	7	est. 340	0.3	3,443	
Dec-96	12/26/1996	9,776	3	8	est. 340	0.0	3,443	System off 10/96 - 12/96
Apr-97	4/3/1997	9,781	5	15	10,000	1.9	3,445	System off 1/97 - 4/97
May-97	5/1/1997	10,032	251	15	9,800	93.5	3,539	
Jun-97	6/12/1997	10,663	631	11	est. 9,000	158.2	3,697	
Jul-97	7/3/1997	10,712	49	12	est. 9,000	13.4	3,710	
Aug-97	8/7/1997	10,950	238	12	est. 9,000	65.1	3,775	
Sep-97	9/3/1997	11,136	186	16	est. 9,000	67.8	3,843	
Oct-97	10/9/1997	11,320	184	12	est. 9,000	50.3	3,893	
Nov-97	11/6/1997	11,452	132	17	est. 9,000	51.2	3,945	
Dec-97	12/4/1997	11,510	58	19	9,000	25.1	3,970	
Jan-98	1/8/1998	11,784	274	17	10,000	118.0	4,088	
Feb-98	2/3/1998	12,180	396	16	10,000	160.5	4,248	
Mar-98	3/10/1998	13,011	831	17	10,000	357.8	4,606	
Apr-98	4/15/1998	13,060	49	17	est. 10,000	21.1	4,627	

TABLE 2
Vapor Extraction Operating Data
Thrifty Oil Station # 054, CASTRO VALLEY, CA

Month	Representative Date	Hour Meter Reading (hrs)	Operation Duration (hrs)	Inlet		Hydrocarbons Removed		Remark
				Average Flow (cfm)	Average FID Conc. (ppmV)	Period (lbs)	Cumulative (lbs)	
May-98	5/7/1998	13,311	251	16	10,000	101.7	4,729	
Jun-98	6/2/1998	13,658	347	17	10,000	149.4	4,878	
Jul-98	7/6/1998	14,340	682	16	est. 10,000	276.4	5,155	
Sep-98	9/21/1998	14,542	202	12	est. 10,000	61.4	5,216	System shut down, 10/98
Nov-98	11/16/1998	14,730	188	12	est. 10,000	57.1	5,273	
Dec-98	12/7/1998	15,124	394	11	est. 10,000	109.8	5,383	
Feb-99	2/9/1999	16,115	991	10	2,800	70.3	5,453	
Mar-99	3/12/1999	16,698	583	13	210	4.0	5,457	
Apr-99	4/6/1999	17,009	311	13	est. 210	2.2	5,459	
May-99	5/3/1999	17,098	89	10	est. 210	0.5	5,460	
Jun-99	6/28/1999	18,130	1,032	10	4,100	107.2	5,567	
Jul-99	7/7/1999	18,163	33	10	est. 4,000	3.3	5,570	
Aug-99	8/2/1999	18,196	33	11	est. 4,000	3.7	5,574	
Sep-99	9/13/1999	18,318	122	12	est. 4,000	14.8	5,589	
Oct-99	10/18/1999	18,348	30	13	est. 4,000	4.0	5,593	
Nov-99	11/29/1999	18,617	269	12	est. 4,000	32.7	5,626	
Dec-99	12/27/1999	19,096	479	12	210	3.1	5,629	
Jan-00	1/24/2000	19,388	292	12	est. 210	1.9	5,631	System shut down, 1/24/00

- Note: 1. The "duration" is derived from subtracting the hour meter from a representative day of the month by the hour meter from a representative day of the previous month. Some months may have more than 30 days.
2. In January 2000, the "hydrocarbons removed" calculations were corrected to reflect the actual calibration gas (methane) of the instrument used. Therefore, the corrected cumulative total value is different than the previous versions of this table.

APPENDIX C

BIOSCREEN Plume Travel Time Output

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence

Version 1.4

TOC 054 MTBE

Data Input Instructions:

115

↑ or

0.02

1. Enter value directly...or
 2. Calculate by filling in grey cells below. (To restore formulas, hit button below). Data used directly in model.
- Variable* 20 Value calculated by model. (Don't enter any data).

1. HYDROGEOLOGY

Seepage Velocity*	Vs	7.4	(ft/yr)
		↑ or	
Hydraulic Conductivity	K	9.3E-05	(cm/sec)
Hydraulic Gradient	i	0.0353	(ft/ft)
Porosity	n	0.46	(-)

2. DISPERSION

Longitudinal Dispersivity*	alpha x	13.6	(ft)
Transverse Dispersivity*	alpha y	1.4	(ft)
Vertical Dispersivity*	alpha z	0.0	(ft)
		↑ or	
Estimated Plume Length	Lp	290	(ft)

3. ADSORPTION

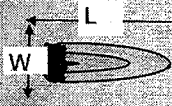
Retardation Factor*	R	1.1	(-)
		↑ or	
Soil Bulk Density	rho	1.7	(kg/l)
Partition Coefficient	Koc	12.59	(L/kg)
Fraction Organic Carbon	foc	2.5E-3	(-)

4. BIODEGRADATION

1st Order Decay Coeff*	lambda	6.9E-2	(per yr)
		↑ or	
Solute Half-Life	t-half	10.00	(year)
or Instantaneous Reaction Model			
Delta Oxygen*	DO	1.65	(mg/L)
Delta Nitrate*	NO3	0.7	(mg/L)
Observed Ferrous Iron*	Fe2+	16.6	(mg/L)
Delta Sulfate*	SO4	22.4	(mg/L)
Observed Methane*	CH4	6.6	(mg/L)

5. GENERAL

Modeled Area Length*	2,640	(ft)
Modeled Area Width*	75	(ft)
Simulation Time*	1	(yr)



6. SOURCE DATA

Source Thickness in Sat.Zone* 20 (ft)

Source Zones:	Width* (ft)	Conc. (mg/L)*
1	11.25	0.25
2	11.25	2.7
3	30	13.8
4	11.25	2.7
5	11.25	0.25

Source Halflife (see Help):

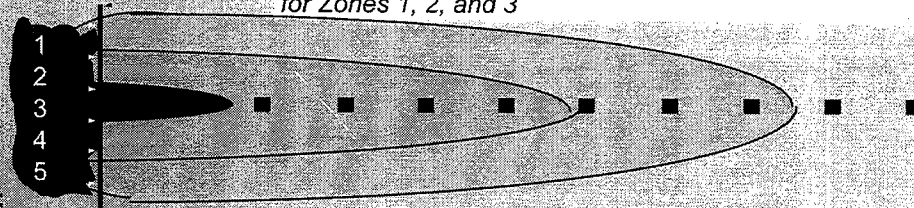
8 20 (yr)

Inst. React. ↑ 1st Order

Soluble Mass 33.00 (Kg)

In Source NAPL, Soil

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3



View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	17.75	4.41	.4	.033							
Dist. from Source (ft)	0	264	528	792	1056	1320	1584	1848	2112	2376	2640

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

RUN ARRAY

View Output

View Output

Help

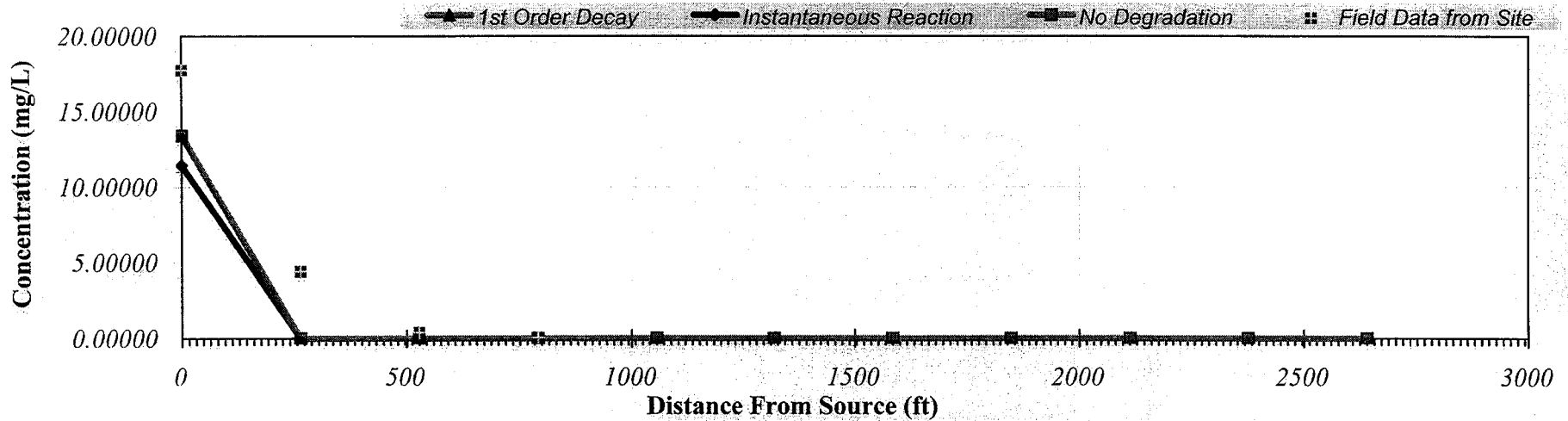
Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	13.419	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1st Order Decay	13.419	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	11.446	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

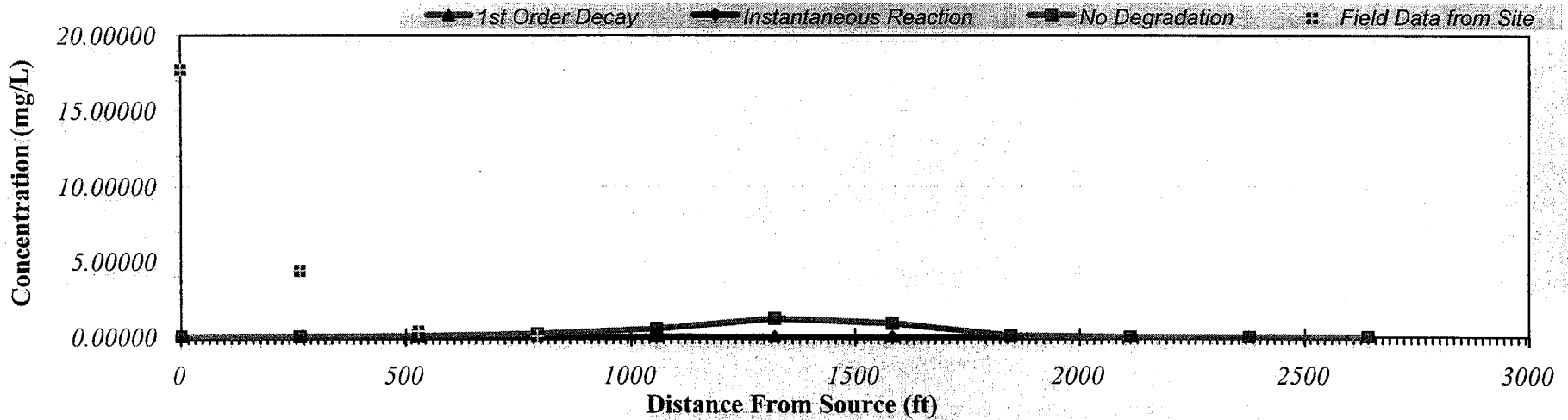
1 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.025	0.037	0.083	0.210	0.550	1.226	0.922	0.101	0.003	0.000	0.000
1st Order Decay	0.025	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

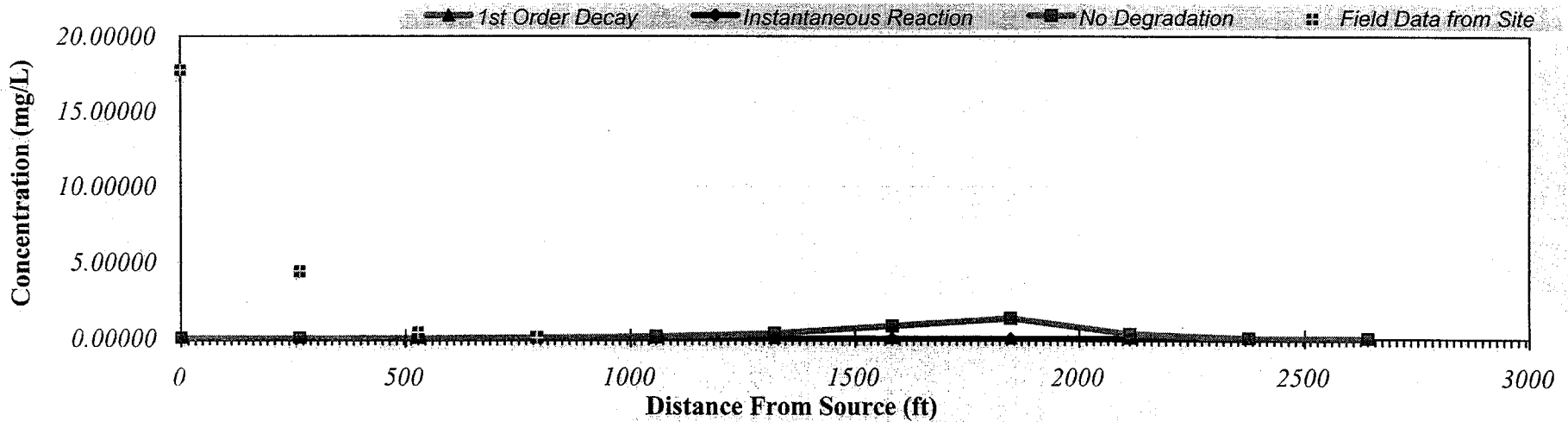
Time:

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.006	0.008	0.018	0.046	0.123	0.335	0.831	1.334	0.298	0.022	0.000
1st Order Decay	0.006	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

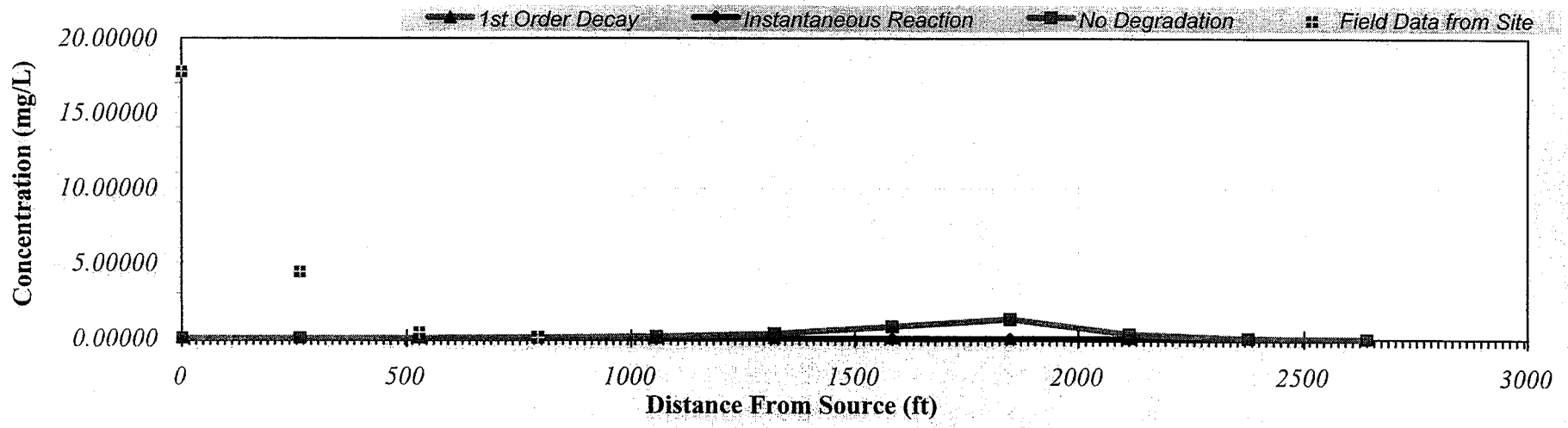
Time:
279 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.005	0.008	0.018	0.045	0.120	0.326	0.813	1.329	0.314	0.024	0.001
1st Order Decay	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

