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By Alameda County Environmental Health at 2:55 pm, Oct 25, 2013

THRIFTY OIL CO.

October 23, 2013

O.135182

Ms. Dilan Roe
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Local #RO0000004
RWQCB #01-1478

RE: **Former Thrifty Oil Co. Station #049**
3400 San Pablo Avenue
Oakland, CA 94612

Subject: **Site Conceptual Model and 3rd Quarter 2013 Groundwater Monitoring Report**

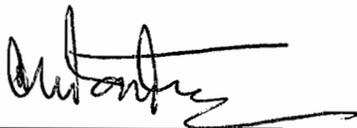
Dear Ms. Roe:

In a letter dated April 22, 2013, the Alameda County Health Care Services (ACHCS) required that Thrifty Oil Co. (Thrifty) submit an updated Site Conceptual Model Report for the Thrifty Station No. 049 located at 3400 San Pablo Avenue, Oakland, CA. The ACHCS letter also required that Thrifty conduct a minimum of one hydrologic cycle of groundwater sampling at the site. In order to fulfill the requirements of the ACHCS letter, Waterstone Environmental, Inc. prepared the enclosed *Site Conceptual Model Update and 3rd Quarter 2013 Groundwater Monitoring Report*, dated October 16, 2013.

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

Should you have any questions regarding this report, please contact Simon Tregurtha at (562) 921-3581 Ext. 260, or myself at Ext. 390.

Respectfully submitted,



Chris Panaitescu
General Manager
Environmental Affairs

cc: File



13116 Imperial Hwy, Santa Fe Springs, CA 90670-0138 • Ph: (562)921-3581

Site Conceptual Model Update and 3rd Quarter 2013 Groundwater Monitoring Report

Thrifty Oil Co. Station No. 049
3400 San Pablo Avenue
Oakland, California 94608

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Global ID T0600101365

October 16, 2013

Project: 13-138

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

Prepared by:



Waterstone Environmental, Inc.
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Site Conceptual Model Update and 3rd Quarter 2013 Groundwater Monitoring Report

Thrifty Oil Co. Station No. 049
3400 San Pablo Avenue
Oakland, California 94608

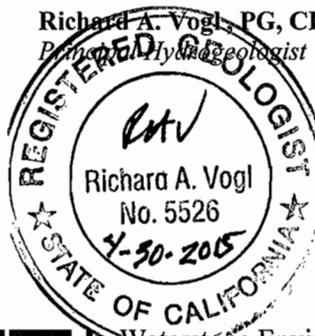
Global ID T0600101365

October 16, 2013

Project: 13-38



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Section 1.0

Introduction

On behalf of Thrifty Oil Co. (Thrifty), Waterstone Environmental, Inc. (Waterstone) has prepared this report to fulfill the requirements of the Alameda County Environmental Health (ACEH), which required Thrifty to prepare an updated Site Conceptual Model and resume groundwater plume monitoring for Thrifty Station No. 049 located at 3400 San Pablo Avenue in Oakland, California (“the Site”; **Figure 1**) as stated in their letter to Thrifty dated April 22, 2013 (**Appendix A**). The oversight agency for the soil and groundwater remediation at this Site is the ACEH. This report was prepared to present to the ACEH an updated site conceptual model and the 3rd quarter 2013 groundwater monitoring results for the Site, to support Thrifty’s current request for Site Closure under the State Water Resources Control Board’s (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP).

On December 1, 2011, following completion of the verification soil sampling and downgradient groundwater investigation which was performed on November 30, 2010 (based on a Workplan approved by ACEH) to document the current residual soil and groundwater concentrations onsite following remedial measures and to define the lateral extent of offsite groundwater impacts at the Site, the SWRCB completed their 5-Year Review document for the Site. The final document was mailed to Thrifty on March 7, 2012, and the SWRCB recommended: ***“Based on the recently completed confirmation sampling results... the residual petroleum hydrocarbons that remain in soil and groundwater pose a low risk to public health, safety and environment. The Fund agrees with the claimant’s consultant’s recommendation for case closure”***. According to the SWRCBs LTCP checklist which was uploaded to Geotracker in August 5, 2013, the Site meets the LTCP.

The Site is an active service station located at the northeast corner of the intersection of San Pablo Avenue and 34th Street in the City of Oakland, California. The Site consists of two active dispenser islands, a cashier’s booth, and two 20,000-gallon double-walled underground storage tanks (USTs) (**Figure 2**). From May 14, 1997 until May 23, 2012 the Site was leased from Thrifty and operated by ARCO/BP as ARCO Station No. 9535. Following this date the lease was transferred to Tesoro and the station is now operated by Tesoro as a USA Gasoline station.

Section 2.0

Site Characterization Data

2.1 Geology/Hydrogeology

2.1.1 Geology

The Site is located within the San Francisco Bay structural depression of the Coast Ranges Physiographic Province in central Alameda County, California. Bedrock in the region consists of sedimentary, meta-sedimentary, volcanic, and intrusive rocks of Jurassic through Tertiary geologic age. Quaternary marine and alluvial sediments blanket the downwarped bedrock within the basin in which the Site is located. Based on previous drilling activities performed, the soils beneath the Site consist mainly of silty, sandy, and gravelly clays to 25 feet below ground surface.

Geologic cross sections are included as **Figures 3A, 3B, and 3C**. The lines of cross section are shown in **Figure 2**. Historic soil laboratory analytical results, both pre- and post-remediation, are summarized in **Table 1A and 1B**.

2.1.2 Hydrogeology

The Site lies within the East Bay Plain groundwater basin which consists of two main water bearing units. The primary unit is comprised of unconsolidated alluvial deposits of Late Quaternary age and a secondary, older semi-consolidated deposit of Tertiary-Quaternary age. Groundwater within these deposits is both confined and unconfined, with the majority of the aquifers being confined. The Site is within the Berkeley alluvial plain sub area of the Bay Plains Groundwater Basin.

Groundwater generally occurs beneath the Site at depths ranging from approximately 4 to 7 feet below ground surface (bgs), which is shown in **Table 2A**, along with historic and recent groundwater sample laboratory analytical results. A groundwater elevation contour map based on the September 26, 2013 monitoring data indicates that groundwater flows to the west at an approximate gradient of 0.0197 feet/foot (**Figure 5**).

2.2 Production Well/Utility Location Survey

Based on the Groundwater Production Well and Utility Conduit Survey Report conducted by Advance GeoEnvironmental (AGE), dated October 21, 2003, well driller's reports were found for seven water wells located within a one-mile radius of the Site, with four of the seven wells having been located. The nearest groundwater production well is located approximately 900 feet west of the Site. No other sensitive receptors were identified visually; however, three additional leaking underground storage tanks (LUST) sites were located adjacent to the Site, with the nearest LUST site located 50 feet north of the Site at a Shell station. The East Bay Municipal Utilities Department (EBMUD) provides the water and sewer service for the Site and has no municipal wells in the area. The Utility Conduit Survey concluded that two main trenches border the Site, which follows 34th Street and San Pablo Avenue. The approximate locations of utilities including water service, storm line drain, sanitary sewer line, gas main, and underground electric

service are shown in **Figure 2**. Previous soil borings performed in the sidewalk along the downgradient perimeter of the Site (B1 through B4), confirmed that soil contamination was limited to the shallow soils of the Site and did not migrate offsite in any appreciable concentration. Therefore transport of contaminants along utility trenches and corridors within the street would not be a concern at the Site.

2.3 Previous Site Assessment Activities

An initial site assessment was conducted by Groundwater Technology in August of 1986 and consisted of advancing three soil borings and installing three 2-inch monitoring wells to 15 feet bgs. Only soil samples from SB-1 at 9 feet bgs and MW-3 at 4 feet bgs were found to contain detectable hydrocarbons (67 and 22 parts per million (ppm), respectively, with TPHg being the only constituent analyzed). However, these concentrations were below the SFRWQCB's ESLs for TPHg in shallow soil (100 mg/kg).

A follow-up assessment in November 1986 was conducted by Woodward-Clyde Consultants and consisted of installing four monitoring wells (MW-4 through MW-7). Wells MW-4 and MW-7 were constructed as 4-inch diameter wells to allow them to be used for extraction activities, if required, while MW-5 and MW-6 were constructed as 2-inch diameter wells. Free product was found to be present in MW-1 at a thickness of approximately 0.3 feet. Soil samples were taken at the approximate location of the water table at a depth of 7 feet in all of the borings except for MW-5 where a sample could not be recovered. Only the samples from MW-4 and MW-7 exhibited hydrocarbon odors and were submitted to a laboratory for analysis. Only the sample from MW-4 was found to have detectable levels of TPHg of 1,200 ppm, which is above the ESL of 100 mg/kg, and a combined total benzene, toluene, xylenes, ethylbenzene, and xylenes (BTEX) of 107 ppm, which is higher than the highest individual BTEX constituent ESL (3.3 mg/kg for ethylbenzene). Water samples were taken from each newly installed well and submitted for laboratory analysis. Only the water samples from MW-4 and MW-7 had detectable levels of TPHg of 97 ppm and 38 ppm, respectively, and total BTEX of 18.8 ppm and 13.9 ppm, respectively. The SFRWQCB's ESLs for TPHg, benzene, toluene, ethylbenzene, and xylenes in groundwater are 100 µg/L, 1.0 µg/L, 40 µg/L, 30 µg/L, and 20 µg/L, respectively.

Soil borings B-1 through B-5 were completed to total a depth of 16 feet (except for B-4 which was completed to 4 feet) on September 11, 1987 by Interstate Soils Sampling under supervision from an engineering geologist from Hydrotech. Laboratory analysis was performed on soil samples from borings B-2 and B-3 because they had the highest field-measured readings. TPH was present at the five foot interval of B-2 at a concentration of 3,600 mg/kg. The soil samples collected from B-3 were non-detect.

On March 23, 1998, four gasoline USTs and their associated piping were removed from the Site. The USTs were 10,000-gallon and 8,000-gallon capacity and were constructed of single-walled steel. On March 27, 1998, two 20,000-gallon double-walled USTs were installed at the Site. Approximately 1,093 tons of impacted soil was excavated. Soil samples and groundwater samples were collected and analyzed. Areas of significant petroleum hydrocarbon impact were determined in the former UST basin and the product piping trenches. TPH concentrations were

detected between 9.5 mg/kg in soil sample P-5 to 4,900 mg/kg in soil sample P-4. An estimated

3,697 pounds of hydrocarbon were removed from the Site in these impacted soils.

On January 6, 2004, AGE completed four offsite soil borings (B-1 through B-4) to a total depth of 20 feet bgs. TPH as gasoline (TPHg) was detected in B-2 at the five foot interval at a concentration of 654 mg/kg and in B-4 at the five foot interval at 30 mg/kg.

In a transmittal letter dated March 11, 2004, Thrifty submitted preliminary soil and groundwater data from the four offsite soil borings (B-1 through B-4) and onsite well replacement activities performed by AGE. Post-initial remediation concentrations of TPHg were detected in samples B2-5 (654 mg/kg) and B4-5 (30 mg/kg), benzene concentrations detected ranged from 0.0018J mg/kg in B1-5 to 0.016 mg/kg in B1-10, and MTBE concentrations ranged from 0.0055 mg/kg in B2-20 to 1.32 mg/kg in B3-15. The ESLs for TPHg, benzene, and MTBE in soil are 100 mg/kg, 0.044 mg/kg, and 0.023 mg/kg, respectively. In a letter dated March 19, 2004, the ACHCS requested that Thrifty prepare a workplan to address the offsite contamination detected during the January 2004 site assessment conducted by AGE. After further discussing the scope of work with the ACEH in an e-mail dated April 27, 2004, Thrifty submitted a workplan to install one onsite (MW-10) and two offsite wells (MW-8 and MW-9) downgradient of the Site (**Figure 2**). The ACEH responded in an e-mail dated May 4, 2004, requesting additional borings to delineate the plume to the west and southwest of the Site. Thrifty submitted a revised Workplan for Additional Offsite Assessment dated May 7, 2004 that included two additional borings (SB-5 and SB-6) to the southwest of the Site (**Figure 2**). In a letter dated May 17, 2004, the ACEH approved the May 7, 2004 workplan with the request that additional borings be considered if soil and groundwater samples indicate significant hydrocarbon contamination. Thrifty selected GHC to conduct site assessment activities. GHC had obtained well permits and information regarding the process of obtaining an encroachment permit from the City of Oakland Public Works Department (COPWD). Thrifty to date has not been able to obtain an encroachment permit or access agreements from the COPWD.

On May 18, 2007, ACEH sent a letter to Thrifty with technical comments regarding the dissolved hydrocarbon plume characterization, proposed soil boring installation and soil sampling, well installation and development, preferential pathway study, soil and groundwater chemical analysis, and site conceptual model development. ACEH requested the preparation of a Revised Workplan for Soil and Groundwater Investigation with Revised Site Conceptual Model and Updated Preferential Pathway Study and Soil and Groundwater Investigation Report.

On July 18, 2007, Thrifty submitted a Revised Workplan for Additional Off-Site Assessment (Workplan). The Workplan proposed three offsite soil borings, three offsite groundwater wells, and one onsite groundwater well. The Workplan also proposed completing a revised preferential pathway study and revised site conceptual model. On August 7, 2007 the ACEH provided approval of the Workplan.

In a letter dated August 7, 2007, ACEH requested that Thrifty provide an explanation for the inconsistent groundwater monitoring data observed in the analytical results of groundwater samples collected during the first and second quarter 2007. On August 21, 2007 Thrifty submitted an Explanation of Fluctuating Dissolved-Phase Hydrocarbon Concentrations in response to the August 7, 2007 ACHCS letter.

The Revised Workplan, Additional Off-Site Assessment, Thrifty Oil Co. Station No. 049, ARCO Products Company Station #9535, 3400 San Pablo Avenue, Oakland, California (Revised Workplan) dated July 18, 2007 prepared by Equipoise (EQC) was submitted to the ACEH to address the ACEH request. On August 7, 2007 the ACEH conditionally approved the Revised Workplan.

On August 8, 2007 Thrifty contacted the City of Oakland and requested an encroachment permit application package for the proposed offsite groundwater well locations on San Pablo Avenue, Oakland.

Thrifty's legal representatives have had numerous communications with the City of Oakland Attorney's Office regarding encroachment permit requirements but to date no agreement has been reached.

On September 13, 2007 EQC on behalf of Thrifty submitted a Request for Extension letter to the ACEH. EQC had submitted requests to both the DWR and ACPW for production well information needed for the Revised Preferential Pathway Study. As of September 13, 2007 EQC had not received a response from either agency and therefore requested that the ACEH provide an extension of the due date of the requested report.

On September 27, 2007, Thrifty submitted an Encroachment Permit Delays and Request for Revised Well and Soil Borings Locations letter to the ACEH. The letter indicated that Thrifty was still negotiating with the City of Oakland regarding the encroachment permits for the wells proposed in San Pablo Avenue, Oakland, but requested that the ACEH consider revised well locations (which were proposed on private property).

On November 6, 2007, ACEH sent a letter to Thrifty responding to Thrifty's September 27, 2007 letter and indicated that moving the monitoring wells MW-8, MW-9, and MW-11 to adjacent private properties was acceptable provided the new locations of the monitoring wells are as close as practicable to the sidewalk at each location.

On November 13, 2007, EQC submitted the Revised Preferential Pathway Study (PPS) which discussed the results of the nearby well survey.

Thrifty and EQC identified and contacted the property owners for the three proposed offsite well locations (MW-8, MW-9, and MW-11). Site access agreements were sent via certified mail to each property owner on December 7, 2007.

In concurrently sent letters dated January 31, 2008, Steven Plunkett of the ACEH informed the adjacent property owners that they were required to execute the access agreements sent by Thrifty otherwise they could potentially be responsible for the cost of environmental assessments on their properties.

On February 12, 2008, Thrifty received an executed access agreement from Vern Lenberg LLC (executed by Mr. Vernon Coleman) for the property located at 3431 San Pablo Avenue, Oakland, California.

On March 5, 2008, Thrifty spoke to Mr. Kelvin Tse (the owner of the property located at 3315 San Pablo Avenue, Oakland, California). During the telephone conversation Mr. Tse

requested that Thrifty supply: 1) an assurance that the proposed groundwater well be installed as close as possible to the northern corner of your property; 2) an explanation of why Thrifty has proposed to install a groundwater well on your property and the details of the sampling and chemical analysis Thrifty will conduct during the installation and during quarterly groundwater sampling events, and 3) a guarantee that Thrifty will mitigate contamination encountered during our investigation at the above mentioned property. On March 5, 2008 Thrifty sent an email summarizing the telephone conversation to Mr. Tse with an attached copy of the Third Quarter 2007 Status Report, for Thrifty Station No. 049. On March 12, 2008 Thrifty sent a letter to Mr. Tse in response to his request on March 5, 2008 for information and guarantees. Included in Thrifty's letter were documents that Thrifty acquired from online databases that indicated Mr. Kelvin Tse and Ms. Linda Tse are the only legal owners of the above mentioned property.