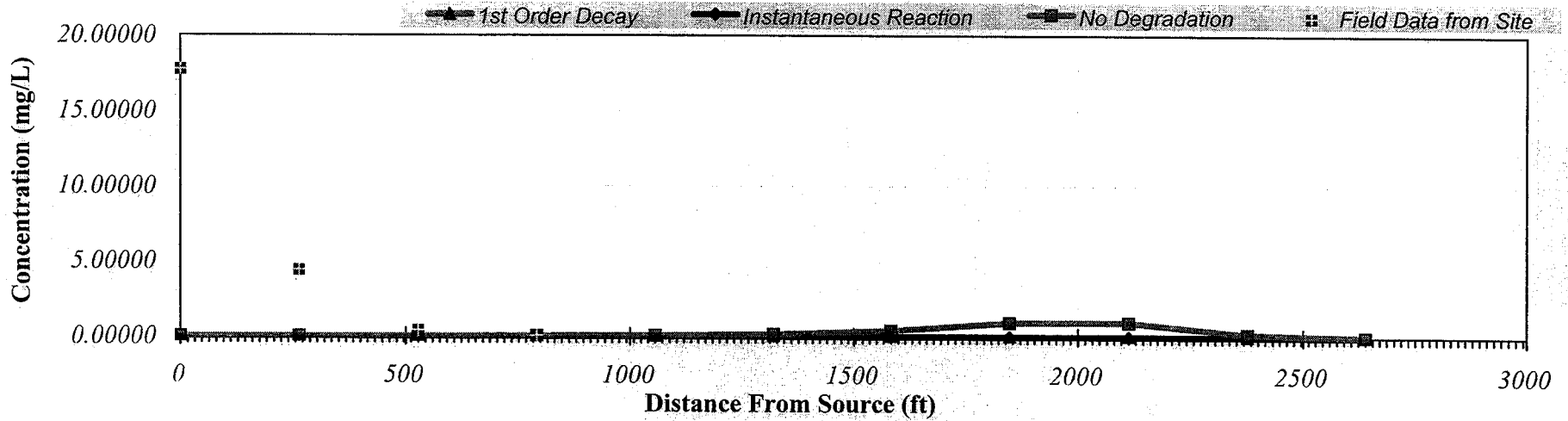
Time:
280 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.002	0.004	0.008	0.021	0.055	0.150	0.408	0.940	0.949	0.181	0.012
1st Order Decay	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

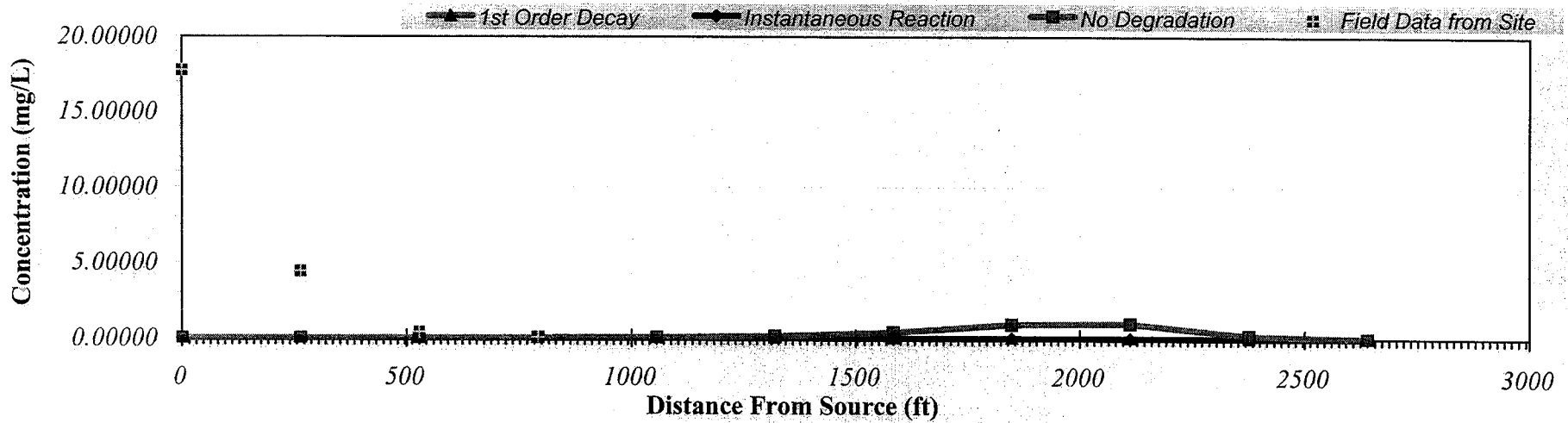
308 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.002	0.004	0.008	0.020	0.053	0.146	0.397	0.923	0.977	0.192	0.013
1st Order Decay	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

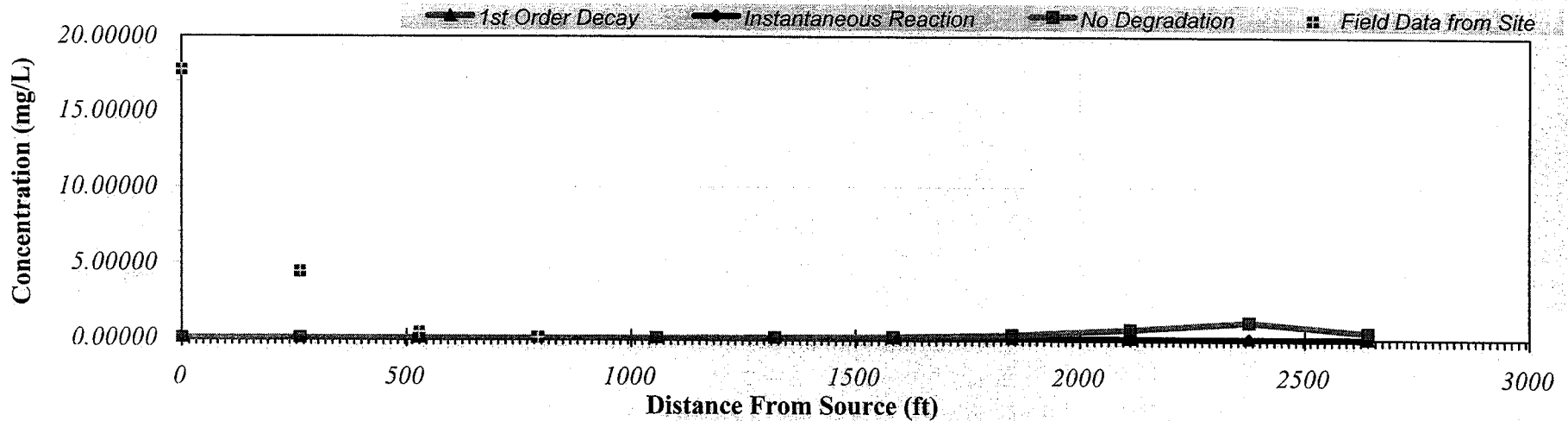
309 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.001	0.001	0.002	0.004	0.011	0.030	0.085	0.238	0.608	1.118	0.432
1st Order Decay	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

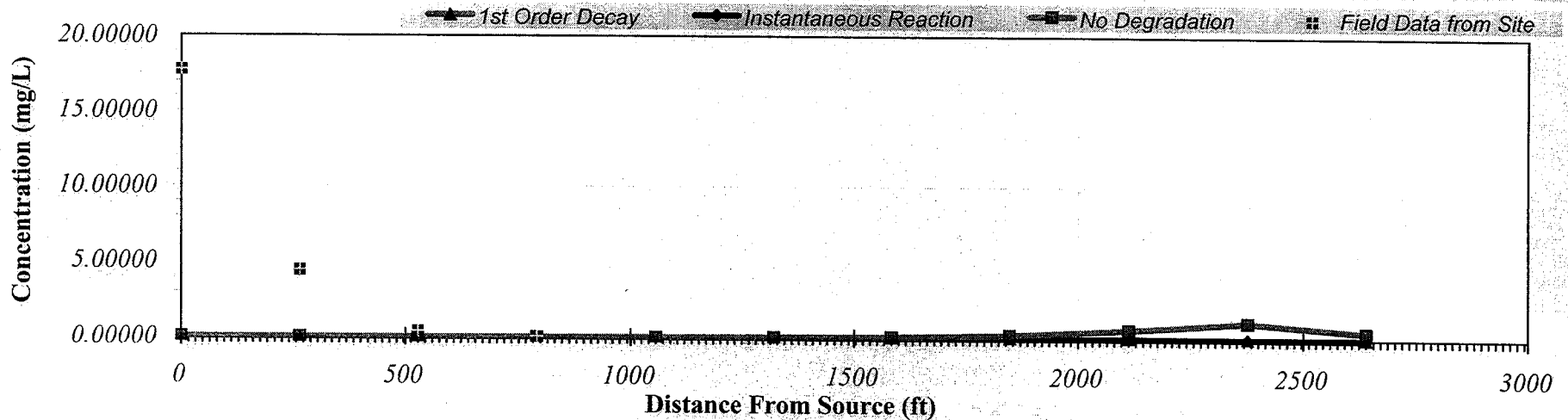
365 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.000	0.001	0.002	0.004	0.011	0.030	0.083	0.231	0.594	1.107	0.448
1st Order Decay	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

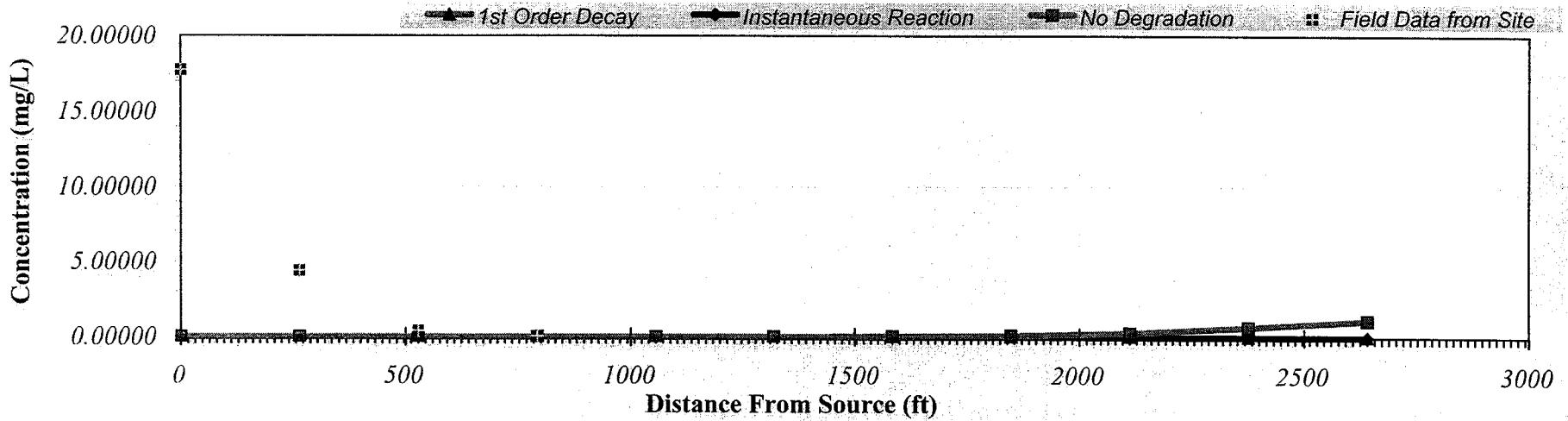
366 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.000	0.000	0.001	0.002	0.004	0.012	0.034	0.095	0.266	0.657	1.107
1st Order Decay	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

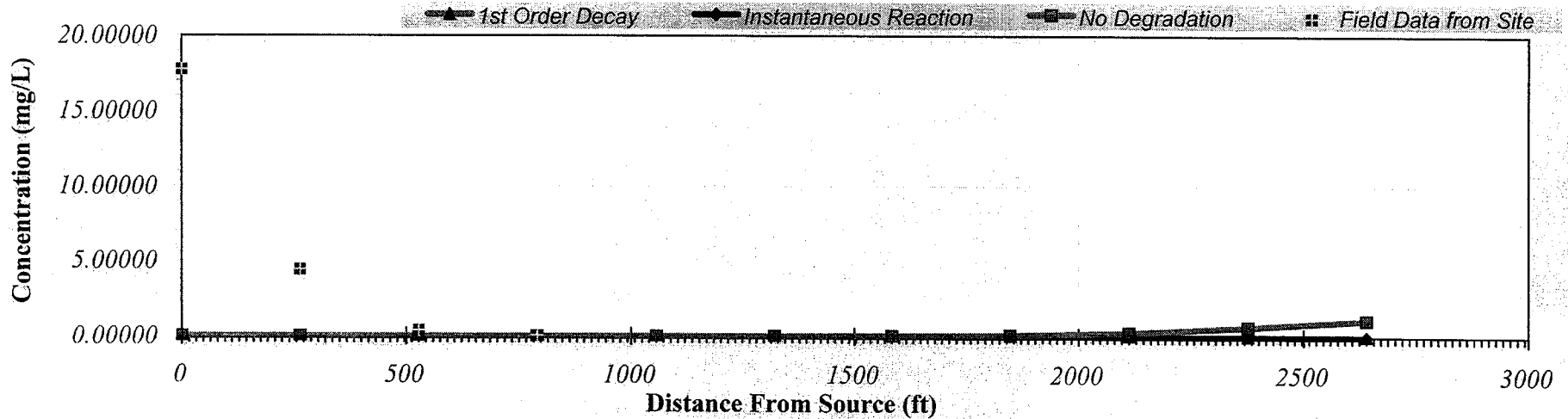
Time: 398 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.000	0.000	0.001	0.002	0.004	0.012	0.033	0.093	0.259	0.643	1.117
1st Order Decay	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

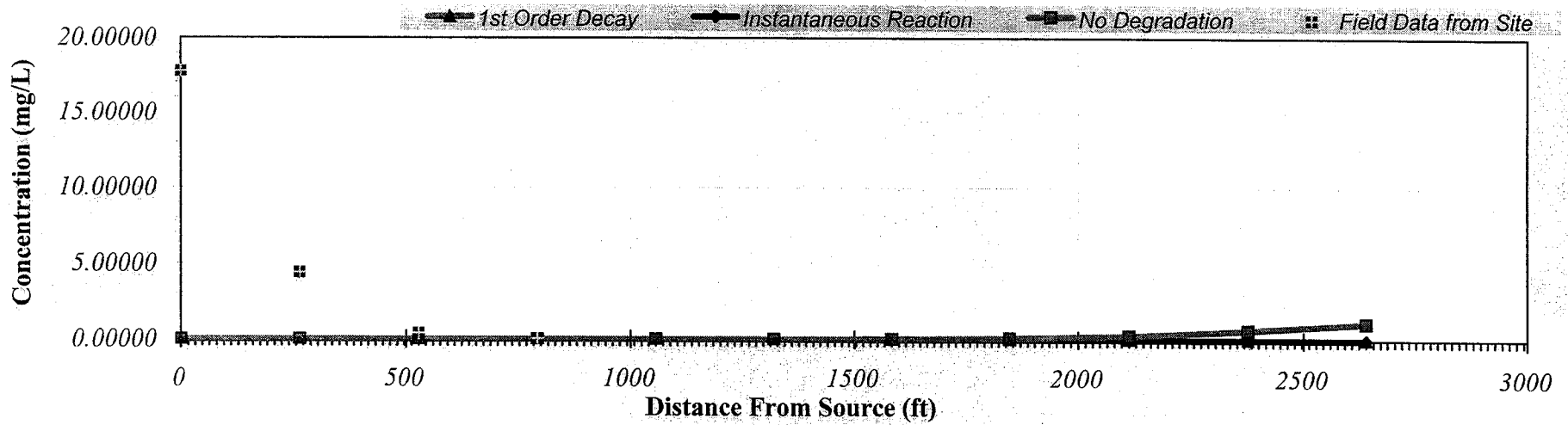
399 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.000	0.000	0.001	0.002	0.004	0.011	0.032	0.090	0.253	0.629	1.108
1st Order Decay	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	17.75000	4.41000	0.40000	0.03300							



Calculate Animation

Time:

Return to Input

Recalculate This Sheet

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence

Version 1.4

TOC 054

Benzene

Run Name

Data Input Instructions:

115

↑ or

0.02

Variable*

20

1. Enter value directly... or
 2. Calculate by filling in grey cells below. (To restore formulas, hit button below). Data used directly in model.
- Value calculated by model. (Don't enter any data).