The access agreement Thrifty sent to the Moriah Christian Fellowship Baptist Church, Inc located at 3354 San Pablo Avenue, Oakland, California, 94608, was returned to Thrifty on March 14, 2008. It appears that the post office attempted delivery of the package on December 13, 2007 and March 8, 2008, and finally returned it to Thrifty with a "final notice" and "unable to forward" stamps on the front of the package. Thrifty called the United States Postal Service (USPS) at 800-275-8777 and they confirmed that the stamps on the front of the envelope indicated that the package had not been received by the addressee and the package had probably been classified as abandoned, and therefore returned to Thrifty. A short examination of the returned envelope showed that the seals applied on the envelope as part of the certified mail features were broken which suggests that somewhere, someone searched the contents of the envelope. Thrifty conducted a search on the United States Postal Service website to track the package (tracking number 7007 0710 0005 2435 5749) and discovered that the only recorded delivery of the package was its return to Thrifty on March 14, 2008 at 8:49 AM.

On April 21, 2008, a Thrifty representative contacted Mr. Kelvin Tse to request that he return an executed copy of the access agreement that had been mailed to him on March 12, 2008. During the conversation with Kelvin Tse once again insisted that his brother, Mr. Jack Chi Tse, was an owner of the property located at 3315 San Pablo Avenue, Oakland, California. On April 21, 2008, Thrifty completed an additional property title database search, results of the search identified Mr. Jack Chi Tse as an owner of the property located at 3315 San Pablo Avenue, Oakland California. On April 22, 2008, Thrifty mailed a revised access agreement (which included Mr. Jack Chi Tse) to Mr. Kelvin Tse and Mr. Jack Chi Tse. In early May 2008, executed access agreements were received by Thrifty from Mr. Jack Tse and Mr. and Mrs. Kelvin Tse and on May 19, 2008 Thrifty executed the agreements and mailed copies back to the respective parties.

On June 25, 2008, Steven Plunkett of ACEH contacted Simon Tregurtha (a Thrifty representative) via the telephone and stated he had recently been in contact with a representative of the Moriah Christian Fellowship Baptist Church (the Church) regarding the placement of a groundwater monitoring well on their property. Mr. Plunkett said that the Church representative had indicated they would be reviewing the access agreement and would return a signed copy to

Thrifty in the near future. Mr. Plunkett also stated that he was going to enlist the help of the Oakland Fire Department to convince the Church to sign the access agreement. To date, Thrifty has not received the executed access agreement from the Church.

In a letter dated October 14, 2010, the ACEH conditionally approved the *Verification Sampling and Downgradient Investigation Workplan* (Workplan) prepared by Thrifty and dated September 22, 2010. As conditional approval, the ACEHs letter requested that Thrifty propose one additional boring location across Linden Street north of the proposed boring SB-3. In response to the ACEHs letter, Thrifty proposed one additional offsite soil boring location (SB-4) in the October 29, 2010 *Addendum to the September 22, 2010 Verification Sampling and Downgradient Investigation Workplan*.

The verification sampling and downgradient groundwater investigation were conducted by GHC on November 30, 2010. The sampling consisted of two onsite soil borings (SB-1 and SB-2) and two offsite soil borings (SB-3 and SB-4), with grab groundwater samples proposed from the two offsite borings. The data collected during this investigation indicate that hydrocarbon-affected soil in the area surrounding borings SB-1 and SB-2 had been successfully remediated, as indicated by the residual hydrocarbon concentrations detected in these soil samples being below the San Francisco Bay Regional Water Quality Control Board's (SFRWQCB) environmental screening levels (ESLs) with the exception of only two soil samples from SB-2 which were only slightly over the ESLs with a TPHg concentration of 510 mg/kg and the 15 foot soil sample from SB-2 with an MTBE concentration of 0.091 mg/kg.

Groundwater was not present in shallow soil in boring SB-3 so a sample could not be collected, however the soil sample results indicated that there did not appear to be any hydrocarbon impacts in the offsite soils sampled and groundwater if it were present. The grab groundwater sample collected from soil boring SB-4 indicated only a minor detectable concentration of MTBE at 0.012 µg/L, which is below the California MCL (0.013 µg/L for MTBE) for this compound. It was concluded that based on these results that the petroleum hydrocarbon groundwater plume is relatively confined to the property and it has been successfully delineated. It was also concluded that it is very possible that this minor impact in offsite boring SB-4 has actually originated from the neighboring Shell Station located upgradient of this area.

Based on the data collected and analyzed during this investigation, along with the remedial efforts performed by Thrifty at the Site for soil and groundwater issues to date, GHC stated that it believed that the Site had been successfully assessed and remediated to residual concentrations that no longer appear to present a threat to groundwater or the environment. Any residual concentrations that remained below the Site, are not migrating offsite and will naturally attenuate to non-detect levels in a reasonable time frame. Therefore GHC on behalf of Thrifty respectfully requested closure for soil and groundwater issues at the Site and recommended no further action for assessment and remedial measures at the Site at that time.

A summary of soil sample results is included as **Table 1A**, and soil sample results for oxygenates is included as **Table 1B**. Historic groundwater data is tabulated in **Table 2A**, and historic oxygenates in groundwater data is tabulated in **Table 2B**. A summary table of well completion details for all historic wells completed at the Site is included as **Table 3**. **Figures 4A**

through **4C** represent contaminant concentrations of total petroleum hydrocarbons as gasoline, benzene, and MTBE in soil pre-remediation (0 – 10 feet bgs), respectively; **Figures 4D** through **4F** represent contaminant concentrations of total petroleum hydrocarbons as gasoline, benzene, and MTBE in soil pre-remediation (11 – 20 feet bgs), respectively.

As stated in the Fourth Quarter 2012, Status Report and Request for Low-Threat UST Case Closure submitted by Thrifty dated January 7, 2013, Thrifty believed that the current Site conditions and remediation activities completed at the Site warrant Low-Threat UST Case Closure in accordance with the May 1, 2012 State Water Resources Control Board LTCP. In addition, in this report ethanol was detected in groundwater samples collected from 5 of the 8 site wells, including first time detections in MW-1, MW-3, and MW-7. The presence of ethanol since 2009 in several wells suggests that ARCO had a surface release around this time frame since Thrifty ceased operation on the Site in May 1997 prior to the time ethanol was used as a gasoline additive.

2.4 Previous Remedial Activities

Site remedial activities were initiated in April 1991. The remediation system consisted of a groundwater treatment system using activated carbon, with groundwater extraction from well RW-1. On April 4, 2003, the system was shut off for upgrade activities after producing and treating approximately 1,445,088 gallons of water. As of June 24, 2008, the upgraded system produced and treated approximately 398,608 gallons of groundwater, and the old system and upgraded system produced and treated a combined cumulative system total of 1,843,696 gallons of groundwater since the system startup (April 1991).

Thrifty selected Advance GeoEnvironmental (AGE) to conduct remedial system upgrade activities including installation of a new treatment compound, installation of new piping, connection of piping to the replacement well network, and the operation and maintenance of the upgraded groundwater pump and treat system. In January 2004, AGE abandoned wells MW-2, MW-4, and RW-1 and replaced them with wells MW-2R, MW-4R, and RW-1R.

The upgraded remediation system was restarted by AGE for continuous operation on June 21, 2004. The primary components of the upgraded system within the treatment compound consist of an air compressor, 500-gallon settling tank, control panel, and three 200-pound granular activated carbon canisters. The upgraded system removed groundwater from extraction wells MW-2R, MW-4R, and RW-1R that were each equipped with downhole submersible pumps. On November 2, 2004, AGE reported that the pump had been stolen from well MW-4R. Because well MW-4R was producing more water than well MW-2R, the pump from well MW-2R was removed and installed in well MW-4R. On February 25, 2005, a new pump was installed in well MW-4R and the existing pump was replaced in well MW-2R.

On January 12, 2005, system operations and maintenance duties were assumed by EMC from AGE. According to EMC, as of April 28, 2011 the system was permanently shut down, and the old system and upgraded system produced and treated a cumulative system total of 2,684,436 gallons (**Table 4**).

2.5 Interim Remedial Action

On March 23, 1998, four gasoline USTs and their associated piping were removed from the Site. The USTs were 10,000-gallon and 8,000-gallon capacity and were constructed of single-walled steel. On March 27, 1998, two 20,000-gallon double-walled USTs were installed at the Site. Approximately 1,093 tons of impacted soil was excavated. An estimated 3,697 pounds of hydrocarbon were removed from the Site in these impacted soils.

On April 22, 2008 Thrifty submitted the *Workplan for Five Bi-Weekly 24-Hour Mobile Dual Phase Extraction Events* (Workplan). The Workplan proposed conducting five bi-weekly 24-hour mobile DPE events as an interim remedial action in order to supplement current groundwater pump-and-treat operations and accelerate the remediation of the groundwater and soil contamination at the Site and expedite case closure. Historical groundwater analytical data indicated a decreasing trend in dissolved-phase hydrocarbon concentrations at the Site with the plume being limited to the area of wells MW-2R, MW-4R, and RW-1R. Thrifty proposed using onsite wells MW-2R, MW-4R, and RW-1R as simultaneous extraction points, and wells MW-1, MW-3, and MW-7 as observation wells.