1. HYDROGEOLOGY

Seepage Velocity*	Vs	7.4	(ft/yr)
or		↑ or	
Hydraulic Conductivity	K	9.3E-05	(cm/sec)
Hydraulic Gradient	i	0.0353	(ft/ft)
Porosity	n	0.46	(-)

2. DISPERSION

Longitudinal Dispersivity*	alpha x	6.3	(ft)
Transverse Dispersivity*	alpha y	0.6	(ft)
Vertical Dispersivity*	alpha z	0.0	(ft)
or		↑ or	
Estimated Plume Length	Lp	85	(ft)

3. ADSORPTION

Retardation Factor*	R	1.4	(-)
or		↑ or	
Soil Bulk Density	rho	1.7	(kg/l)
Partition Coefficient	Koc	38	(L/kg)
Fraction Organic Carbon	foc	2.5E-3	(-)

4. BIODEGRADATION

1st Order Decay Coeff*	lambda	6.9E-1	(per yr)
or		↑ or	
Solute Half-Life	t-half	1.00	(year)
or Instantaneous Reaction Model			
Delta Oxygen*	DO	5.8	(mg/L)
Delta Nitrate*	NO3	6.3	(mg/L)
Observed Ferrous Iron*	Fe2+	16.6	(mg/L)
Delta Sulfate*	SO4	24.6	(mg/L)
Observed Methane*	CH4	7.2	(mg/L)

5. GENERAL

Modeled Area Length*	2640	(ft)
Modeled Area Width*	40	(ft)
Simulation Time*	1	(yr)

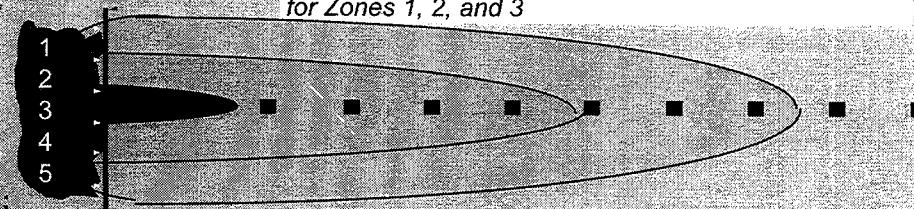


6. SOURCE DATA

Source Thickness in Sat. Zone* 20 (ft)

Source Zones:

Width* (ft)	Conc. (mg/L)*
3.75	0.004
3.75	0.013
25	0.122
3.75	0.013
3.75	0.004



Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

Source Halflife (see Help):

9 >1000 (yr)

Inst. React. ↑ 1st Order

Soluble Mass 18.04 (Kg)

In Source NAPL Soil

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	.143	.016											
Dist. from Source (ft)	0	264	528	792	1056	1320	1584	1848	2112	2376	2640		

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

RUN ARRAY

Help

Recalculate This Sheet

View Output

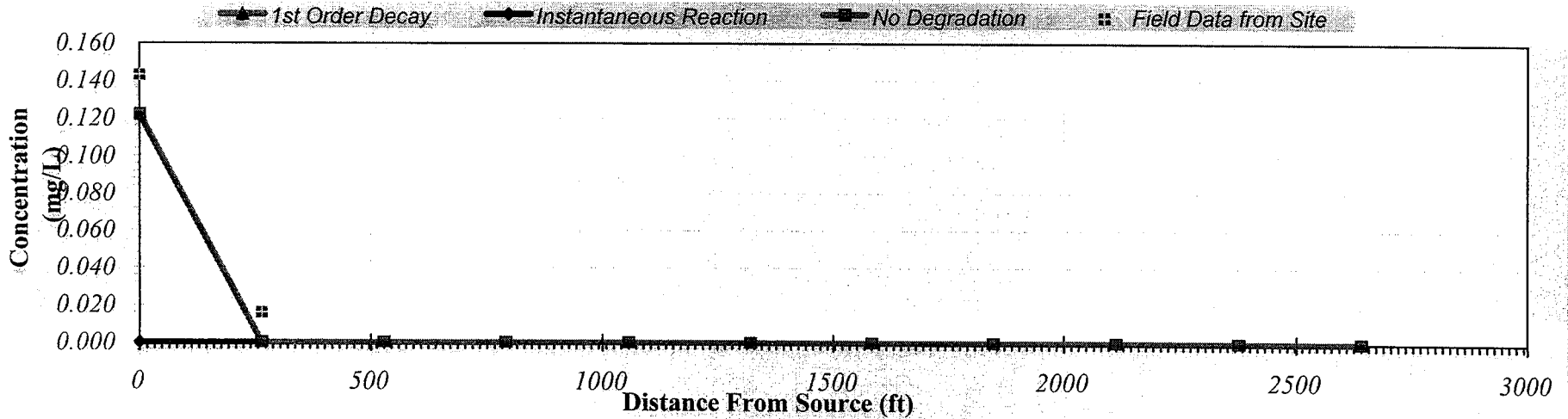
View Output

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1st Order Decay	0.122	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

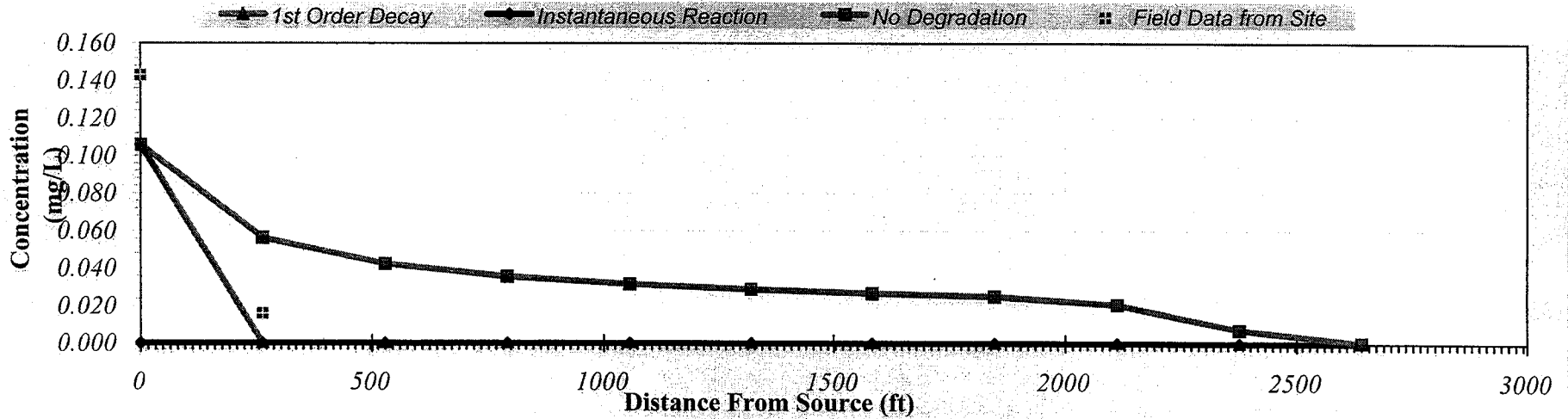
1 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.106	0.056	0.042	0.036	0.032	0.029	0.027	0.025	0.021	0.007	0.000
1st Order Decay	0.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

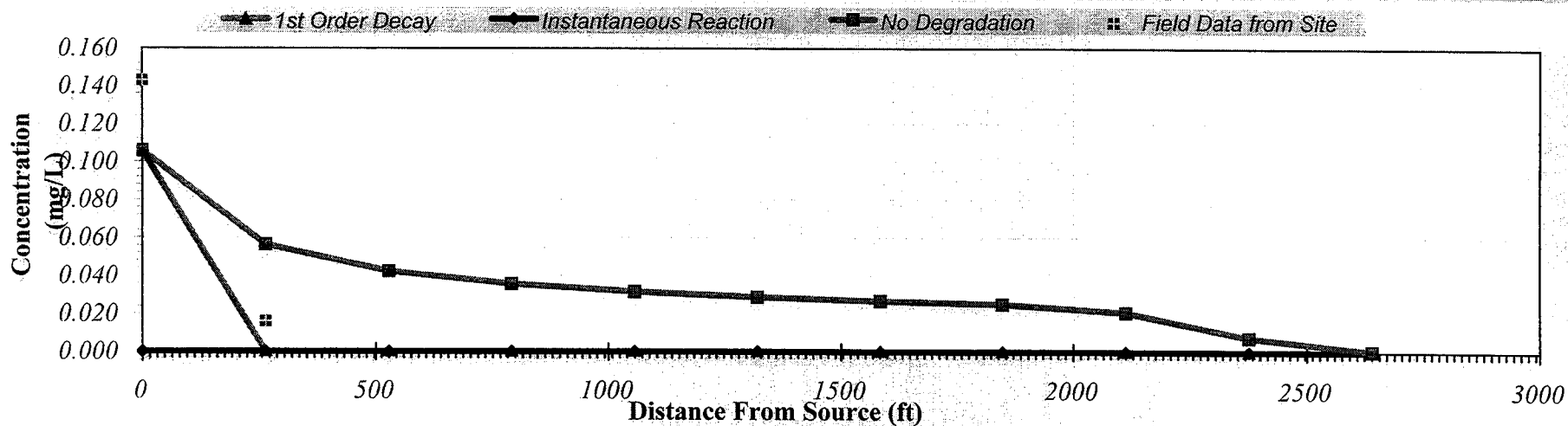
420 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.106	0.056	0.042	0.036	0.032	0.029	0.027	0.025	0.021	0.008	0.001
1st Order Decay	0.106	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

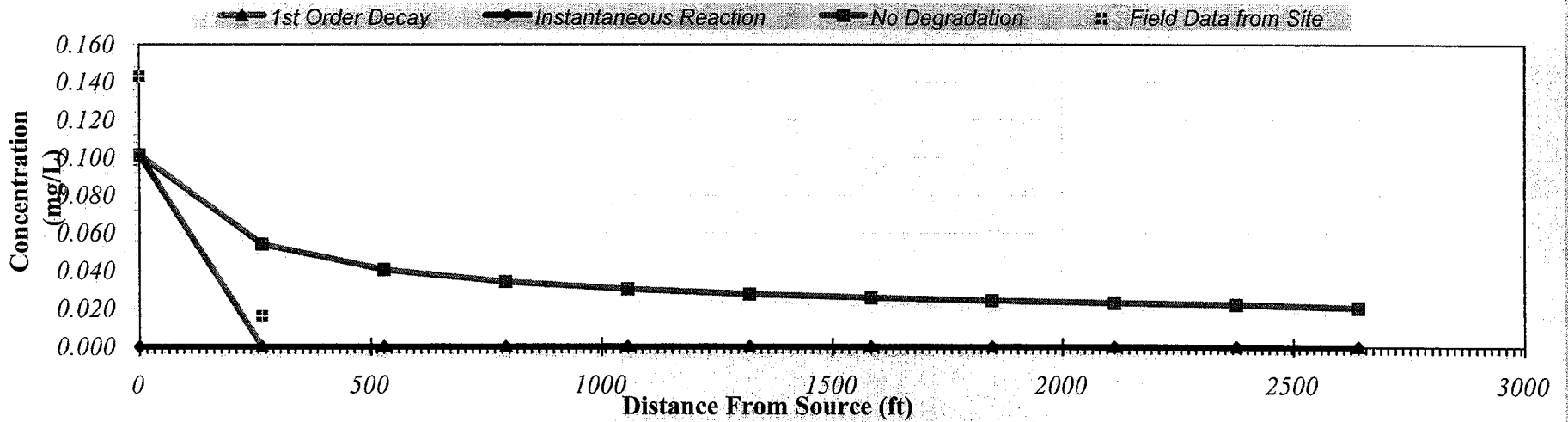
421 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.101	0.054	0.040	0.034	0.030	0.028	0.026	0.024	0.023	0.022	0.020
1st Order Decay	0.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

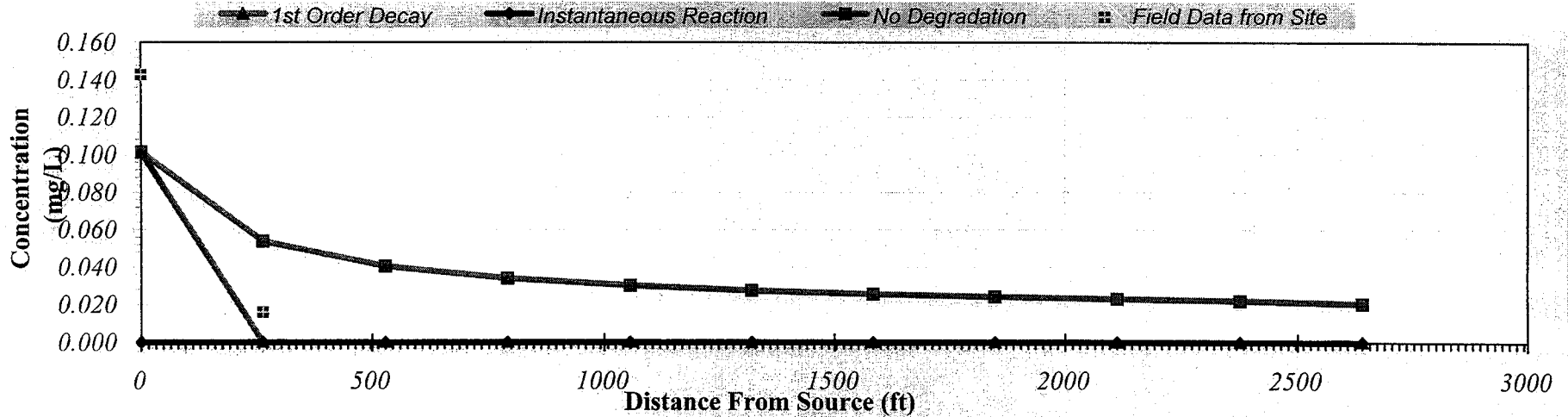
544 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.101	0.054	0.040	0.034	0.030	0.028	0.026	0.024	0.023	0.022	0.021
1st Order Decay	0.101	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