In a letter dated July 29, 2008 the ACHCS stated that they did not agree with the scope of work proposed in Thrifty's Workplan and directed Thrifty to submit a Feasibility Study and Corrective Action Plan (FS/CAP). On September 25, 2008, Thrifty submitted a FS/CAP prepared by GHC and dated September 22, 2008. The FS/CAP proposed a 5-Day 24-hour MPE event. From March 22 through 27, 2010, CalClean Inc. (CalClean) conducted a continuous 5-day (24 hour/day) high vacuum dual-phase extraction (HVDPE) event in wells MW-2R, MW-4R, and RW-1R. The HVDPE event was implemented under the "60-day rule" and completed in accordance with the September 25, 2008 FS/CAP and February 9, 2010, *Notification to Proceed with the Proposed 5 Consecutive Day (24-hour/day) Multi-Phase Extraction Event* letter. Details of the HVDPE event were presented in a *Continuous 5-day Mobile High Vacuum Dual-Phase Extraction Report and Workplan to Conduct a Continuous 30-Day Mobile High Vacuum Dual-Phase Extraction Event* (HVDPE Report/WP) dated April 21, 2010. The HVDPE event was very successful in reducing residual vapor phase hydrocarbons in the subsurface soils. Reportedly, 510.40 pounds of vapor phase hydrocarbons were removed and destroyed, and 12,840 gallons of groundwater were removed and discharged to the sewer through the existing onsite groundwater treatment system. First Semester 2010 groundwater sampling results for wells MW-2R, MW-4R and RW-1R indicate a significant decrease in total petroleum hydrocarbons as gasoline (TPHg) and benzene concentrations when compared to Second Semester 2009 results.

From August 4, 2010 through September 4, 2010, CalClean Inc. (CalClean) conducted a continuous 30-day (24 hour/day) high vacuum dual-phase extraction (HVDPE) event in wells MW-2R, MW-4R, and RW-1R. The HVDPE event was implemented in accordance with the *Continuous 5-day Mobile High Vacuum Dual-Phase Extraction Report and Workplan to Conduct a Continuous 30-Day Mobile High Vacuum Dual-Phase Extraction Event* (HVDPE Report/WP) dated April 21, 2010 which was approved by default under the "60-day rule". The HVDPE event was very successful in reducing residual vapor phase hydrocarbons in the subsurface soils. Reportedly, 1,613.97 pounds of vapor phase hydrocarbons were removed and destroyed at an average removal rate of 2.24 pounds per hour, and 12,869 gallons of groundwater

were removed and discharged to the sewer through the existing onsite groundwater treatment system. During the last ten days of operation vapor concentrations declined significantly and the vapor removal rate dropped to approximately 0.54 pounds per hour. The results of this work were documented in CalClean's *High Vacuum Dual Phase Extraction Report* dated September 29, 2010. All total there were approximately 2,124.37 pounds of petroleum hydrocarbons recovered in the vapor phase during these activities.

A combined total of approximately 5,821.37 pounds of petroleum hydrocarbons were removed from the Site through vapor phase extraction during interim remedial measures (2,124.37 pounds) and soil excavation (3,697 pounds) throughout the history of remedial activities at the Site (**Table 4**).

Section 3.0

Updated Site Conceptual Model

This Site Conceptual Model was prepared on behalf of Thrifty Oil Co. (Thrifty) to fulfill the requirements set forth by the ACEH in their letter dated December 7, 2005. The current Site Conceptual Model is as follows:

- Soils beneath the Site consist primarily of Quaternary alluvial deposits of silty, sandy, and gravelly clays from ground surface to 25 feet below ground surface (bgs), the maximum depth explored (**Figures 3A, 3B, and 3C**). Bedrock in the region consists of sedimentary, meta-sedimentary, volcanic and intrusive rocks of Jurassic through Tertiary geologic age.
- Hydrocarbon soil contamination was first detected in August of 1986 in one soil boring (SB-1) and one monitoring well (MW-3) at concentrations up to 67 mg/kg, which indicated that the initial petroleum hydrocarbon release occurred at some point prior to this first assessment.
- On March 23, 1998, four gasoline USTs and their associated piping were removed from the Site. The USTs were 10,000-gallon and 8,000-gallon capacity and were constructed of single-walled steel. On March 27, 1998, two 20,000-gallon double-walled USTs were installed at the Site thus stopping the release. Approximately 1,093 tons of impacted soil was excavated. Soil samples and groundwater samples were collected and analyzed. Areas of significant petroleum hydrocarbon impact were the former UST basin and the product piping trenches. TPH concentrations were detected at concentrations between 9.5 mg/kg in soil sample P-5 to 4,900 mg/kg in soil sample P-4. An estimated 3,697 pounds of hydrocarbon were removed from the Site in these impacted soils.
- TPHg soil concentrations in excess of 100 mg/kg are confined 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 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. Pre-remediation, shallow (before April 1991, 0-10 feet bgs) TPHg, benzene, and MTBE soil concentration maps are included as **Figures 4A through 4C**, respectively. Pre-remediation deep (before April 1991, 11-20 feet bgs) TPHg, benzene, and MTBE soil concentration maps are included as **Figures 4D through 4F**, respectively. Post-remediation, shallow (after April 1991, 0-10 feet bgs) TPHg, benzene, and MTBE soil concentration maps are included as **Figures 4G through 4I**, respectively. Post-remediation deep (after April 1991, 11-20 feet bgs) TPHg, benzene, and MTBE soil concentration maps are included as **Figures 4J through 4L**, respectively.
- Based on the Groundwater Production Well and Utility Conduit Survey Report conducted by AGE, dated October 21, 2003, well driller's reports were found for seven water wells

located within a one-mile radius of the Site, with four of the seven wells having been located. The nearest groundwater production well is located approximately 900 feet west of the Site. No other sensitive receptors were identified visually; however, three additional leaking underground storage tanks (LUST) sites were located adjacent to the Site, with the nearest LUST site located 50 feet north of the Site at a Shell station. The East Bay Municipal Utilities Department (EBMUD) provides the water and sewer service for the Site and has no municipal wells in the area. The Utility Conduit Survey concluded that two main trenches border the Site, which follows 34th Street and San Pablo Avenue. The approximate locations of utilities including water service, storm line drain, sanitary sewer line, gas main, and underground electric service are shown in **Figure 2**. These utility trenches are not believed to be a conduit for contaminant migration due to the tight nature of Site soils and low hydraulic conductivities and shallow groundwater gradients in the area. In addition, previous soil borings (installed in October 2004 and following removal of the Thrifty fuel system in 1998) in the sidewalk along the downgradient perimeter of the Site (B1 through B4), confirmed that soil contamination was limited to the shallow soils of the Site and did not migrate offsite in any appreciable concentration. Therefore transport of contaminants along utility trenches and corridors within the street would not be a concern at the Site.

- Current and historic depths to groundwater beneath the Site ranged from approximately 4 to 7 feet below grade. Groundwater has historically flowed approximately southwest at a hydraulic gradient ranging from approximately 0.043 feet per foot to 0.06 feet per foot. During the Third Quarter of 2013, depth to groundwater varied from **4.38** feet in MW-4R to **5.74** feet in MW-3. Groundwater elevations ranged from 27.77 feet above mean sea level (msl) to 25.41 feet msl in wells MW-6 and MW-3, respectively. Based on the calculated groundwater elevations for the Site, groundwater was estimated to be flowing to the south at an approximate gradient of 0.0197 ft/ft. Based on this gradient, an estimated hydraulic conductivity of silt at 0.08 m/day (Todd, 1980) and an assumed porosity of 30 percent, the groundwater velocity beneath the Site is calculated to be approximately 0.0053 meters per day or 1.92 meters per year.
- During the 3rd quarter 2013 groundwater sampling event on September 26, 2013, samples were taken from wells MW-1 through MW-7 and RW-1R. TPHg was only detected in wells MW-3 and MW-1R at concentrations of 1,430 µg/L and 2,880 µg/L, respectively. Benzene was also detected in these same two wells at concentrations of 30 µg/L and 24 µg/L, respectively. MTBE was not detected in any of the eight wells above the laboratory MDL of 0.19 µg/L. TBA was not detected in any of the eight wells with a laboratory detection limit of 5.2 µg/L. Ethanol was also only detected in wells MW-3 and RW-1R at concentrations of 3,900 µg/L and 2,200 µg/L, respectively. Post-remediation (September 26, 2013) distribution of TPHg, benzene, MTBE, and ethanol in groundwater is shown in **Figures 6A, 6B, 6C, 6D, and 6E**, respectively, and is also summarized in the **Summary Table** and historic **Tables 2A and 2B**. The slightly elevated BTEX and ethanol concentrations in MW-3 and RW-1R appear to be residual concentrations associated with a 2009 surface release by ARCO most likely in the area of the dispensers near MW-3 and the USTs near well RW-1R, and do not appear to be the result of the historic Thrifty release at the Site.