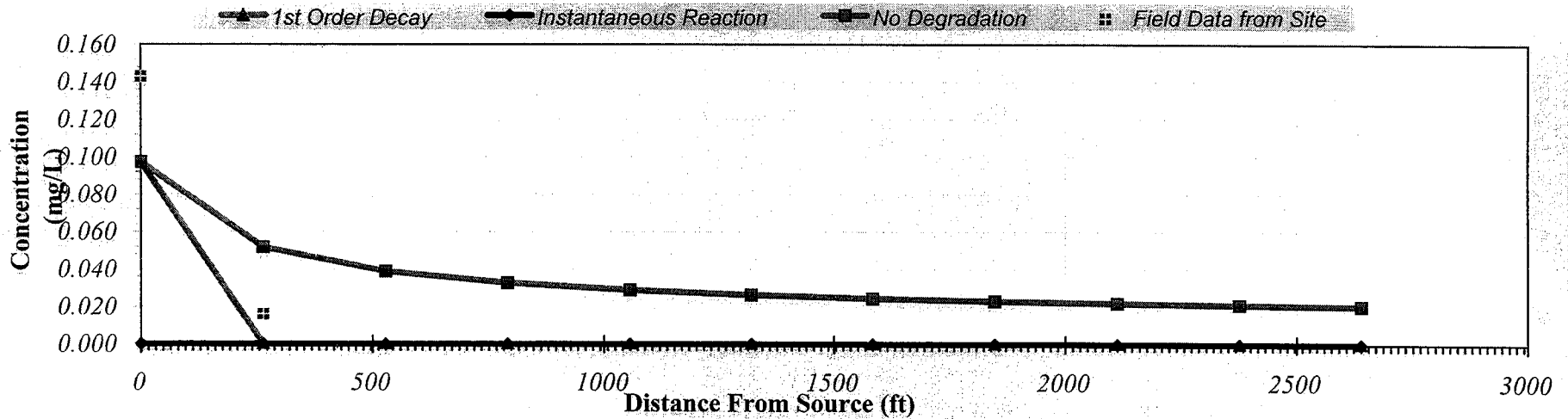
545 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.097	0.052	0.039	0.033	0.029	0.026	0.025	0.023	0.022	0.021	0.021
1st Order Decay	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time:

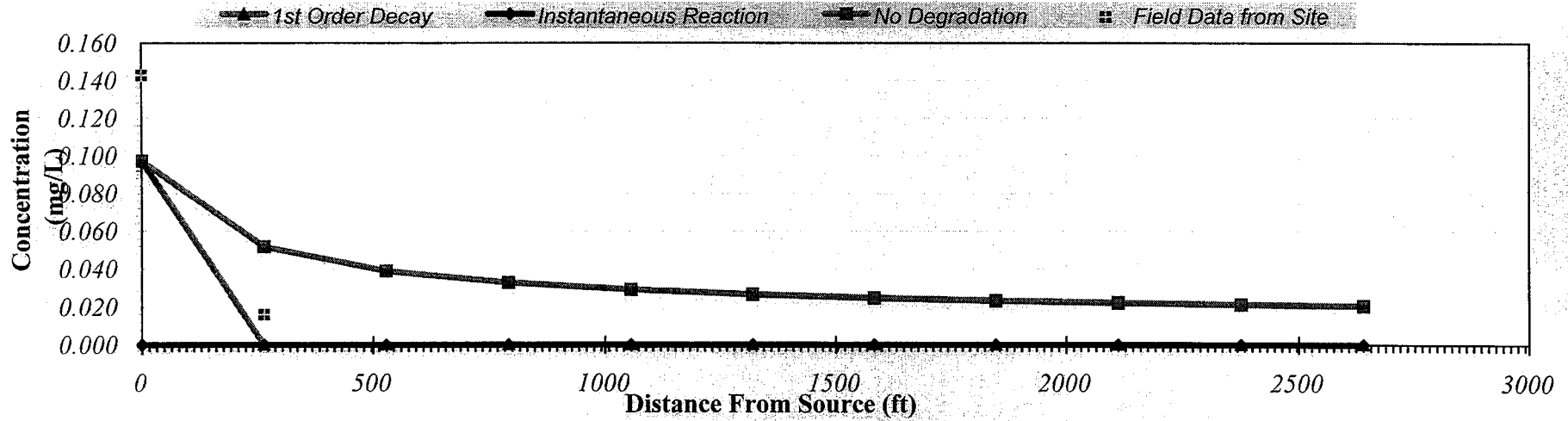
667 Years

Return to Input

Recalculate This Sheet

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	264	528	792	1056	1320	1584	1848	2112	2376	2640
No Degradation	0.097	0.052	0.039	0.033	0.029	0.026	0.025	0.023	0.022	0.021	0.020
1st Order Decay	0.097	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Field Data from Site	0.143	0.016									



Calculate Animation

Time: 668 Years

Return to Input

Recalculate This Sheet

APPENDIX D

ESLs for Soil and BPOs for Groundwater

TABLE A. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Shallow Soils (<=3m bgs)
Groundwater IS Current or Potential Source of Drinking Water

CHEMICAL PARAMETER	¹ Shallow Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
ACENAPHTHENE	1.6E+01	1.6E+01	2.0E+01
ACENAPHTHYLENE	1.3E+01	1.3E+01	3.0E+01
ACETONE	5.0E-01	5.0E-01	1.5E+03
ALDRIN	3.2E-02	1.3E-01	2.0E-03
ANTHRACENE	2.8E+00	2.8E+00	7.3E-01
ANTIMONY	6.1E+00	4.0E+01	6.0E+00
ARSENIC	5.5E+00	5.5E+00	3.6E+01
BARIUM	7.5E+02	1.5E+03	1.0E+03
BENZENE	4.4E-02	4.4E-02	1.0E+00
BENZO(a)ANTHRACENE	3.8E-01	1.3E+00	2.7E-02
BENZO(b)FLUORANTHENE	3.8E-01	1.3E+00	2.9E-02
BENZO(k)FLUORANTHENE	3.8E-01	1.3E+00	2.9E-02
BENZO(g,h,i)PERYLENE	2.7E+01	2.7E+01	1.0E-01
BENZO(a)PYRENE	3.8E-02	1.3E-01	1.4E-02
BERYLLIUM	4.0E+00	8.0E+00	2.7E+00
BIPHENYL, 1,1-	6.5E-01	6.5E-01	5.0E-01
BIS(2-CHLOROETHYL)ETHER	1.8E-04	1.8E-04	1.4E-02
BIS(2-CHLOROISOPROPYL)ETHER	5.4E-03	5.4E-03	5.0E-01
BIS(2-ETHYLHEXYL)PHTHALATE	6.6E+01	6.6E+01	4.0E+00
BORON	1.6E+00	2.0E+00	1.6E+00
BROMODICHLOROMETHANE	1.4E-02	3.9E-02	1.0E+02
BROMOFORM	2.2E+00	2.2E+00	1.0E+02
BROMOMETHANE	2.2E-01	3.9E-01	9.8E+00
CADMIUM	1.7E+00	7.4E+00	1.1E+00
CARBON TETRACHLORIDE	1.2E-02	3.4E-02	5.0E-01
CHLORDANE	4.4E-01	1.7E+00	4.0E-03
CHLOROANILINE, p-	5.3E-02	5.3E-02	5.0E+00
CHLOROBENZENE	1.5E+00	1.5E+00	2.5E+01
CHLOROETHANE	6.3E-01	8.5E-01	1.2E+01
CHLOROFORM	8.8E-01	1.9E+00	7.0E+01
CHLOROMETHANE	7.0E-02	2.0E-01	1.3E+00
CHLOROPHENOL, 2-	1.2E-02	1.2E-02	1.8E-01
CHROMIUM (Total)	5.8E+01	5.8E+01	5.0E+01
CHROMIUM III	7.5E+02	7.5E+02	1.8E+02
CHROMIUM VI	1.8E+00	1.8E+00	1.1E+01
CHRYSENE	3.8E+00	1.3E+01	2.9E-01
COBALT	1.0E+01	1.0E+01	3.0E+00
COPPER	2.3E+02	2.3E+02	3.1E+00
CYANIDE (Free)	3.6E-03	3.6E-03	1.0E+00
DIBENZO(a,h)ANTHTRACENE	1.1E-01	3.8E-01	8.5E-03
DIBROMOCHLOROMETHANE	1.9E-02	5.4E-02	1.0E+02
1,2-DIBROMO-3-CHLOROPROPANE	4.5E-03	4.5E-03	2.0E-01
DIBROMOETHANE, 1,2-	3.3E-04	3.3E-04	5.0E-02
DICHLOROBENZENE, 1,2-	1.1E+00	1.1E+00	1.0E+01

**TABLE A. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Shallow Soils (<3m bgs)
Groundwater IS Current or Potential Source of Drinking Water**

CHEMICAL PARAMETER	¹ Shallow Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
DICHLOROBENZENE, 1,3-	7.4E+00	7.4E+00	6.5E+01
DICHLOROBENZENE, 1,4-	4.6E-02	1.3E-01	5.0E+00
DICHLOROBENZIDINE, 3,3-	7.7E-03	7.7E-03	2.9E-02
DICHLORODIPHENYLDICHLOROETHANE (DDD)	2.3E+00	9.0E+00	1.0E-03
DICHLORODIPHENYLDICHLOROETHYLENE (DDE)	1.6E+00	4.0E+00	1.0E-03
DICHLORODIPHENYLTRICHLOROETHANE (DDT)	1.6E+00	4.0E+00	1.0E-03
DICHLOROETHANE, 1,1-	2.0E-01	2.0E-01	5.0E+00
DICHLOROETHANE, 1,2-	4.5E-03	4.5E-03	5.0E-01
DICHLOROETHYLENE, 1,1-	1.0E+00	1.0E+00	6.0E+00
DICHLOROETHYLENE, Cis 1,2-	1.9E-01	1.9E-01	6.0E+00
DICHLOROETHYLENE, Trans 1,2-	6.7E-01	6.7E-01	1.0E+01
DICHLOROPHENOL, 2,4-	3.0E-01	3.0E-01	3.0E-01
DICHLOROPROPANE, 1,2-	5.1E-02	1.2E-01	5.0E+00
DICHLOROPROPENE, 1,3-	3.3E-02	5.9E-02	5.0E-01
DIELDRIN	2.3E-03	2.3E-03	1.9E-03
DIETHYLPHTHALATE	3.5E-02	3.5E-02	1.5E+00
DIMETHYLPHTHALATE	3.5E-02	3.5E-02	1.5E+00
DIMETHYLPHENOL, 2,4-	6.7E-01	6.7E-01	1.0E+02
DINITROPHENOL, 2,4-	4.0E-02	4.0E-02	1.4E+01
DINITROTOLUENE, 2,4-	8.5E-04	8.5E-04	1.1E-01
1,4 DIOXANE	1.8E-03	1.8E-03	3.0E+00
DIOXIN (2,3,7,8-TCDD)	4.6E-06	1.9E-05	5.0E-06
ENDOSULFAN	4.6E-03	4.6E-03	8.7E-03
ENDRIN	6.5E-04	6.5E-04	2.3E-03
ETHANOL	4.5E+01	4.5E+01	5.0E+04
ETHYLBENZENE	3.3E+00	3.3E+00	3.0E+01
FLUORANTHENE	4.0E+01	4.0E+01	8.0E+00
FLUORENE	8.9E+00	8.9E+00	3.9E+00
HEPTACHLOR	1.4E-02	1.4E-02	3.8E-03
HEPTACHLOR EPOXIDE	1.5E-02	1.5E-02	3.8E-03
HEXACHLOROBENZENE	2.7E-01	9.6E-01	1.0E+00
HEXACHLOROBUTADIENE	1.0E+00	1.0E+00	2.1E-01
HEXACHLOROCYCLOHEXANE (gamma) LINDANE	4.9E-02	4.9E-02	8.0E-02
HEXACHLOROETHANE	2.4E+00	2.4E+00	7.0E-01
INDENO(1,2,3-cd)PYRENE	3.8E-01	1.3E+00	2.9E-02
LEAD	1.5E+02	7.5E+02	2.5E+00
MERCURY	3.7E+00	1.0E+01	1.2E-02
METHOXYCHLOR	1.9E+01	1.9E+01	1.9E-02
METHYLENE CHLORIDE	7.7E-02	7.7E-02	5.0E+00
METHYL ETHYL KETONE	3.9E+00	3.9E+00	4.2E+03
METHYL ISOBUTYL KETONE	2.8E+00	2.8E+00	1.2E+02
METHYL MERCURY	1.2E+00	1.0E+01	3.0E-03
METHYLNAPHTHALENE (total 1- & 2-)	2.5E-01	2.5E-01	2.1E+00
METHYL TERT BUTYL ETHER	2.3E-02	2.3E-02	5.0E+00

**TABLE A. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Shallow Soils (≤ 3 m bgs)
Groundwater IS Current or Potential Source of Drinking Water**

CHEMICAL PARAMETER	¹ Shallow Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
MOLYBDENUM	4.0E+01	4.0E+01	3.5E+01
NAPHTHALENE	4.6E-01	1.5E+00	1.7E+01
NICKEL	1.5E+02	1.5E+02	8.2E+00
PENTACHLOROPHENOL	4.4E+00	5.0E+00	1.0E+00
PERCHLORATE	1.0E-02	1.0E-02	6.0E+00
PHENANTHRENE	1.1E+01	1.1E+01	4.6E+00
PHENOL	7.6E-02	7.6E-02	5.0E+00
POLYCHLORINATED BIPHENYLS (PCBs)	2.2E-01	7.4E-01	1.4E-02
PYRENE	8.5E+01	8.5E+01	2.0E+00
SELENIUM	1.0E+01	1.0E+01	5.0E+00
SILVER	2.0E+01	4.0E+01	1.9E-01
STYRENE	1.5E+00	1.5E+00	1.0E+01
tert-BUTYL ALCOHOL	7.3E-02	7.3E-02	1.2E+01
TETRACHLOROETHANE, 1,1,1,2-	2.4E-02	2.4E-02	1.3E+00
TETRACHLOROETHANE, 1,1,2,2-	9.1E-03	1.8E-02	1.0E+00
TETRACHLOROETHYLENE	8.7E-02	2.4E-01	5.0E+00
THALLIUM	1.0E+00	1.3E+01	2.0E+00
TOLUENE	2.9E+00	2.9E+00	4.0E+01
TOXAPHENE	4.2E-04	4.2E-04	2.0E-04
TPH (gasolines)	1.0E+02	1.0E+02	1.0E+02
TPH (middle distillates)	1.0E+02	1.0E+02	1.0E+02
TPH (residual fuels)	5.0E+02	1.0E+03	1.0E+02
TRICHLOROBENZENE, 1,2,4-	3.8E-01	1.0E+00	2.5E+01
TRICHLOROETHANE, 1,1,1,-	7.8E+00	7.8E+00	6.2E+01
TRICHLOROETHANE, 1,1,2,-	3.2E-02	7.0E-02	5.0E+00
TRICHLOROETHYLENE	2.6E-01	4.6E-01	5.0E+00
TRICHLOROPHENOL, 2,4,5-	1.8E-01	1.8E-01	1.1E+01
TRICHLOROPHENOL, 2,4,6-	1.7E-01	1.7E-01	5.0E-01
VANADIUM	1.1E+02	2.0E+02	1.5E+01
VINYL CHLORIDE	6.7E-03	1.9E-02	5.0E-01
XYLENES	2.3E+00	2.3E+00	2.0E+01
ZINC	6.0E+02	6.0E+02	8.1E+01

**TABLE A. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Shallow Soils (≤3m bgs)
Groundwater IS Current or Potential Source of Drinking Water**

CHEMICAL PARAMETER	¹ Shallow Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
Electrical Conductivity (mS/cm, USEPA Method 120.1 MOD)	2.0	4.0	not applicable
Sodium Adsorption Ratio	5.0	12	not applicable

Red: Updated with respect to ESLs presented in July 2003 document.

Notes:

1. Shallow soils defined as soils less than or equal to 3 meters (approximately 10 feet) below ground surface.
 2. Category "Residential Land Use" generally considered adequate for other sensitive uses (e.g., day-care centers, hospitals, etc.)
 3. Assumes potential discharge of groundwater into a freshwater, marine or estuary surface water system.
- Source of soil ESLs: Refer to Appendix 1, Tables A-1 and A-2.
Source of groundwater ESLs: Refer to Appendix 1, Table F-1a.
Soil data should be reported on dry-weight basis (see Appendix 1, Section 6.2).
Soil ESLs intended to address direct-exposure, groundwater protection, ecologic (urban areas) and nuisance concerns under noted land-use scenarios. Soil gas data should be collected for additional evaluation of potential indoor-air impacts at sites with significant areas of VOC-impacted soil. See Section 2.6 and Table E.
Groundwater ESLs intended to be address drinking water, surface water, indoor-air and nuisance concerns. Use in conjunction with soil gas screening levels to more closely evaluate potential impacts to indoor-air if groundwater screening levels for this concern approached or exceeded (refer to Section 2.6 and Appendix 1, Table F-1a).
Aquatic habitat goals for bioaccumulation concerns not considered in selection of groundwater goals (refer to Section 2.7).
Refer to appendices for summary of ESL components.
Soil and water ESLs for ethanol based on gross contamination concerns (see Appendix 1, Chapter 5 and related tables).
TPH -Total Petroleum Hydrocarbons. TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g., BTEX, PAHs, oxidizers, etc.). See Volume 1, Section 2.2 and Appendix 1, Chapter 5.