- Site remedial activities were initiated in April 1991. The remediation system consisted of a groundwater treatment system using activated carbon, with groundwater extraction from well RW-1. On April 4, 2003, the system was shut off for upgrade activities. As of April 4, 2003, the system treated approximately 1,445,088 gallons of groundwater since startup (April 1991). Thrifty selected Advance GeoEnvironmental (AGE) to conduct remedial system upgrade activities including installation of a new treatment compound, installation of new piping, connection of piping to the replacement well network, and the operation and maintenance of the upgraded groundwater pump and treat system. In January 2004, AGE abandoned wells MW-2, MW-4, and RW-1 and replaced them with wells MW-2R, MW-4R, and RW-1R. According to EMC, as of April 28, 2011 the system was permanently shut down, and the old system and upgraded system produced and treated a cumulative system total of 2,684,436 gallons (**Table 4**).
- HVDPE was completed at the Site during two separate events, the first was a 5 day continuous event March 22 through 27, 2010 which was conducted as an interim remedial measure and the second was a 30 day continuous event August 4, 2010 through September 4, 2010 in accordance with the submitted FS/CAP which was submitted to the ACEH in 2008. A combined total of approximately 5,821.37 pounds of petroleum hydrocarbons were removed from the Site through HVDPE measures (2,124.37 pounds) and soil excavation (3,697 pounds) throughout the history of remedial activities at the Site.
- Graphs of TPHg, benzene, MTBE, TBA, and ethanol concentrations along with groundwater elevations are plotted over time for each of the wells and included in **Appendix D**. As demonstrated by the graphs for all of the individual wells, the overall concentrations indicate decreasing concentrations for all chemicals of concern. More recent spikes in ethanol and TPHg concentrations, and other constituents of concern appear to have been related to and ARCO surface release that has dissipated, and low level detectable concentrations only remain in a few wells at the Site, MW-2R, MW-3, and RW-1R, for TPHg, ethanol, and MTBE, respectively. This trends and concentrations indicate that the dissolved phase groundwater plume is shrinking in size and concentrations are continuing to decline to near non-detectable concentrations for each constituent of concern. Benzene, the main risk driver at the Site, is in fact currently non-detect in all wells at the Site.

Section 4.0

Third Quarter Groundwater Monitoring 2013

During the Third Quarter of 2013, the groundwater monitoring wells were gauged and sampled by EMC on September 26, 2013. Eight wells (MW-1, MW-2R, MW-3, MW-4R, MW-5, MW-6, MW-7, and RW-1R) were gauged and sampled by EMC during this event. Field sampling data sheets are included in **Appendix B**.

Groundwater samples were delivered under strict chain-of-custody procedures to Associated Laboratories, a California-certified analytical laboratory in Orange, California. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015B. The groundwater samples were also analyzed for BTEX and MTBE by EPA Method 8260B. Groundwater analysis also included oxygenates including ethyl tert-butyl ether (ETBE), isopropyl ether (DIPE), tert-amyl methyl ether (TAME), and tertiary-butyl alcohol (TBA) using EPA method 8260B. Groundwater samples were also analyzed for ethanol by EPA Method 8260B. Copies of laboratory reports and chain-of-custody documentation are attached in **Appendix C**.

During the Third Quarter of 2013, depth to groundwater varied from **4.38** feet in MW-4R to **5.74** feet in MW-3. Groundwater elevations ranged from 27.77 feet above mean sea level (msl) to 25.41 feet msl in wells MW-6 and MW-3, respectively. Based on the calculated groundwater elevations for the Site, groundwater was estimated to be flowing to the south at an approximate gradient of 0.0197 ft/ft. A groundwater elevation contour map generated for the Third Quarter 2013 is included as **Figure 5**. Groundwater gauging records are included with the field sampling sheets in **Appendix B**.

During the 3rd quarter 2013 groundwater sampling event on September 26, 2013, samples were taken from wells MW-1 through MW-7 and RW-1R. TPHg was only detected in wells MW-3 and MW-1R at concentrations of 1,430 µg/L and 2,880 µg/L, respectively. Benzene was also detected in these same two wells at concentrations of 30 µg/L and 24 µg/L, respectively. MTBE was not detected in any of the eight wells above the laboratory MDL of 0.19 µg/L. TBA was not detected in any of the eight wells with a laboratory detection limit of 5.2 µg/L. Ethanol was also only detected in wells MW-3 and RW-1R at concentrations of 3,900 µg/L and 2,200 µg/L, respectively. Post-remediation (September 26, 2013) distribution of TPHg, benzene, MTBE, and ethanol in groundwater is shown in **Figures 6A, 6B, 6C, 6D, and 6E**, respectively, and is also summarized in the **Summary Table** and historic **Tables 2A and 2B**. The slightly elevated BTEX and ethanol concentrations in MW-3 and RW-1R appear to be residual concentrations associated with a 2009 surface release by ARCO most likely in the area of the dispensers near MW-3 and the USTs near well RW-1R, and do not appear to be the result of the historic Thrifty release at the Site.

Current quarter groundwater sampling results are included in the **Summary Table**. Historic groundwater data is also presented in **Tables 2A and 2B**. Graphs of TPHg, benzene, MTBE, TBA, and ethanol concentrations along with groundwater elevations are plotted over time for each of the wells and included in **Appendix D**. As demonstrated by the graphs for all of the

individual wells, the overall concentrations indicate decreasing concentrations for all chemicals of concern. More recent spikes in ethanol and TPHg concentrations and other constituents of concern appear to have been related to an ARCO surface release that has dissipated, and low level detectable concentrations only remain in a few wells at the site, MW-3 and RW-1R for TPHg, BTEX, and ethanol.

Section 5.0

Petroleum Release Low Threat Closure Evaluation

According to the State Water Resources Control Board (State Water Board) Resolution 2012-0016, Petroleum Release Low-Threat UST Case Closure Policy (Closure Policy) adopted on May 1, 2012 there are four main sets of criteria considered for Site Closure which include general criteria and three media-specific criteria (groundwater criteria, vapor intrusion to indoor air criteria, and direct contact and outdoor air exposure criteria). It is important to note that this policy is flexible, i.e., if a site does not meet one of the media-specific criteria, then a site-specific evaluation may be performed for that exposure pathway to show low-threat conditions, and this policy can still be used for the other sets of criteria. A copy of the Low-Threat UST Case Closure Policy Check List completed for the Site is included in **Appendix E**.

5.1 The Site Meets the Closure Policy's General Criteria

The Site meets all general criteria that must be satisfied to qualify for Low-Threat Closure, as follows:

- *The unauthorized release is located within the service area of a public water system.* A public water system is described as one with 15 or more service connections or one which regularly serves at least 25 individuals daily at least 60 days per year. The Site meets this criterion and is served by the East Bay Municipal Utility District.
- *The unauthorized release consists only of petroleum.* The residual contamination detected surrounding the former UST tank pit and dispensers at the Site consist only of petroleum hydrocarbons, and it was associated with a former UST and UST systems (i.e. dispensers and piping).
- *The unauthorized ("primary") release from the UST system has been stopped.* On March 23, 1998, four gasoline USTs and their associated piping were removed from the Site. The USTs were 10,000-gallon and 8,000-gallon capacity and were constructed of single-walled steel. On March 27, 1998, two 20,000-gallon double-walled USTs were installed at the Site.
- *Free product has been removed to the maximum extent practicable.* Free product was never detected at the Site.
- *A site conceptual model that assesses the nature, extent, and mobility of the release has been developed.* A site conceptual model has been developed for the Site and previously submitted to the ACEH, the latest updated Site Conceptual Model is included in Section 3.0 of this report.
- *Secondary source removal has been removed to the extent practicable.* Soil over-excavation was originally performed in 1998, at the time of UST removal approximately 1,093 tons of impacted soil was excavated. An estimated 3,697 pounds of hydrocarbon were removed from the Site in these impacted soils. Site remedial activities were initiated in April 1991. The remediation system consisted of a groundwater treatment system using activated carbon, with groundwater extraction from well RW-1. According to EMC, as of April 28, 2011 the system was permanently shut down, and the old system and upgraded system produced and treated a cumulative system total of 2,684,436 gallons (**Table 4**). A combined total of approximately 5,821.37 pounds of petroleum hydrocarbons were removed from the

Site through HVDPE measures (2,124.37 pounds) and soil excavation (3,697 pounds) throughout the history of remedial activities at the Site.