TABLE C. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

CHEMICAL PARAMETER	¹ Deep Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
ACENAPHTHENE	1.6E+01	1.6E+01	2.0E+01
ACENAPHTHYLENE	1.3E+01	1.3E+01	3.0E+01
ACETONE	5.0E-01	5.0E-01	1.5E+03
ALDRIN	1.5E+00	1.5E+00	2.0E-03
ANTHRACENE	2.8E+00	2.8E+00	7.3E-01
ANTIMONY	2.8E+02	2.8E+02	6.0E+00
ARSENIC	5.5E+00	5.5E+00	3.6E+01
BARIUM	2.5E+03	2.5E+03	1.0E+03
BENZENE	4.4E-02	4.4E-02	1.0E+00
BENZO(a)ANTHRACENE	1.2E+01	1.2E+01	2.7E-02
BENZO(b)FLUORANTHENE	1.5E+01	1.5E+01	2.9E-02
BENZO(k)FLUORANTHENE	2.7E+00	2.7E+00	2.9E-02
BENZO(g,h,i)PERYLENE	2.7E+01	2.7E+01	1.0E-01
BENZO(a)PYRENE	1.5E+00	1.5E+00	1.4E-02
BERYLLIUM	3.6E+01	3.6E+01	2.7E+00
BIPHENYL, 1,1-	6.5E-01	6.5E-01	5.0E-01
BIS(2-CHLOROETHYL)ETHER	1.8E-04	1.8E-04	1.4E-02
BIS(2-CHLOROISOPROPYL)ETHER	5.4E-03	5.4E-03	5.0E-01
BIS(2-ETHYLHEXYL)PHTHALATE	6.6E+01	6.6E+01	4.0E+00
BORON	4.6E+04	4.6E+04	1.6E+00
BROMDICHLOROMETHANE	1.4E-02	3.9E-02	1.0E+02
BROMOFORM	2.2E+00	2.2E+00	1.0E+02
BROMOMETHANE	2.2E-01	3.9E-01	9.8E+00
CADMIUM	3.8E+01	3.8E+01	1.1E+00
CARBON TETRACHLORIDE	1.2E-02	3.4E-02	5.0E-01
CHLORDANE	1.5E+01	1.5E+01	4.0E-03
CHLOROANILINE, p-	5.3E-02	5.3E-02	5.0E+00
CHLOROBENZENE	1.5E+00	1.5E+00	2.5E+01
CHLOROETHANE	6.3E-01	8.5E-01	1.2E+01
CHLOROFORM	2.1E+00	2.1E+00	7.0E+01
CHLOROMETHANE	7.0E-02	2.0E-01	1.3E+00
CHLOROPHENOL, 2-	1.2E-02	1.2E-02	1.8E-01
CHROMIUM (Total)	5.8E+01	5.8E+01	5.0E+01
CHROMIUM III	2.5E+03	5.0E+03	1.8E+02
CHROMIUM VI	1.8E+00	1.8E+00	1.1E+01
CHRYSENE	1.9E+01	1.9E+01	2.9E-01
COBALT	1.0E+01	1.0E+01	3.0E+00
COPPER	2.5E+03	5.0E+03	3.1E+00
CYANIDE (Free)	3.6E-03	3.6E-03	1.0E+00
DIBENZO(a,h)ANTHTRACENE	4.3E+00	4.3E+00	8.5E-03
DIBROMOCHLOROMETHANE	1.9E-02	5.4E-02	1.0E+02
1,2-DIBROMO-3-CHLOROPROPANE	4.5E-03	4.5E-03	2.0E-01
DIBROMOETHANE, 1,2-	3.3E-04	3.3E-04	5.0E-02
DICHLOROBENZENE, 1,2-	1.1E+00	1.1E+00	1.0E+01

TABLE C. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

CHEMICAL PARAMETER	¹ Deep Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
DICHLOROBENZENE, 1,3-	7.4E+00	7.4E+00	6.5E+01
DICHLOROBENZENE, 1,4-	4.6E-02	1.3E-01	5.0E+00
DICHLOROBENZIDINE, 3,3-	7.7E-03	7.7E-03	2.9E-02
DICHLORODIPHENYLDICHLOROETHANE (DDD)	1.1E+02	1.1E+02	1.0E-03
DICHLORODIPHENYLDICHLOROETHYLENE (DDE)	7.6E+01	7.6E+01	1.0E-03
DICHLORODIPHENYLTRICHLOROETHANE (DDT)	4.3E+00	4.3E+00	1.0E-03
DICHLOROETHANE, 1,1-	2.0E-01	2.0E-01	5.0E+00
DICHLOROETHANE, 1,2-	4.5E-03	4.5E-03	5.0E-01
DICHLOROETHYLENE, 1,1-	1.0E+00	1.0E+00	6.0E+00
DICHLOROETHYLENE, Cis 1,2-	1.9E-01	1.9E-01	6.0E+00
DICHLOROETHYLENE, Trans 1,2-	6.7E-01	6.7E-01	1.0E+01
DICHLOROPHENOL, 2,4-	3.0E-01	3.0E-01	3.0E-01
DICHLOROPROPANE, 1,2-	5.1E-02	1.2E-01	5.0E+00
DICHLOROPROPENE, 1,3-	3.3E-02	5.9E-02	5.0E-01
DIELDRIN	2.3E-03	2.3E-03	1.9E-03
DIETHYLPHTHALATE	3.5E-02	3.5E-02	1.5E+00
DIMETHYLPHTHALATE	3.5E-02	3.5E-02	1.5E+00
DIMETHYLPHENOL, 2,4-	6.7E-01	6.7E-01	1.0E+02
DINITROPHENOL, 2,4-	4.0E-02	4.0E-02	1.4E+01
DINITROTOLUENE, 2,4-	8.5E-04	8.5E-04	1.1E-01
1,4 DIOXANE	1.8E-03	1.8E-03	3.0E+00
DIOXIN (2,3,7,8-TCDD)	2.4E-04	2.4E-04	5.0E-06
ENDOSULFAN	4.6E-03	4.6E-03	8.7E-03
ENDRIN	6.5E-04	6.5E-04	2.3E-03
ETHANOL	4.5E+01	4.5E+01	5.0E+04
ETHYLBENZENE	3.3E+00	3.3E+00	3.0E+01
FLUORANTHENE	6.0E+01	6.0E+01	8.0E+00
FLUORENE	8.9E+00	8.9E+00	3.9E+00
HEPTACHLOR	1.4E-02	1.4E-02	3.8E-03
HEPTACHLOR EPOXIDE	1.5E-02	1.5E-02	3.8E-03
HEXACHLOROBENZENE	1.1E+01	1.1E+01	1.0E+00
HEXACHLOROBUTADIENE	1.0E+00	1.0E+00	2.1E-01
HEXACHLOROCYCLOHEXANE (gamma) LINDANE	4.9E-02	4.9E-02	8.0E-02
HEXACHLOROETHANE	2.4E+00	2.4E+00	7.0E-01
INDENO(1,2,3-cd)PYRENE	7.7E+00	7.7E+00	2.9E-02
LEAD	7.5E+02	7.5E+02	2.5E+00
MERCURY	9.8E+01	9.8E+01	1.2E-02
METHOXYCHLOR	1.9E+01	1.9E+01	1.9E-02
METHYLENE CHLORIDE	7.7E-02	7.7E-02	5.0E+00
METHYL ETHYL KETONE	3.9E+00	3.9E+00	4.2E+03
METHYL ISOBUTYL KETONE	2.8E+00	2.8E+00	1.2E+02
METHYL MERCURY	4.1E+01	4.1E+01	3.0E-03
METHYLNAPHTHALENE (total 1- & 2-)	2.5E-01	2.5E-01	2.1E+00
METHYL TERT BUTYL ETHER	2.3E-02	2.3E-02	5.0E+00

TABLE C. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

CHEMICAL PARAMETER	¹ Deep Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
MOLYBDENUM	2.5E+03	3.6E+03	3.5E+01
NAPHTHALENE	4.6E-01	1.5E+00	1.7E+01
NICKEL	1.0E+03	1.0E+03	8.2E+00
PENTACHLOROPHENOL	5.3E+00	5.3E+00	1.0E+00
PERCHLORATE	1.0E-02	1.0E-02	6.0E+00
PHENANTHRENE	1.1E+01	1.1E+01	4.6E+00
PHENOL	7.6E-02	7.6E-02	5.0E+00
POLYCHLORINATED BIPHENYLS (PCBs)	6.3E+00	6.3E+00	1.4E-02
PYRENE	8.5E+01	8.5E+01	2.0E+00
SELENIUM	2.5E+03	3.4E+03	5.0E+00
SILVER	2.5E+03	3.6E+03	1.9E-01
STYRENE	1.5E+00	1.5E+00	1.0E+01
tert-BUTYL ALCOHOL	7.3E-02	7.3E-02	1.2E+01
TETRACHLOROETHANE, 1,1,1,2-	2.4E-02	2.4E-02	1.3E+00
TETRACHLOROETHANE, 1,1,2,2-	9.1E-03	1.8E-02	1.0E+00
TETRACHLOROETHYLENE	8.7E-02	2.4E-01	5.0E+00
THALLIUM	4.7E+01	4.7E+01	2.0E+00
TOLUENE	2.9E+00	2.9E+00	4.0E+01
TOXAPHENE	4.2E-04	4.2E-04	2.0E-04
TPH (gasolines)	1.0E+02	1.0E+02	1.0E+02
TPH (middle distillates)	1.0E+02	1.0E+02	1.0E+02
TPH (residual fuels)	1.0E+03	1.0E+03	1.0E+02
TRICHLOROBENZENE, 1,2,4-	3.8E-01	1.0E+00	2.5E+01
TRICHLOROETHANE, 1,1,1-	7.8E+00	7.8E+00	6.2E+01
TRICHLOROETHANE, 1,1,2-	3.2E-02	7.0E-02	5.0E+00
TRICHLOROETHYLENE	2.6E-01	4.6E-01	5.0E+00
TRICHLOROPHENOL, 2,4,5-	1.8E-01	1.8E-01	1.1E+01
TRICHLOROPHENOL, 2,4,6-	1.7E-01	1.7E-01	5.0E-01
VANADIUM	2.5E+03	5.0E+03	1.5E+01

TABLE C. ENVIRONMENTAL SCREENING LEVELS (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

CHEMICAL PARAMETER	¹ Deep Soil		³ Groundwater (ug/L)
	² Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
VINYL CHLORIDE	6.7E-03	1.9E-02	5.0E-01
XYLENES	2.3E+00	2.3E+00	2.0E+01
ZINC	2.5E+03	5.0E+03	8.1E+01
Electrical Conductivity (mS/cm, USEPA Method 120.1 MOD)	not applicable	not applicable	not applicable
Sodium Adsorption Ratio	not applicable	not applicable	not applicable

Red: Updated with respect to ESLs presented in July 2003 document.

Notes:

1. Deep soils defined as soils greater than 3 meters (approximately 10 feet) below ground surface.
2. Category "Residential Land Use" generally considered adequate for other sensitive uses (e.g., day-care centers, hospitals, etc.)
3. Assumes potential discharge of groundwater into a freshwater, marine or estuary surface water system.

Source of soil ESLs: Refer to Appendix 1, Tables C-1 and C-2.

Source of groundwater ESLs: Refer to Appendix 1, Table F-1a.

Soil data should be reported on dry-weight basis (see Appendix 1, Section 6.2).

Soil ESLs intended to address human health, groundwater protection and nuisance concerns under a construction/trench worker exposure scenario and noted land-use scenarios. Soil gas data should be collected for additional evaluation of potential indoor-air impacts at sites with significant areas of VOC-impacted soil. See Section 2.6 and Table E.

Groundwater ESLs intended to be address drinking water, surface water, indoor-air and nuisance concerns. Use in conjunction with soil gas screening levels to more closely evaluate potential impacts to indoor-air if groundwater screening levels for this concern approached or exceeded (refer to Section 2.6 and Appendix 1, Table F-1a).

Aquatic habitat goals for bioaccumulation concerns not considered in selection of groundwater goals (refer to Section 2.7).

Refer to appendices for summary of ESL components.

Soil and water ESLs for ethanol based on gross contamination concerns (see Appendix 1, Chapter 5 and related tables).

TPH -Total Petroleum Hydrocarbons. TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g., BTEX, PAHs, oxidizers, etc.). See Volume 1, Section 2.2 and Appendix 1, Chapter 5.