- *Soil and groundwater have been tested for methyl tert butyl ether (MTBE) and results were reported to the lead regulatory agency.* Soil and groundwater were previously analyzed for MTBE and results were reported to the ACEH, MTBE and other oxygenates was again recently (September 26, 2013) tested for in groundwater, and MTBE was not detected in any of the Site well above the laboratory MDL of 0.19 µg/L. Other oxygenates including TBA, DIPE, ETBE, and TAME were also not detected in any of the eight wells sampled on the Site above their respective laboratory detection limits.
- *A nuisance as defined by Water Code Section 13050 does not exist at the site.* No nuisance, as defined, is present at the Site.

5.2. Summary of Closure Policy Groundwater Criteria

The following outlines the groundwater criteria as described in the Closure Policy that must be satisfied to qualify for Low-Threat Closure:

- *Only applicable to groundwater with a designated beneficial use.*
- *For sites with releases that have not affected groundwater, if the soil does not contain sufficient mobile constituents to cause groundwater to exceed groundwater criteria in this policy, then the sites shall be considered low-threat sites for groundwater medium.*
- *For older releases, the absence of current groundwater impacts is often a good indication that residual concentrations present in the soil are not a source of groundwater pollution.*
- *Plumes with chemicals of concern exceeding water quality objectives must be stable or decreasing in areal extent, which is a contaminant mass that has expanded to its maximum extent-the distance from the release where attenuation exceeds migration.*

To be considered “low threat” according to the Closure Policy, a plume that exceeds water quality objectives (WQOs) must be stable or decreasing in areal extent and must meet all of the characteristics of one of the five classes of sites listed below:

- *Class 1. Contaminant plume that exceeds WQOs is less than 100 feet in length; there is no free product; and the nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary.*
- *Class 2. Containment plume that exceeds WQOs is less than 250 feet in length; there is no free product; the nearest water supply well or surface water body is greater than 1,000 feet from the defined plume boundary; the dissolved concentration of benzene is less than 3,000 micrograms per liter (µg/L), and the dissolved concentration of MTBE is less than 1,000 µg/L.*
- *Class 3. Contaminant plume that exceeds WQOs is less than 250 feet in length; free product has been removed to the extent practicable; free product may still be present below the site where the release originated, but does not extend offsite; plume has been stable or decreasing for minimum of 5 years; nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary; and property owner is willing to accept a land-use restriction if the regulatory agency requires a land-use restriction as a*

condition of closure.

- *Class 4. Contaminant plume that exceeds WQOs is less than 1,000 feet in length; there is no free product; the nearest water supply well or surface water body is greater than 1,000 feet from the defined plume boundary; the dissolved concentration of benzene is less than 1,000 µg/L; and the dissolved concentration of MTBE is less than 1,000 µg/L.*
- *Class 5. The regulatory agency determines that, based on analysis of site-specific conditions and under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment, and WQOs will be achieved within a reasonable time frame.*

5.3. The Site Meets the Closure Policy's Groundwater Criteria

Based on the groundwater criteria listed above, Waterstone believes that the Site would be categorized as Class 1 - Contaminant plume that exceeds WQOs is less than 100 feet in length; there is no free product; and the nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary. This is demonstrated by the fact that no free product has been detected at this Site and the chemicals of concern that have been detected in groundwater in the past, benzene and MTBE, in September 2013 benzene was only detected in two of the eight groundwater monitoring wells at low concentrations of 30 µg/L in MW-3 and 24 µg/L in RW-1R and MTBE was not detected in any of the eight wells sampled at the Site above the laboratory MDL of 0.19 µg/L. Current residual maximum benzene levels detected in soil are not sufficiently high to cause groundwater to exceed WQOs in this policy as demonstrated by the non-detect groundwater COC concentrations in the Site monitoring wells. Benzene and MTBE are the only chemicals of concern with respect to the Policy's groundwater criteria. Therefore, WQOs have not been exceeded and there is no possibility of them being exceeded in the future, unless a new release occurs at the Site.

Moreover, the Closure Policy states that for older releases, the absence of current groundwater impacts is often a good indication that residual concentrations present in the soil are not a source of groundwater pollution. The former petroleum release at the Site was stopped in 1998 with removal of the former leaking Site USTs and dispensers. Based on these documented dates, this Site release should be considered an older release for purposes of the Policy.

5.4 The Site Meets the Closure Policy's Petroleum Vapor Intrusion to Indoor Air Criteria

Under the Closure Policy, a petroleum release site is assumed to present **no** unacceptable risk from vapor intrusion if any of the following conditions exist:

- *Site-specific conditions satisfy all the characteristics/criteria of scenarios 1 through 3, or all characteristics/criteria of scenario 4 as described in the Policy;*
- *A site-specific risk assessment for the vapor intrusion pathway demonstrates that human health is protected; or*
- *Use of mitigation measures or institutional/engineering controls reduce exposure, and no significant risk to human health exists.*

Since the Site will remain an active fueling facility, this portion of the policy is not applicable to this Site's ability to meet closure criteria.

5.5 The Site Meets the Closure Policy's Direct Contact and Outdoor Air Exposure Criteria

The Closure Policy describes conditions where direct contact with contaminated soil or inhalation of contaminants volatilized to outdoor air poses a low threat to human health. Release sites where human exposure may occur satisfy the media-specific criteria for direct contact and outdoor air exposure and shall be considered low-threat if they meet any of the following:

- *Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the policy. Both the 0-to-5-feet and 5-to-10 feet below ground surface (bgs) concentration limits and 5-to-10-feet bgs for the appropriate site classification (here, a commercial setting) must be satisfied: at a depth of 0-to-5-feet bgs – 8.2 mg/kg for benzene, 89 mg/kg for ethylbenzene, 45 mg/kg for naphthalene; and at a depth of 5-to-10-feet bgs – 12 mg/kg for benzene, 134 mg/kg for ethylbenzene, and 45 mg/kg for naphthalene; or*
- *Maximum concentrations of petroleum constituents in soil are lower than the levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health; or*
- *Mitigation measures or institutional or engineered controls are used to control exposure (to the satisfaction of the lead regulatory agency).*

Maximum allowable soil concentrations, as indicated in the first bullet above, are met for Site soils, for depth of 0-5 feet (benzene was not detected above a detection limit of 0.018 mg/kg, ethylbenzene was detected at a maximum of 1.52 mg/kg in SB2-5, and naphthalene was not analyzed however based on the non-detect benzene concentrations it should not be a concern) and 5-10 feet (benzene was not detected above a detection limit of 0.018 mg/kg, ethylbenzene was detected at a maximum of 0.0035 J mg/kg in SB2-10, and naphthalene was not analyzed however based on the non-detect benzene concentrations it should not be a concern), indicating the direct contact and outdoor air exposure criteria are satisfied for low-threat closure.

5.6 Conclusions

As demonstrated in Sections A through D of this section, the Site meets all of the Low-Threat UST Closure Policy criteria, including the general criteria and three media-specific criteria (groundwater, vapor intrusion to indoor air, and direct contact and outdoor air exposure). Therefore Waterstone concludes that the residual concentrations remaining in soil as a result of the original old release, as well as the non-detect benzene concentrations and extremely low MTBE concentrations detected in groundwater during the September 2013 groundwater sampling event, do not represent a threat to groundwater, human health, or the environment.

Section 6.0

Conclusion and Recommendations

Site remedial activities were initiated in April 1991. The remediation system consisted of a groundwater treatment system using activated carbon, with groundwater extraction from well RW-1. On April 4, 2003, the system was shut off for upgrade activities. As of April 4, 2003, the system treated approximately 1,445,088 gallons of groundwater since startup (April 1991). Thrifty selected Advance GeoEnvironmental (AGE) to conduct remedial system upgrade activities including installation of a new treatment compound, installation of new piping, connection of piping to the replacement well network, and the operation and maintenance of the upgraded groundwater pump and treat system. In January 2004, AGE abandoned wells MW-2, MW-4, and RW-1 and replaced them with wells MW-2R, MW-4R, and RW-1R. According to EMC, as of April 28, 2011 the system was permanently shut down, and the old system and upgraded system produced and treated a cumulative system total of 2,684,436 gallons.

HVDPE was completed at the Site during two separate events, the first was a 5 day continuous event March 22 through 27, 2010 which was conducted as an interim remedial measure and the second was a 30 day continuous event August 4, 2010 through September 4, 2010 in accordance with the submitted FS/CAP which was submitted to the ACEH in 2008. A combined total of approximately 5,821.37 pounds of petroleum hydrocarbons were removed from the Site through HVDPE measures (2,124.37 pounds) and soil excavation (3,697 pounds) throughout the history of remedial activities at the Site.

Based on the Groundwater Production Well and Utility Conduit Survey Report conducted by AGE, dated October 21, 2003, well driller's reports were found for seven water wells located within a one-mile radius of the Site, with four of the seven wells having been located. The nearest groundwater production well is located approximately 900 feet west of the Site. No other sensitive receptors were identified visually; however, three additional leaking underground storage tanks (LUST) sites were located adjacent to the Site, with the nearest LUST site located 50 feet north of the Site at a Shell station. The East Bay Municipal Utilities Department (EBMUD) provides the water and sewer service for the Site and has no municipal wells in the area. The Utility Conduit Survey concluded that two main trenches border the Site, which follows 34th Street and San Pablo Avenue. The approximate locations of utilities including water service, storm line drain, sanitary sewer line, gas main, and underground electric service are shown in **Figure 2**. These utility trenches are not believed to be a conduit for contaminant migration due to the tight nature of Site soils and low hydraulic conductivities and shallow groundwater gradients in the area. In addition, previous soil borings performed in the sidewalk along the downgradient perimeter of the Site (B1 through B4), confirmed that soil contamination was limited to the shallow soils of the Site and did not migrate offsite in any appreciable concentration. Therefore transport of contaminants along utility trenches and corridors within the street would not be a concern at the Site.

TPHg soil concentrations in excess of 100 mg/kg are confined to depths of 10 feet bgs or less, and the vertical and horizontal extent of contamination has been fairly well 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 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. Soil TPHg concentrations were only detected in one soil sample in excess of 100 mg/kg in November 2010 during confirmation soil sampling activities in SB-2-5 at a concentration of 510 mg/kg. This same soil sample did not contain detectable concentrations of benzene and MTBE.

During the 3rd quarter 2013 groundwater sampling event on September 26, 2013, samples were taken from wells MW-1 through MW-7 and RW-1R. TPHg was only detected in wells MW-3 and MW-1R at concentrations of 1,430 µg/L and 2,880 µg/L, respectively. Benzene was also detected in these same two wells at concentrations of 30 µg/L and 24 µg/L, respectively. MTBE was not detected in any of the eight wells above the laboratory MDL of 0.19 µg/L. TBA was not detected in any of the eight wells with a laboratory detection limit of 5.2 µg/L. Ethanol was also only detected in wells MW-3 and RW-1R at concentrations of 3,900 µg/L and 2,200 µg/L, respectively. Post-remediation (September 26, 2013) distribution of TPHg, benzene, MTBE, and ethanol in groundwater is shown in **Figures 6A, 6B, 6C, 6D, and 6E**, respectively, and is also summarized in the **Summary Table** and historic **Tables 2A and 2B**. The slightly elevated BTEX and ethanol concentrations in MW-3 and RW-1R appear to be residual concentrations associated with a 2009 surface release by ARCO most likely in the area of the dispensers near MW-3 and the USTs near well RW-1R, and do not appear to be the result of the historic Thrifty release at the Site.

As demonstrated by the graphs for all of the individual wells, the overall concentrations indicate decreasing concentrations for all chemicals of concern. More recent spikes in ethanol, TPHg, and benzene concentrations, and other constituents of concern appear to have been related to and ARCO surface release near the dispensers and UST area that has dissipated, and low level detectable concentrations only remain in a wells MW-3 and RW-1R, for TPHg, ethanol, and BTEX. This trends and concentrations indicate that the dissolved phase groundwater plume is shrinking in size and concentrations are continuing to decline to near non-detectable concentrations for each constituent of concern. MTBE, one of the main risk driver at the Site, is in fact currently non-detect in all wells at the Site.

The Site meets all of the Low-Threat UST Closure Policy criteria, including the general criteria and three media-specific criteria (groundwater, vapor intrusion to indoor air, and direct contact and outdoor air exposure). Therefore Waterstone concludes that the residual concentrations remaining in soil as a result of the original old release, as well as the low benzene concentrations and non-detect MTBE concentrations detected in groundwater during the September 2013 groundwater sampling event, do not represent a threat to groundwater, human health, or the environment.

Based on the Site specific data presented in this report, Waterstone concludes that the residual contamination remaining in soil and groundwater beneath the Site will continue to be reduced by natural attenuation and the current concentrations do not appear to be a threat to groundwater, human health, or the environment, and these residual concentrations meet the State Low-Threat UST Closure Policy criteria. Therefore Waterstone requests that the Site be granted closure for soil and groundwater issues and requests permission to abandon the existing monitoring wells at the Site.

The temporary spikes in groundwater concentrations observed during the groundwater sampling events conducted since 2009, and currently detected in wells MW-3 and RW-1R during the 3rd Quarter 2013 for TPHg, BTEX, and ethanol, should be attributed to a likely new release(s) which occurred during ARCO's operation. This conclusion is supported by the presence of ethanol which was released along with other fuel constituents (TPHg, BTEX, etc.) and reached the shallow groundwater beneath the Site. If the ACEH considers at this time additional investigations are still necessary at the Site, it is Waterstone's and Thrifty's position that the Thrifty Case should be closed based on the November 2010 verification sampling and downgradient investigation results and a new case should be opened with ARCO as the responsible party.

Tables

**SUMMARY TABLE
CURRENT PERIOD GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA, 94612
T0600101365**

WELL	STATUS	Monit/ Sampl. Date	ANALYTICAL PARAMETERS											MONITORING PARAMETERS				ELEVATION		WELL	
			TPHg (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	ETH (ug/L)	DTP (feet)	DTW (feet)	DTB (feet)	PT (feet)	CASING (feet)	GW (feet)	DIA (inches)	SCREEN (feet)
MW-1	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	5.49	17.77	0.00	31.55	26.06	2"	5 - 25
MW-2R	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	4.56	16.79	0.00	30.49	25.93	4"	5 - 20
MW-3	ACT	09/26/13	1,430	30	390	84	500	<0.19	<0.2	<0.23	<0.19	<5.2	3,900	NP	5.74	24.13	0.00	31.15	25.41	2"	5 - 25
MW-4R	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	4.38	19.65	0.00	30.23	25.85	4"	5 - 20
MW-5	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	4.55	13.75	0.00	32.30	27.75	2"	4 - 14
MW-6	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	5.37	13.02	0.00	33.14	27.77	2"	4 - 14
MW-7	ACT	09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	<0.2	<0.23	<0.19	<5.2	<100	NP	4.75	13.55	0.00	31.61	26.86	4"	4 - 14
RW-1R	ACT	09/26/13	2,880	24	330	79	520	<0.19	<0.2	<0.23	<0.19	<5.2	2,200	NP	4.51	19.08	0.00	30.59	26.08	4"	5 - 20

NOTE:	ACT	Groundwater well currently used for monitoring	TPHg	= Total Petroleum Hydrocarbons as gasoline	MTBE	= Methyl-tert-butyl ether	DTP	= Depth To Product	" - "	= Not analyzed / Not available
	INACT	Groundwater well is NOT included in monitoring program	TPHd	= Total Petroleum Hydrocarbons as diesel	DIPE	= Isopropyl ether	DTW	= Depth To Water	" < "	= Less than detection level indicated
	DRY	Groundwater well is dry and cannot be sampled	B	= Benzene	EYBE	= Ethyl-tert-butyl ether	DTB	= Depth To Bottom	" J "	= Flag indicating value
	NOACC	Presently no access to groundwater well	T	= Toluene	TAME	= Tert-amyl methyl ether	PT	= Product Thickness		= between MDL & PQL
	DEST	Well has been properly destroyed, no longer a conduit to subsurface	E	= Ethylbenzene	TBA	= Tertiary butyl alcohol	GW	= Groundwater	ug/L	= micrograms per liter
	AB	Groundwater well is abandoned, but not yet destroyed	X	= Total Xylenes	ETH	= Ethanol	NP	= No free product	mg/L	= milligrams per liter

TABLE 1A
Historic and Recent Soil Sample Laboratory Analytical Results
 Thrifty Oil Station #049 - Oakland, CA