APPENDIX E

Production Well Survey Results

Permit	Tr	Section	Address	Locality	Owner	Update	Xcoord	Ycoord	Matchlevls	Tsraq	Rec_code	Phone	City	Elevation	Totaldept	Waterdept	Diameter	Drilldate	Use
	3S/2W	3A 2	4589 JAMES ST	Castro Valley	H. PERTO	1/18/1985	122065027	37705271	9 3S/2W 3A	4217	0	0	0	CSV	0	48	8	9/17	8 IRR
	3S/2W	3B 1	19661 FOREST AVE	San Leandro	RONALD SILVA	8/21/1984	122069571	37705267	9 3S/2W 3B	4218	0	0	0	SLE	0	50	20	8/77	6 IRR
	3S/2W	3C 1	20450 REDWOOD RD	San Leandro	EXXON OIL	8/21/1984	122074016	37705262	9 3S/2W 3C	4219	0	0	0	SLE	0	50	0	8/77	0 ?
	3S/2W	3F 1	FOREST AVE	San Leandro	MARTINS NURSERY	8/21/1984	122141000	37701450	2 3S/2W 3F	4220	0	0	0	SLE	0	51	0	6/49	8 DOM
	3S/2W	3F 2	20115 FOREST AVE	San Leandro	MARTINS NURSERY	8/21/1984	122074015	37701447	9 3S/2W 3F	4221	0	0	0	SLE	0	31	5	Nov-85	2 MON
	3S/2W	3J 1	9263 EDWARD LANE	San Leandro	DOROTHY WIXON	8/21/1984	122065075	37698477	9 3S/2W 3J	4222	0	0	0	SLE	0	53	0	7/83	6 IRR
	3S/2W	3K 1	20115 FOREST AVE	San Leandro	MARTIN NURSERY	8/21/1984	122069571	37698477	9 3S/2W 3K	4223	0	0	0	SLE	0	28	10	8/53	10 IRR
	3S/2W	3K 2	4057 STEVENS ST	San Leandro	R. FORQUEN	8/21/1984	122069571	37698477	9 3S/2W 3K	4224	0	0	0	SLE	0	70	0	?	8 IRR
	3S/2W	3K 3	19910 FOREST AVE	San Leandro	JACK LUSE	8/21/1984	122069571	37698477	9 3S/2W 3K	4225	0	0	0	SLE	0	56	38	8/78	8 IRR
	3S/2W	3K 4	19945 FOREST	San Leandro	MR. WEHE	8/21/1984	122074016	37698477	9 3S/2W 3K	4226	0	0	0	SLE	0	51	15	3/78	8 DES
	3S/2W	3L 1	3559 JAMISON WAY	San Leandro	R. NAHAS CO.	8/21/1984	122074016	37698477	9 3S/2W 3L	4227	0	0	0	SLE	0	56	9	8/78	8 DES
	3S/2W	3L 2	3533 JAMISON WAY	San Leandro	R. NAHAS CO.	8/21/1984	122074016	37698477	9 3S/2W 3L	4228	0	0	0	SLE	0	25	9	?	5 DES
	3S/2W	3L 3	3533 JAMISON WAY	San Leandro	R. NAHAS CO.	8/21/1984	122074016	37698477	9 3S/2W 3L	4229	0	0	0	SLE	0	20	0	?	5 DES
	3S/2W	3N	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	767	0	0	0	CSV	0	8	0	Apr-80	2 BOR
	3S/2W	3N 1	3095 CASTRO VALLEY BLVD	Castro Valley	ADOBE ASSOCIATES	11/6/1989	122079845	37695600	0 3S/2W 3N	4230	0	0	0	CSV	0	30	19	Aug-89	2 MON
	3S/2W	3N 2	3095 CASTRO VALLEY BLVD	Castro Valley	ADOBE ASSOCIATES	11/6/1989	122079845	37695600	0 3S/2W 3N	4231	0	0	0	CSV	0	20	10	Aug-89	2 MON
	3S/2W	3N 3	3095 CASTRO VALLEY BLVD	Castro Valley	ADOBE ASSOCIATES	11/6/1989	122079845	37695600	0 3S/2W 3N	4232	0	0	0	CSV	0	25	16	Aug-89	2 MON
	3S/2W	3N 4	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	768	0	0	0	CSV	0	16	0	Apr-90	2 MON
	3S/2W	3N 5	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	769	0	0	0	CSV	0	16	0	Apr-90	2 MON
	3S/2W	3N 6	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	770	0	0	0	CSV	0	16	0	Apr-90	2 MON
	3S/2W	3N 7	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	771	0	0	0	CSV	0	23	0	May-90	2 MON
	3S/2W	3N 8	3234 Castro Valley Blvd	Castro Valley	Mtzi Stokel	7/30/1980	122071869	37695600	0 3S/2W 3N	772	0	0	0	CSV	0	20	0	May-90	2 MON
	3S/2W	3P	20405 Redwood Rd	Castro Valley	Robert T. Nahas	8/1/1981	122072869	37697321	0 3S/2W 3P	1834	0	0	0	CSV	0	28	0	5/91	8 BOR*
	3S/2W	3P 1	20405 Redwood Rd	Castro Valley	R. T. Nahas Company	7/9/1980	122072869	37697321	0 3S/2W 3P	510	0	0	0	CSV	0	12	0	Dec-89	8 BOR
	3S/2W	3P 2	3495 Castro Valley Blvd	Castro Valley	Tex Simas	6/4/1980	122072910	37695400	0 3S/2W 3P	126	0	0	0	CSV	0	19	0	2/90	6 BOR*
	3S/2W	3P 3	3495 Castro Valley Blvd	Castro Valley	Tex Simas	6/4/1980	122072910	37695400	0 3S/2W 3P	127	0	0	0	CSV	0	16	0	2/90	4 MON
	3S/2W	3P 4	3495 Castro Valley Blvd	Castro Valley	Tex Simas	6/4/1980	122072910	37695400	0 3S/2W 3P	128	0	0	0	CSV	0	176	18	2/90	4 MON
	3S/2W	3P 5	3495 Castro Valley Blvd	Castro Valley	Tex Simas	6/4/1980	122072910	37695400	0 3S/2W 3P	129	0	0	0	CSV	0	176	18	2/90	4 MON
	3S/2W	3P 6	20405 Redwood Road	Castro Valley	R. T. Nahas Company	7/9/1980	122072869	37697321	0 3S/2W 3P	511	0	0	0	CSV	0	30	12	Dec-89	2 MON
	3S/2W	3P 7	20405 Redwood Road	Castro Valley	R. T. Nahas Company	7/9/1980	122072869	37697321	0 3S/2W 3P	512	0	0	0	CSV	0	30	12	Dec-89	2 MON
	3S/2W	3P 8	20405 Redwood Road	Castro Valley	R. T. Nahas Company	7/9/1980	122072869	37697321	0 3S/2W 3P	513	0	0	0	CSV	0	25	12	Dec-89	2 MON
	3S/2W	3P 9	20405 Redwood Rd	Castro Valley	R. T. Nahas Co.	8/21/1982	122072914	37696287	1 3S/2W 3P	7667	0	0	0	CSV	0	37	23	3/92	2 MON
	3S/2W	3P 10	20405 Redwood Rd	Castro Valley	R. T. Nahas Co.	8/21/1982	122072914	37696287	1 3S/2W 3P	7668	0	0	0	CSV	0	29	16	4/92	2 MON
	3S/2W	3P 11	20405 Redwood Rd	Castro Valley	R. T. Nahas Co.	8/21/1982	122072914	37696287	1 3S/2W 3P	7669	0	0	0	CSV	0	188	29	4/92	2 MON
	3S/2W	3P 12	3519 Castro Valley Blvd	Castro Valley	BP Oil Company ESE-1/MMW1	4/30/1983	122072125	37695221	1 3S/2W 3P	0	0	0	0	CSV	0	31	15	9/92	2 MON
	3S/2W	3P 13	3519 Castro Valley Blvd	Castro Valley	BP Oil Company ESE-2/MMW2	4/30/1983	122072125	37695221	1 3S/2W 3P	0	0	0	0	CSV	0	30	20	9/92	2 MON
	3S/2W	3P 14	3519 Castro Valley Blvd	Castro Valley	BP Oil Company ESE-3/MMW3	4/30/1983	122072125	37695221	1 3S/2W 3P	0	0	0	0	CSV	0	30	24	9/92	2 MON
	3S/2W	3P 15	3519 Castro Valley Blvd	Castro Valley	BP Oil Company ESE-4/MMW4	4/30/1983	122072125	37695221	1 3S/2W 3P	0	0	0	0	CSV	0	25	15	9/92	2 MON
	3S/2W	3P 16	3439 Castro Valley Blvd	Castro Valley	BP Oil Company ESE-2/MMW5	4/30/1983	122072125	37695221	1 3S/2W 3P	0	0	0	0	CSV	0	30	22	9/92	2 MON
	3S/2W	3P 17	3439 Castro Valley Blvd	Castro Valley	Goodyear Tire & Rubber Co	7/24/1987	122074249	37695600	0 3S/2W 3P	0	0	0	0	CSV	0	20	0	9/94	2 MON
	3S/2W	3P 18	3439 Castro Valley Blvd	Castro Valley	Goodyear Tire & Rubber Co	7/24/1987	122074249	37695600	0 3S/2W 3P	0	0	0	0	CSV	0	20	0	9/94	2 MON
	3S/2W	3P 19	3369 Castro Valley Blvd	Castro Valley	Chevron USA	8/21/1997	122075857	37695400	1 3S/2W 3P	0	0	0	0	CSV	0	20	0	Oct-93	2 MON
	3S/2W	3P 20	3369 Castro Valley Blvd	Castro Valley	Chevron USA	8/21/1997	122075857	37695400	1 3S/2W 3P	0	0	0	0	CSV	0	20	0	Oct-93	2 MON
	3S/2W	3P 21	3369 Castro Valley Blvd	Castro Valley	Chevron USA	8/21/1997	122075857	37695400	1 3S/2W 3P	0	0	0	0	CSV	0	20	0	Oct-93	2 MON
	3S/2W	3P 22	3430 Castro Valley Blvd	Castro Valley	Goodyear	12/26/1997	122074248	37695590	0 3S/2W 3P	0	0	0	0	CSV	0	16	14	Dec-96	2 MON
96844	3S/2W	3P 23	3519 Castro Valley Blvd	Castro Valley	BP Oil Company	2/17/1988	122072089	37695228	1 3S/2W 3P	0	0	0	0	CSV	0	30	10	7/95	2 MON
95432	3S/2W	3P 24	3519 Castro Valley Blvd	Castro Valley	BP Oil Company	2/17/1988	122072089	37695228	1 3S/2W 3P	0	0	0	0	CSV	0	30	10	7/95	2 MON
95432	3S/2W	3P 25	3519 Castro Valley Blvd	Castro Valley	BP Oil Company	2/17/1988	122072089	37695228	1 3S/2W 3P	0	0	0	0	CSV	0	20	8	7/95	2 MON
97WR049	3S/2W	3P 26	3495 Castro Valley Blvd	Castro Valley	Xtra Oil Company	10/27/1986	122072894	37695410	1 3S/2W 3P	0	0	0	0	CSV	0	20	0	8/97	2 MON
	3S/2W	3Q 1	MULFORD GARDEN	San Leandro	CURTIS OR BREED	8/21/1984	122158860	37690150	2 3S/2W 3Q	4233	0	0	0	SLE	0	87	8	28-Dec	8 ?
	3S/2W	3Q 2	BELOW MULFORD GARDEN	San Leandro	CURTIS	8/21/1984	122158860	37690150	2 3S/2W 3Q	4234	0	0	0	SLE	0	85	8	28-Dec	8 ?
	3S/2W	3Q 3	20283 YEANDLE AVE	Castro Valley	ROBERT ROUSEY	1/18/1984	122069571	37694633	0 3S/2W 3Q	4235	0	0	0	CSV	0	28	18	5/77	6 IRR
	3S/2W	3Q 4	20680 FOREST AV	Castro Valley	G.G. PAUL KASMER	1/18/1985	122067700	37694368	0 3S/2W 3Q	4236	0	0	0	CSV	0	20	0	Oct-73	0 DES
	3S/2W	3Q 5	20551 FOREST AV	Castro Valley	HOWARD W. BURKHART	1/18/1985	122067900	37695833	0 3S/2W 3Q	4237	0	0	0	CSV	0	57	0	2/50	8 ?
	3S/2W	3R 1	20287 MARSHAL ST	Castro Valley	MR. ORNELAS	8/21/1984	122065101	37694970	9 3S/2W 3R	4238	0	0	0	CSV	0	61	21	Dec-77	6 IRR
	3S/2W	4B 1	19101 LAKE CHABOT RD.	Castro Valley	HENRY HERTLIEN	11/6/1985	122087764	37705105	9 3S/2W 4B	4239	0	0	0	CSV	0	21	10	?	5 ?
	3S/2W	4E 1	19682 BETROUSE CT	Castro Valley	WILLIAM DUNCAN	8/21/1984	122093250	376974650	2 3S/2W 4E	4240	0	0	0	CSV	0	98	0	?	5 ?
	3S/2W	4F 1	3902 Somerset Ave	Castro Valley	CARL POMBERG	8/21/1984	122093046	37701251	0 3S/2W 4F	4241	0	0	0	CSV	0	52	0	7/77	0 TES
	3S/2W	4G 1	7400 SOMERSET AVE	Castro Valley	REES	8/21/1984	122083336	37701647	9 3S/2W 4G	7138	0	0	0	CSV	0	76	0	8/64	6 DOM
	3S/2W	4H 1	27210 FAIRVIEW	Castro Valley	LOUIS JENSEN	8/31/1984													

3S/2W	5P 4	1440 164TH AVE	San Leandro	ALAMEDA COUNTY	8/31/1984	1221103005	37694330	9 3S/2W 8P	4271	0 SLE	?	0	25	0	6 DES
3S/2W	5Q 1	1596 168th Ave	San Leandro	Diamond Temple 1	8/31/1992	1221106162	37694790	1 3S/2W 5Q	7567	0 SLE	8/91	0	85	25	6 PUB
3S/2W	8A 1	1740 ESTEBAN ST	San Leandro	M. LUCAS	8/31/1984	122101390	37690736	9 3S/2W 8A	4387	0 SLE	3/48	70	132	0	10 IRR
3S/2W	8B 1	1440 168TH AVE	San Leandro	PETERSON'S SANITARIUM	8/31/1984	122105820	37690700	9 3S/2W 8B	4388	0 SLE	?	54	80	0	0 IRR
3S/2W	8C 1	16870 MELOY LANE	San Leandro	STEVENS	8/31/1984	122110265	37690665	9 3S/2W 8C	4389	0 SLE	1/49	52	42	0	6 IRR
3S/2W	8C 2	1310 ELGIN ST	San Leandro	MEDINA	8/31/1984	122110265	37690665	9 3S/2W 8C	4390	0 SLE	9/49	48	51	0	4 IRR
3S/2W	8C 3	1151 ELGIN ST	San Leandro	ROGER WATSON	8/31/1984	122110265	37690665	9 3S/2W 8C	4391	0 SLE	9/77	0	37	0	4 IRR
3S/2W	8D	916 ELGIN ST	San Leandro	MARY RAMOS	6/15/1989	122114219	37690629	9 3S/2W 8D	4392	5372439 SLE	Sep-88	0	0	0	0 DES
3S/2W	8D 1	1106 ELGIN ST	Hayward	FORTH	8/31/1984	122114219	37690629	9 3S/2W 8D	4393	0 HAY	12/3	45	70	0	0 IRR
3S/2W	8D 2	16450 KENT AVE	Hayward	KURAMOTO NURSERY	8/31/1984	122114219	37690629	9 3S/2W 8D	4394	0 HAY	15/2	45	100	0	10 IRR
3S/2W	8D 3	901 Lynn Ct.	San Lorenzo	BART MW-1	6/23/1993	122114767	37689816	1 3S/2W 8D	0	0 SILZ	7/92	0	22	0	5 DES
3S/2W	8D 4	16450 Kent Ave.	Hayward	Plant Unlimited MM-3	7/22/1993	122112900	37692014	1 3S/2W 8D	0	0 HAY	Nov-92	0	18	0	2 MON
3S/2W	8D 5	16450 Kent Ave.	Hayward	Plant Unlimited MM-2	7/22/1993	122112900	37692014	1 3S/2W 8D	0	0 HAY	Nov-92	0	18	0	2 MON
3S/2W	8D 6	16450 Kent Ave.	Hayward	Plant Unlimited MM-1	7/22/1993	122112900	37692014	1 3S/2W 8D	0	0 HAY	Nov-92	0	19	0	2 MON
3S/2W	8E 1	16638 KENT AVE	San Leandro	GONSALVES	8/31/1984	122114196	37687055	9 3S/2W 8E	4395	0 SLE	1/18	44	90	0	8 IRR
3S/2W	8E 2	LEWELLING	San Leandro	S. BOTTICOURT	8/31/1984	122140776	37685213	2 3S/2W 8E	4396	0 SLE	?	54	104	0	12 IRR
3S/2W	8E 3	467 E. LEWELLING BLVD	San Leandro	GEORGE REPPOND	8/31/1984	122114196	37687035	9 3S/2W 8E	4397	0 SLE	Nov-90	0	60	20	6 IRR
3S/2W	8E 4	44 LEWELLING ROAD	San Leandro	ECONO GAS STA. KAYO OIL	2/8/1988	122110265	37687035	9 3S/2W 8E	4398	0 SLE	1/87	37	20	2	2 MON
3S/2W	8F 1	44 LEWELLING RD.	San Leandro	ECONO GAS	2/8/1988	122110265	37687035	9 3S/2W 8F	4399	0 SLE	1/87	37	20	2	2 MON
3S/2W	8F 2	44 LEWELLING ROAD	San Leandro	ECONO GAS	2/8/1988	122110265	37687035	9 3S/2W 8F	4400	0 SLE	1/87	37	20	2	2 MON
3S/2W	8F 3	44 LEWELLING ROAD	San Leandro	ECONO GAS	2/8/1988	122110265	37687035	9 3S/2W 8F	4401	0 SLE	1/87	37	20	2	2 MON
3S/2W	8F 4	LEWELLING & WICKHAM CT.	Hayward	DUBLINSAN RAMON SANIT.	1/18/1990	122110265	37687035	9 3S/2W 8F	4402	0 HAY	Mar-89	0	100	0	0 CAT
3S/2W	8G 1	17577 MELOY WAY	San Leandro	FERNANDES	8/31/1984	122105820	37687035	9 3S/2W 8G	4403	0 SLE	?	60	47	0	0 IRR
3S/2W	8G 2	1460 172ND AVE	San Leandro	MUSIL	8/31/1984	122105820	37687035	9 3S/2W 8G	4404	0 SLE	5/4	60	51	0	6 IRR
3S/2W	8G 3	779 PARADISE DR	San Leandro	ANTONE BRUN	8/31/1984	122105820	37687035	9 3S/2W 8G	4405	0 SLE	4/76	77	36	0	6 IRR
3S/2W	8H	18555 Mission Blvd.	Hayward	Burger King (Krone Ent.)	3/8/1991	122101385	37687035	9 3S/2W 8H	4406	0 SLE	1/81	250	50	35	2 MON
3S/2W	8H 1	19610 E. 14TH ST.	San Leandro	RODGERS	8/31/1984	122101385	37687035	9 3S/2W 8H	4407	0 SLE	1/10	54	85	0	4 IRR
3S/2W	8H 2	GILBERT & E. 14TH ST	Castro Valley	?	8/31/1984	122101385	37687035	9 3S/2W 8H	4408	0 CSV	?	75	0	0	8 IRR
3S/2W	8H 3	91100 Mission Blvd.	Hayward	NIP Associates	4/8/1993	122102574	37686308	1 3S/2W 8H	4409	0 HAY	Nov-92	0	43	32	2 MON
3S/2W	8J 1	CAMBRIDGE & HAMPTON RD	Hayward	J. POINTER	8/31/1984	122101380	37686365	9 3S/2W 8J	4410	0 HAY	3/33	0	120	0	0 IRR
3S/2W	8J 2	E. 14TH ST	San Leandro	Mr. Dominic Lima	8/31/1984	122145350	37717850	2 3S/2W 8J	4408	0 SLE	?	0	0	0	0 GEO*
3S/2W	8J 3	65 Cambridge Avenue	San Leandro	Mr. Dominic Lima	7/26/1990	1221160330	37733949	9 3S/2W 8J	700	0 SLE	Jul-90	0	120	0	5 IRR
3S/2W	8J 4	65 Cambridge Avenue	San Leandro	Mr. Dominic Lima	7/26/1990	1221160330	37733949	9 3S/2W 8J	701	0 SLE	Jul-90	0	120	0	5 IRR
3S/2W	8K 1	654 HAMPTON RD	San Leandro	G. FREITAS	8/31/1984	122105820	37683565	9 3S/2W 8K	4409	0 SLE	5/5	60	60	0	0 DES
3S/2W	8L 1	451 HAMPTON RD	San Leandro	KINSEY	8/31/1984	122110265	37683565	9 3S/2W 8L	4410	0 SLE	7/5	0	75	25	6 IRR
3S/2W	8L 2	18381 HAVEN ST	San Leandro	GREENFIELD	8/31/1984	122110265	37683565	9 3S/2W 8L	4411	0 SLE	5/0	60	50	0	8 IRR
3S/2W	8L 3	988 LEWELLING BLVD	San Leandro	KNAAPP'S NURSERY	8/31/1984	122142582	37684283	0 3S/2W 8L	4412	0 SLE	1/42	57	211	0	10 IRR+
3S/2W	8M	17771 Meekland Ave.	Hayward	Josson Auto Electric	7/27/1993	122113980	37682126	1 3S/2W 8M	0	0 HAY	6/92	0	22	18	0 BOR
3S/2W	8M 1	477 E. LEWELLING BLVD	San Leandro	SHUMAMURA	8/31/1984	122114173	37683565	9 3S/2W 8M	4413	0 SLE	1/41	42	70	0	10 IRR
3S/2W	8M 2	16980 MEERLAND AVE	San Leandro	BURTON BUSK	12/12/1984	122114173	37683565	9 3S/2W 8M	4414	0 SLE	?	50	58	20	8 DOM+
3S/2W	8M 3	29517 SHASTA RD	Hayward	CHARLES A. TAYLOR	8/31/1984	122114173	37683565	9 3S/2W 8M	4415	0 HAY	1/68	48	48	22	8 DOM+
3S/2W	8M 4	171 Hampton Road	Hayward	Cherryland Homes	7/31/1990	122113177	37683545	3 3S/2W 8M	417	0 HAY	5/56	0	40	6	6 DOM
3S/2W	8M 5	171 Hampton Road	Hayward	Cherryland Homes	7/31/1990	122113177	37683545	3 3S/2W 8M	418	0 HAY	Oct-89	0	40	0	6 DES
3S/2W	8M 6	17771 Meekland Ave.	Hayward	Josson Auto Electric MM-1	7/27/1993	122113980	37682126	1 3S/2W 8M	0	0 HAY	Oct-89	0	31	20	2 MON
3S/2W	8M 7	17771 Meekland Ave.	Hayward	Josson Auto Electric MM-2	7/27/1993	122113980	37682126	1 3S/2W 8M	0	0 HAY	6/92	0	31	18	2 MON
3S/2W	8M 8	17771 Meekland Ave.	Hayward	Josson Auto Electric MM-3	7/27/1993	122113980	37682126	1 3S/2W 8M	0	0 HAY	6/92	0	31	22	2 MON
3S/2W	8M 9	17771 Meekland Ave.	Hayward	BITTNER	8/31/1984	122114151	37679990	9 3S/2W 8M	4417	0 HAY	1/40	47	85	0	0 IRR
3S/2W	8N 1	18288 MEERLAND AVE	Hayward	HOFFMAN	8/31/1984	122114151	37679990	9 3S/2W 8N	4418	0 HAY	1/40	47	85	0	0 IRR
3S/2W	8N 2	17754 MEERLAND AVE	Hayward	VANDERBURG	8/31/1984	122110265	37680011	9 3S/2W 8N	4419	0 HAY	1/45	48	158	0	8 DES
3S/2W	8P 1	19231 LOWELL AVE	Hayward	R.A. PACE	8/31/1984	122110265	37680011	9 3S/2W 8P	4420	0 HAY	1/55	56	50	0	0 IRR
3S/2W	8P 2	203 MEDFORD AVE	Hayward	NANCY SMITH	8/31/1984	122110265	37680011	9 3S/2W 8P	4421	0 HAY	3/36	56	64	0	0 IRR
3S/2W	8P 3	219 MEDFORD AVE	Hayward	ART CROWE	8/31/1984	122110265	37680011	9 3S/2W 8P	4422	0 HAY	1/78	0	80	26	6 IRR
3S/2W	8Q 1	546 CHERRY WAY	Hayward	DEXTER'S HATCHERY	8/31/1984	122105820	37680039	9 3S/2W 8Q	4423	0 HAY	1/43	58	86	24	10 IRR
3S/2W	8Q 2	19751 WESTERN BLVD	Hayward	R.J. CHASTAIN	8/31/1984	122105820	37680039	9 3S/2W 8Q	4424	0 HAY	9/42	57	86	0	0 IRR
3S/2W	8Q 3	361 SAINT GEORGE AVE	Hayward	WILLIE DEKETH	8/31/1984	122105820	37680039	9 3S/2W 8Q	4425	0 HAY	6/77	0	86	0	0 ?
3S/2W	8Q 4	328 CHERRY WAY	Hayward	WILLIAM MATHEWS	8/31/1984	122105820	37680039	9 3S/2W 8Q	4426	0 HAY	6/79	0	83	25	6 IRR
3S/2W	8Q 5	310 CHERRY WAY	Hayward	GUNTER MAHLER	4/11/1987	122105820	37680039	9 3S/2W 8Q	4427	0 HAY	4/80	0	83	23	6 IRR
3S/2W	8Q 6	839 CHERRY WAY	Hayward	HEITMAN	8/31/1984	122105820	37680067	9 3S/2W 8Q	4428	0 HAY	7/24	68	100	0	0 IRR
3S/2W	8R 1	823 BLOSSOM WAY	Hayward	BURROWS	8/31/1984	122101375	37680067	9 3S/2W 8R	4429	0 HAY	10/39	69	90	0	6 IRR
3S/2W	8R 2	859 MEDFORD RD	Hayward	O. HIGGINS	8/31/1984	122101375	37680067	9 3S/2W 8R	4430	0 HAY	7/3	68	85	0	6 IRR
3S/2W	8R 3	20887 MONTGOMERY AVE	Hayward	JOHN VARNI	8/31/1984	122101375	37680067	9 3S/2W 8R	4431	0 HAY	1/52	70	100	0	10 IRR
3S/2W	8R 4	21070 WESTERN BLVD	Hayward	M. VIERA	8/31/1984	122101375	37680067	9 3S/2W 8R	4432	0 HAY	?	64	85	0	12 DOM+
3S/2W	8R 5	559 CHERRY WAY	Hayward	MANUEL GONSALVES	8/31/1984	122101375	37680067	9 3S/2W 8R	4433	0 HAY	4/77	0	64	31	5 IRR
3S/2W	8R 6	2573 SANTA CLARA ST.	Hayward	H.A. NOTZAN	12/12/1984	122101375	37683900	0 3S/2W 8R	4434	0 HAY	6/63	0	83	0	6 IND
3S/2W	8R 7	650 CHERRY WAY	Hayward	LELAND DE QUADROS	8/31/1984	122101375	37680067	9 3S/2W 8R	4435	0 HAY	Oct-77	0	100	41	6 IRR
3S/2W	8R 8	21065 WESTERN	Hayward	RON BAXTER	8/31/1984	122101375	37680067	9 3S/2W 8R	4436	0 HAY	Dec-95	0	35	20	2 MON
3S/2W	8R 9	21031 Western Blvd	Hayward	William and Kathy Florenc	3/12/1998	122101920	37680135	1 3S/2W 8R	0	0 HAY	Dec-95	0	35	25	2 MON
3S/2W	8R 10	21031 Western Blvd	Hayward	William and Kathy Florenc	3/12/1998	122101920	37680135	1 3S/2W 8R	0	0 HAY	Dec-95	0	35	25	2 MON
3S/2W	8R 11	21031 Western Blvd	Hayward	William and Kathy Florenc	3/12/1998	122101920	37680135								

35/2W	TYEE CT.	Castro Valley	SAM WALLACE	122084000	37691200	2 35/2W 9A	0 CSV	7/53	0	52	0	0 BOR
9A 1	22771 MAIN ST	Castro Valley	ANTHONY B. VARNI	122087673	37690926	0 35/2W 9B	0 CSV	Aug-88	0	205	0	0 BOR
9B	2445 Castro Valley Blvd	Castro Valley	Unocal Corp.	122089538	37692102	0 35/2W 9B	0 CSV	Apr-90	14	15	0	8 BOR
9B				0	0	0 35/2W 9B	0 CSV	Aug-88	205	0	0	0 BOR
9B 1	2445 Castro Valley Blvd.	Castro Valley	Unocal Corporation	122089538	37692102	0 35/2W 9B	0 CSV	190	0	26	14	2 MON
9B 2	2445 Castro Valley Blvd.	Castro Valley	Unocal Corporation	122089538	37692102	0 35/2W 9B	0 CSV	190	0	25	20	2 MON
9B 3	2445 Castro Valley Blvd.	Castro Valley	Unocal Corporation	122089538	37692102	0 35/2W 9B	0 CSV	190	0	22	10	2 MON
9B 4	2445 Castro Valley Blvd.	Castro Valley	Unocal Corporation	122089538	37692102	0 35/2W 9B	0 CSV	890	0	25	17	2 MON
9B 5	2445 Castro Valley Blvd.	Castro Valley	Unocal Corporation	122089538	37692102	0 35/2W 9B	0 CSV	890	0	25	17	2 MON
9B 6	2620 Norridge Ave	Castro Valley	Clark's Woodworking	122086581	37691847	0 35/2W 9B	0 CSV	890	182	21	10	0 MON
9B 7	2610 Norridge Ave	Castro Valley	Pacific Bell	122086581	37691847	0 35/2W 9B	0 CSV	192	0	53	0	0 MON
9E 1	1312 WEBB ST	Castro Valley	CAL DIVISION OF HIGHWAY	122086963	37691342	0 35/2W 9E	0 CSV	2/94	0	16	5	4 MON
9E 1	1312 WEBB ST	Castro Valley	CAL DIVISION OF HIGHWAY	122086963	37691342	0 35/2W 9E	0 CSV	?	0	80	0	36 DES.
9E 1	21065 Foothill Blvd	Hayward	Breastbeat B-1	122093622	37687210	0 35/2W 9F	0 HAY	4/92	0	20	0	2 MON
9F 1	21065 Foothill Blvd	Hayward	ROY BREITENBACH	122093622	37686746	0 35/2W 9F	0 HAY	4/92	0	44	37	0 BOR*
9H 1	BOYWOOD AVE	Hayward	TENNYSON DISTRICT	122093250	37687210	0 35/2W 9H	0 HAY	192	0	44	0	2 MON
9H 1	1205 COTTER WAY	Hayward	LUZ ORNELAS	122093250	37687210	0 35/2W 9H	0 HAY	8/49	0	48	0	8 ?
9K 1	GROVE WAY	Hayward	EMBLUD	122091500	37682750	0 35/2W 9K	0 HAY	8/77	0	86	13	0 CAT
9K 2	GROVE WAY	Hayward	JERRY'S TEXACO	122090031	37683506	0 35/2W 9K	0 HAY	7/82	0	65	0	0 CAT
9K 3	21501 FOOTHILL BLVD	Hayward	BP Oil Co. SS #1131	122087217	37682484	0 35/2W 9K	0 HAY	Dec-88	0	30	15	2 MON
9K 4	21732 FOOTHILL BLVD.	Hayward	BP Oil Co. SS #1131	122087217	37682484	0 35/2W 9K	0 HAY	Jan-86	0	27	15	2 MON
9K 5	21494 Foothill Blvd	Hayward	BP Oil Co. SS #1131	122089348	37684002	0 35/2W 9K	0 HAY	Jan-90	0	44	23	4 MON
9K 6	21494 Foothill Blvd	Hayward	BP Oil Co. SS #1131	122089348	37684002	0 35/2W 9K	0 HAY	Jun-90	0	24	4	4 MON
9K 7	21494 Foothill Blvd	Hayward	BP Oil Co. SS #1131	122089348	37684002	0 35/2W 9K	0 HAY	May-90	0	25	15	4 MON
9K 8	21732 FOOTHILL BLVD.	Hayward	Emmons Trust	122087208	37683489	0 35/2W 9K	0 HAY	6/92	0	25	15	2 MON
9L 2	2983 EVERGLADE ST	Hayward	CONSTANTINO MARTINEZ	122092118	37683740	0 35/2W 9L	0 HAY	7/77	0	30	22	4 IRR
9L 3	21293 LOCUST ST	Hayward	M. VERANDES	122092118	37683740	0 35/2W 9L	0 HAY	8/77	0	58	17	0 IRR
9L 4	Locust & Apple St	Hayward	PG&E	122091634	37684199	0 35/2W 9L	0 HAY	8/77	0	120	0	0 OTH
9M 1	OCEAN VIEW & ASH	San Leandro	LAVVMA	122097657	37680143	0 35/2W 9M	0 SLE	Dec-91	0	125	0	0 CAT
9M 1	834 Blossom Way	Hayward	George Hayward	122097657	37680143	0 35/2W 9M	0 SLE	5/79	0	44	6	6 IRR
9N 1	21123 MONTGOMERY	Hayward	AL SANTUCCI	122097652	37680182	0 35/2W 9N	0 HAY	3/93	72	83	44	6 IRR
9N 2	710 GROVE WAY	Hayward	ELLIOT BABO	122096752	37680182	0 35/2W 9N	0 HAY	8/77	0	97	50	0 IRR
9N 3	752 GROVE WAY	Hayward	PAUL SHARP	122096752	37680182	0 35/2W 9N	0 HAY	Nov-77	0	96	50	6 IRR
9N 4	21001 MONTGOMERY AV.	Hayward	WARREN MUNSON	122096752	37680182	0 35/2W 9N	0 HAY	Nov-77	0	97	50	6 IRR
9P 1	10 MAIN ST	Hayward	GEO. SIMMONDS	122092118	37680205	0 35/2W 9P	0 HAY	Sep-88	0	50	38	2 MON
9P 2	921 GROVE WAY	Hayward	DALE DAVIS	122092118	37680205	0 35/2W 9P	0 HAY	4/51	0	83	18	6 DOM
9Q 1	21732 FOOTHILL BLVD	Hayward	?	122087217	37682484	0 35/2W 9Q	0 HAY	7/77	0	91	58	6 IRR
9Q 2	21732 FOOTHILL BLVD	Hayward	?	122087217	37682484	0 35/2W 9Q	0 HAY	Jun-89	102	27	15	2 MON
9Q 3	21732 FOOTHILL BLVD	Hayward	?	122087217	37682484	0 35/2W 9Q	0 HAY	Jun-89	100	25	14	2 MON
9Q 3	21732 FOOTHILL BLVD	Hayward	?	122087217	37682484	0 35/2W 9Q	0 HAY	Jun-89	100	25	14	2 MON
9Q 4	Sunset & Main/SLZ Crk	Hayward	CHEVRON USA	122086222	37679112	0 35/2W 9Q	0 HAY	Jun-89	0	20	0	2 MON
9Q 5	Sunset & Main/SLZ CR	San Lorenzo	Chevron USA Prod.	122086222	37679112	0 35/2W 9Q	0 SLZ	Aug-92	0	38	23	2 MON
9Q 6	21799 Foothill Blvd	Hayward	Foreign Auto Service	122086613	37681790	0 35/2W 9Q	0 HAY	8/92	87	22	10	2 MON
9Q 7	21799 Foothill Blvd	Hayward	Foreign Auto Service	122086613	37681790	0 35/2W 9Q	0 HAY	8/93	0	16	10	2 MON
9Q 8	21799 Foothill Blvd	Hayward	Foreign Auto Service	122086613	37681790	0 35/2W 9Q	0 HAY	8/93	0	23	20	2 MON
9R	21995 FOOTHILL BLVD	Hayward	Chevron USA INC	122085210	37680670	0 35/2W 9R	0 HAY	8/93	0	25	20	2 MON
9R	City Center Dr	Hayward	Hayward City Hall	122085210	37680248	0 35/2W 9R	0 HAY	2/91	30	47	23	2 MON
9R	FOOTHILL BLVD	Hayward	CITY CENTER OFFICE TOWER	122121850	37709500	0 35/2W 9R	0 HAY	Jan-88	0	40	28	0 BOR
9R 2	HAZEL ST & FOOTHILL BLVD	Hayward	SHELL OIL CO.	122084300	37680100	0 35/2W 9R	0 HAY	Aug-85	0	42	25	0 BOR
9R 2	22253 FOOTHILL BLVD	Hayward	WORLD OIL STA 76	122084020	37679596	0 35/2W 9R	0 HAY	Nov-73	0	50	0	0 CAT
9R 3	22253 FOOTHILL BLVD	Hayward	WORLD OIL STA 76	122084020	37679596	0 35/2W 9R	0 HAY	Aug-85	0	40	25	0 BOR
9R 4	22253 FOOTHILL BLVD	Hayward	WORLD OIL STA 76	122084020	37679596	0 35/2W 9R	0 HAY	Dec-85	0	40	19	2 MON
9R 5	21985 FOOTHILL BLVD	Hayward	CHEVRON USA INC	122085210	37680670	0 35/2W 9R	0 HAY	Dec-85	0	36	14	2 MON
9R 6	21985 FOOTHILL BLVD	Hayward	CHEVRON USA INC	122085210	37680670	0 35/2W 9R	0 HAY	Jan-88	0	27	11	4 MON
9R 7	21985 FOOTHILL BLVD	Hayward	CHEVRON USA INC	122085210	37680670	0 35/2W 9R	0 HAY	Jan-88	0	25	13	4 MON
9R 8	21985 FOOTHILL BLVD	Hayward	CHEVRON USA INC	122085210	37680670	0 35/2W 9R	0 HAY	Jan-88	0	22	14	4 MON
9R 8	21985 FOOTHILL BLVD	Hayward	CHEVRON USA INC	122085210	37680670	0 35/2W 9R	0 HAY	Jan-88	0	22	13	4 MON
9R 9	21985 FOOTHILL BLVD	Hayward	CHEVRON U.S.A.	122085210	37680670	0 35/2W 9R	0 HAY	Jan-88	0	23	13	4 MON
9R 10	21985 FOOTHILL BLVD.	Hayward	CHEVRON U.S.A.	122085210	37680670	0 35/2W 9R	0 HAY	Oct-88	0	24	14	4 MON
9R 11	21985 FOOTHILL BLVD.	Hayward	CHEVRON U.S.A.	122085210	37680670	0 35/2W 9R	0 HAY	Oct-88	0	24	14	4 MON
9R 11	21985 FOOTHILL BLVD.	Hayward	CHEVRON U.S.A.	122085210	37680670	0 35/2W 9R	0 HAY	Oct-88	0	32	23	4 MON
9R 15	21985 FOOTHILL BLVD.	Hayward	CHEVRON STATION #90260	122085210	37680670	0 35/2W 9R	0 HAY	Oct-88	0	25	15	4 MON
9R 15	21985 FOOTHILL BLVD.	Hayward	CHEVRON STATION #90260	122085210	37680670	0 35/2W 9R	0 HAY	Jun-88	0	25	15	4 MON
9R 18	21985 FOOTHILL BLVD.	Hayward	CHEVRON STATION #90260	122085210	37680670	0 35/2W 9R	0 HAY	Jun-88	0	22	14	4 MON
9R 18	21985 FOOTHILL BLVD.	Hayward	CHEVRON STATION #90260	122085210	37680670	0 35/2W 9R	0 HAY	Jun-88	0	25	15	4 MON
9R 20	21985 Foothill Blvd	Hayward	Chevron	122085210	37680670	0 35/2W 9R	0 HAY	Jun-89	0	22	14	4 MON
9R 21	21985 Foothill Blvd	Hayward	Chevron	122085210	37680670	0 35/2W 9R	0 HAY	Jun-89	0	43	32	2 MON
9R 21	21985 Foothill Blvd	Hayward	Chevron	122085210	37680670	0 35/2W 9R	0 HAY	8/90	0	42	33	2 MON
9R 22	22253 Foothill Blvd	Hayward	World Oil Marketing Corp	122084007	37679594	0 35/2W 9R	0 HAY	8/90	0	44	32	2 MON
9R 23	22253 Foothill Blvd	Hayward	World Oil Marketing Corp	122084007	37679594	0 35/2W 9R	0 HAY	8/90	0	23	18	2 MON
9R 24	22253 Foothill Blvd	Hayward	World Oil Marketing Corp	122084007	37679594	0 35/2W 9R	0 HAY	5/98	104	30	17	2 MON
9R 25	22253 Foothill Blvd	Hayward	World Oil Marketing Corp	122084007	37679594	0 35/2W 9R	0 HAY	5/98	108	30	17	2 MON
9R 26	22253 Foothill Blvd	Hayward	World Oil Marketing Corp	122084007	37679594	0 35/2W 9R	0 HAY	5/98	107	30	17	2 MON
10A	21195 Center Street	Castro Valley	Office of State Architect	122061474	37693742	0 35/2W 10A	0 CSV	5/98	110	30	17	2 MON
10A	21195 Center Street	Castro Valley	Office of State Architect	122061474	37693742	0 35/2W 10A	0 CSV	190	0	0	0	6 BOR*
10A	3940 CASTRO VALLEY BLVD	Castro Valley	TEXACO REF & MPRKTG INC	122063498	37692546	0 35/2W 10A	0 CSV	Nov-87	0	35	31	0 BOR

3S/2W	10A 1	3940 CASTRO VALLEY BLVD	Castro Valley	TEXACO	4/30/1986	122053498	37692546	0 3S/2W 10A	4470	0 CSV	Dec-85	0	30	20	2 MON
3S/2W	10A 2	3940 CASTRO VALLEY BLVD	Castro Valley	TEXACO REF & MKRTG INC	6/3/1988	122053498	37692546	0 3S/2W 10A	6709	0 CSV	Dec-87	0	45	28	4 MON
3S/2W	10A 3	3940 Castro Valley Blvd	Castro Valley	Lakeshore Financial	7/6/1988	122053498	37692546	0 3S/2W 10A	364	0 CSV	4/89	0	20	0	4 DES
3S/2W	10A 4	3940 CASTRO VALLEY BLVD	Castro Valley	TEXACO REF & MKRTG INC	6/3/1988	122053498	37692546	0 3S/2W 10A	4471	0 CSV	Dec-87	0	38	24	4 MON
3S/2W	10A 5	3940 Castro Valley Blvd	Castro Valley	Lakeshore Financial	7/6/1988	122053498	37692546	0 3S/2W 10A	6710	0 CSV	Dec-87	0	40	23	4 MON
3S/2W	10A 6	3940 Castro Valley Blvd	Castro Valley	TEXACO REF & MKRTG INC	7/31/1990	122063498	37692546	0 3S/2W 10A	464	0 CSV	4/90	0	20	0	4 DES
3S/2W	10A 7	3940 Castro Valley Blvd	Castro Valley	TEXACO REF & MKRTG INC	7/31/1990	122063498	37692546	0 3S/2W 10A	785	0 CSV	Apr-90	0	45	30	4 MON
3S/2W	10A 8	3940 Castro Valley Blvd	Castro Valley	Texaco Env Serv MW-6	9/24/1992	122063314	37692436	0 3S/2W 10A	786	0 CSV	Apr-90	0	45	33	4 MON
3S/2W	10A 9	3940 Castro Valley Blvd	Castro Valley	Texaco Env Serv MW-7	9/24/1992	122063314	37692436	1 3S/2W 10A	8032	0 CSV	1/92	187	38	21	4 MON
3S/2W	10A 10	3889 Castro Valley Blvd	Castro Valley	Texaco Env Serv MW-6	9/24/1992	122063314	37692436	1 3S/2W 10A	8033	0 CSV	1/92	190	38	21	4 MON
3S/2W	10A 11	3889 Castro Valley Blvd	Castro Valley	VIP Service (MW1)	1/18/1994	122065538	37693014	1 3S/2W 10A	8034	0 CSV	1/92	194	40	29	4 MON
3S/2W	10A 12	3889 Castro Valley Blvd	Castro Valley	VIP Service (MW2)	1/18/1994	122065538	37693014	1 3S/2W 10A	8034	0 CSV	1/92	194	40	29	4 MON
3S/2W	10B 1	9318 CASTRO VALLEY BLVD	Castro Valley	VIP Service (MW3)	1/18/1994	122065538	37693014	1 3S/2W 10A	8034	0 CSV	1/92	194	40	29	4 MON
3S/2W	10C 1	21000 Wilbeam Ave.	Castro Valley	WEINKE	8/31/1984	122069416	37691156	0 3S/2W 10E	4472	0 CSV	Nov-93	180	20	12	2 MON
3S/2W	10C 2	21000 Wilbeam Ave.	Castro Valley	BART MW-1	7/15/1993	122075668	37692904	0 3S/2W 10C	4472	0 CSV	Nov-93	179	20	13	2 MON
3S/2W	10C 3	21000 Wilbeam Ave.	Castro Valley	BART MW-2	7/15/1993	122075668	37692904	0 3S/2W 10C	4472	0 CSV	Nov-93	179	20	13	2 MON
3S/2W	10C 4	21000 Wilbeam Ave.	Castro Valley	BART MW-3	7/15/1993	122075668	37692904	0 3S/2W 10C	4472	0 CSV	Nov-93	179	20	13	2 MON
3S/2W	10G 1	2633 VEGAS AV	Castro Valley	ANNA WEEDEN	12/18/1984	122070587	37689500	0 3S/2W 10C	4473	0 CSV	4/77	0	24	7	4 IRR
3S/2W	10H 2	UNKNOWN	Castro Valley	UNKNOWN	3/14/1988	122065008	37687377	0 3S/2W 10A	4474	0 CSV	May-77	0	30	5	0 IRR
3S/2W	10J 1	UNKNOWN	Castro Valley	UNKNOWN	3/14/1988	122064990	37687377	0 3S/2W 10A	4474	0 CSV	May-77	0	30	5	0 IRR
3S/2W	10L	#2 Corporation Yard	Hayward	Alameda Public Works	6/22/1993	122073359	37682592	0 3S/2W 10J	4475	0 HAY	Jul-76	0	365	208	10 DOM
3S/2W	10L 1	22447 CHARLENE WAY	Hayward	M. CLIFFORD	8/3/1984	122073861	37683907	0 3S/2W 10L	4476	0 HAY	6/92	0	16	0	2 BOR
3S/2W	10L 2	REDWOOD RD & GROVE WY	Castro Valley	CHEVRON SERVICE STA	1/21/1987	122072600	37684200	0 3S/2W 10L	4476	0 CSV	9/77	0	50	32	8 IRR
3S/2W	10L 3	REDWOOD RD & GROVE WY	Castro Valley	CHEVRON SERVICE STA	1/21/1987	122072600	37684200	0 3S/2W 10L	4477	0 CSV	9/77	0	50	32	8 IRR
3S/2W	10L 4	REDWOOD RD & GROVE WY	Castro Valley	CHEVRON SERVICE STA	1/21/1987	122072600	37684200	0 3S/2W 10L	4478	0 CSV	Oct-86	97	30	17	3 MON
3S/2W	10L 5	REDWOOD RD & GROVE WY	Castro Valley	CHEVRON SERVICE STA	1/21/1987	122072600	37684200	0 3S/2W 10L	4478	0 CSV	Oct-86	96	31	16	3 MON
3S/2W	10L 6	1783 KNOX STREET	Castro Valley	CHEVRON SERVICE STA	1/21/1987	122072600	37684200	0 3S/2W 10L	4479	0 CSV	Oct-86	98	30	18	3 MON
3S/2W	10L 7	2416 Grove Way	Castro Valley	NANCY C. CARTER	1/21/1987	122072600	37684200	0 3S/2W 10L	4480	0 CSV	Oct-86	100	30	17	3 MON
3S/2W	10L 8	2416 Grove Way	Castro Valley	Chevron	3/28/1991	122071784	37684479	0 3S/2W 10L	4481	0 CSV	Oct-88	0	0	0	60 DES
3S/2W	10L 9	2416 Grove Way	Castro Valley	Chevron	3/28/1991	122071784	37684479	0 3S/2W 10L	4481	0 CSV	Oct-88	0	0	0	60 DES
3S/2W	10L 10	22315 Redwood Rd	Castro Valley	Chevron	3/28/1991	122071784	37684479	0 3S/2W 10L	1544	0 CSV	6/90	0	12	11	2 MON
3S/2W	10L 11	22315 Redwood Rd	Castro Valley	Former Beacon Station	7/31/1991	122072700	37683925	0 3S/2W 10L	1546	0 CSV	8/90	0	30	17	2 MON
3S/2W	10L 12	22315 Redwood Rd	Castro Valley	Former Beacon Station	7/31/1991	122072700	37683925	0 3S/2W 10L	1546	0 CSV	8/90	0	30	17	2 MON
3S/2W	10L 13	22315 Redwood Rd	Castro Valley	Former Beacon Station	7/31/1991	122072700	37683925	0 3S/2W 10L	1776	0 CSV	4/91	69	25	13	4 MON
3S/2W	10L 14	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1777	0 CSV	4/91	69	25	13	4 MON
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station	10/19/1997	122072698	37683925	0 3S/2W 10L	1778	0 CSV	3/91	157	30	22	0 BOR
93081	3S/2W	22315 Redwood Rd	Castro Valley	Former Beacon Station											