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
MW-1	7/31/1986	ND					
MW-2	7/31/1986	ND					
MW-3(4-4.5 ft)	7/31/1986	22					
SB-1	7/31/1986	ND					
SB-2(9-9.5 ft)	7/31/1986	67					
SB-3	7/31/1986	ND					
MW-4(6.75 ft)	11/14/1986	1,200	12				
MW-5	11/14/1986						
MW-6	11/14/1986						
MW-7(6.50 ft)	11/14/1986	ND	ND				
B-1	9/11/1987						
B-2(5 ft)	9/11/1987	3,600					
B-3	9/11/1987	ND					
B-4	9/11/1987						
B-5	9/11/1987						
T-1	3/23/1998	430	3.0	<1.2	7.3	7.5	<6.2
T-2	3/23/1998	31	0.74	0.15	0.65	1.1	4.7
T-3	3/23/1998	73	0.34	<0.10	<0.10	0.56	<0.50
T-4	3/23/1998	1,600	9.3	17	22	100	27
P-1	3/23/1998	27	0.36	0.054	0.53	0.10	13
P-2	3/23/1998	1,800	3.4	3.1	11	21	6.0
P-3	3/23/1998	14	0.28	0.023	0.048	0.16	2.8
P-4	3/23/1998	3,900	19	42	53	330	22
P-5	3/23/1998	9.5	0.15	0.080	0.031	0.12	0.066
B1-5	1/6/2004	<0.401	0.0018J	<0.00042	<0.00041	<0.0008	0.097
B1-10	1/6/2004	<0.401	0.016	<0.00042	0.0023J	0.001J	0.411
B1-15	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	<0.0008	0.053
B1-20	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	<0.0008	0.019
B2-5	1/6/2004	654	<0.0195	<0.021	5.89	31.3	0.140J
B2-10	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	0.007	0.939
B2-15	1/6/2004	<0.401	<0.00039	<0.00042	0.0014J	0.0084	0.22
B2-20	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	<0.0008	0.0055
B3-10	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	0.0035J	0.609
B3-15	1/6/2004	<0.401	0.0021J	0.0061	0.0041J	0.02	1.32
B3-20	1/6/2004	<0.401	<0.00039	<0.00042	<0.00041	0.0032J	1.06
B4-5	1/6/2004	30	0.0023J	<0.00042	0.0018J	0.0035J	0.024
B4-10	1/6/2004	<0.041	<0.00039	<0.00042	<0.00041	<0.0008	1.07
B4-15	1/6/2004	<0.041	<0.00039	<0.00042	<0.00041	<0.0008	0.121
B4-20	1/6/2004	<0.041	<0.00039	<0.00042	<0.00041	<0.0008	0.42
SB-1-4	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-1-5	11/30/2010	7.1	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-1-10	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	0.003 J
SB-1-15	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	0.014
SB-1-20	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	0.0083
SB-2-4	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-2-5	11/30/2010	510	<0.00018	<0.00017	1.52	0.839	<0.00017
SB-2-10	11/30/2010	<0.018	<0.00018	<0.00017	0.0035 J	0.0019 J	0.0033 J
SB-2-15	11/30/2010	<0.018	0.0059	<0.00017	<0.00023	<0.00038	0.091
SB-2-20	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-3-5	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-3-10	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-3-15	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-3-20	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-3-25	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017

TABLE 1A
Historic and Recent Soil Sample Laboratory Analytical Results
 Thrifty Oil Station #049 - Oakland, CA

Sample ID	Date Sampled	ANALYTICAL PARAMETERS					
		TPHg (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	MTBE (mg/Kg)
SB-4-5	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-4-10	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017
SB-4-15	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	0.0052
SB-4-20	11/30/2010	<0.018	<0.00018	<0.00017	<0.00023	<0.00038	<0.00017

NOTES: TPHg analyzed by EPA Method 8015M
 BTEX and MTBE analysis by EPA Method 8260B
 "<" = Less than the specified laboratory detection limit
 "J" = Trace
 * = Total Recoverable Petroleum Hydrocarbons
 [Redacted] = Not analyzed
 ESLs = Environmental Screening Levels
 3m bgs = 3 meters (10 feet) below ground surface

TABLE 1B
Historic and Recent Soil Sample Laboratory Analytical Results
Other Oxygenates
 Thrifty Oil Station #049 - Oakland, CA

Sample ID	Date Sampled	ANALYTICAL PARAMETERS			
		DIPE (mg/Kg)	ETBE (mg/Kg)	TAME (mg/Kg)	TBA (mg/Kg)
B1-5	10/6/2004	<0.00082	<0.00077	<0.00061	0.132
B1-10	10/6/2004	<0.00082	<0.00077	0.024	0.304
B1-15	10/6/2004	<0.00082	<0.00077	<0.00061	0.012J
B1-20	10/6/2004	<0.00082	<0.00077	<0.00061	<0.005
B2-5	10/6/2004	<0.041	<0.0385	<0.0305	<0.250
B2-10	10/6/2004	<0.00082	<0.00077	0.011	0.339
B2-15	10/6/2004	0.0016J	<0.00077	0.0011J	0.038J
B2-20	10/6/2004	<0.00082	<0.00077	<0.00061	<0.005
B3-10	10/6/2004	<0.00082	<0.00077	0.0024J	0.488
B3-15	10/6/2004	<0.00082	<0.00077	0.025	0.263
B3-20	10/6/2004	<0.00082	<0.00077	0.025	0.175
B4-5	10/6/2004	<0.00082	<0.00077	<0.00061	0.013J
B4-10	10/6/2004	<0.00082	<0.00077	0.0028J	0.496
B4-15	10/6/2004	<0.00082	<0.00077	<0.00061	0.019J
B4-20	10/6/2004	<0.00082	<0.00077	<0.00061	0.070
SB-1-4	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-1-5	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-1-10	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-1-15	11/30/2010	<0.00017	<0.00025	<0.00013	1.650
SB-1-20	11/30/2010	<0.00017	<0.00025	<0.00013	0.141
SB-2-4	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-2-5	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-2-10	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-2-15	11/30/2010	<0.00017	<0.00025	<0.00013	0.678
SB-2-20	11/30/2010	<0.00017	<0.00025	<0.00013	0.956
SB-3-5	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-3-10	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-3-15	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-3-20	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-3-25	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-4-5	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-4-10	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-4-15	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088
SB-4-20	11/30/2010	<0.00017	<0.00025	<0.00013	<0.0088

NOTES: Oxygenate analysis by EPA Method 8260B
 "<" = Less than the specified laboratory detection limit
 "J" = Trace
 DIPE = Di IsoPropyl Ether TAME = Tert Amyl Methyl Ether
 ETBE = Ethyl Tert Butyl Ether TBA = Tert Butyl Alcohol

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
MONITORING WELL #MW-1											
Screen Interval = 5 to 25 feet						Casing Diameter = 2 inches					
01/09/92	-	-	-	-	-	-	NP	5.54	0.00	98.03	92.49
04/13/92	-	-	-	-	-	-	NP	5.86	0.00	98.03	92.17
10/05/92	-	-	-	-	-	-	NP	9.39	0.00	98.03	88.64
01/06/93	-	-	-	-	-	-	NP	4.76	0.00	98.03	93.27
04/26/93	-	-	-	-	-	-	NP	4.96	0.00	98.03	93.07
01/04/94	-	-	-	-	-	-	NP	7.00	0.00	98.03	91.03
04/05/94	-	-	-	-	-	-	NP	6.44	0.00	98.03	91.59
10/09/95	44,000	4,500	4,300	1,700	10,000	-	-	-	-	98.03	-
01/08/96	21,000	1,200	150	34	4,800	-	NP	6.15	0.00	98.03	91.88
04/08/96	4,700	80	110	10	910	-	NP	5.40	0.00	98.03	92.63
07/22/96	7,000	280	130	<3.0	2,100	440	NP	5.50	0.00	98.03	92.53
10/16/96	120	<0.3	<0.3	<0.3	<0.5	180	NP	6.02	0.00	98.03	92.01
01/22/97	160	<0.3	<0.3	<0.3	<0.5	360	NP	4.40	0.00	98.03	93.63
04/21/97	20,000	420	140	5.8	840	55,000	NP	6.30	0.00	98.03	91.73
07/14/97	13,000	<0.3	<0.3	<0.3	<0.55	30,000	NP	5.92	0.00	98.03	92.11
10/07/97	-	-	-	-	-	-	7.70	7.71	0.01	98.03	90.33
01/15/98	<50	0.3	<0.3	<0.3	<0.5	-	NP	4.40	0.00	98.03	93.63
04/23/98	540	<0.3	<0.3	<0.3	<0.5	<20	NP	8.10	0.00	98.03	89.93
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	5.55	0.00	98.03	92.48
10/14/98	50	1.4	0.56	<0.3	11	22	NP	7.05	0.00	98.03	90.98
01/21/99	<50	0.59	<0.3	<0.3	<0.5	<5.0	NP	4.10	0.00	98.03	93.93
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	4.30	0.00	98.03	93.73
07/26/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	5.54	0.00	98.03	92.49
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.13	0.00	98.03	91.90
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.04	0.00	98.03	91.99
04/05/00	<50	<0.25	<0.25	<0.25	<0.5	<5.0	NP	4.03	0.00	98.03	94.00
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5.0	NP	4.00	0.00	98.03	94.03
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	5.53	0.00	98.03	92.50
01/17/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.97	0.00	98.03	94.06
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.98	0.00	98.03	94.05
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	5.51	0.00	98.03	92.52
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.97	0.00	98.03	94.06
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.95	0.00	98.03	94.08
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	2.42	0.00	98.03	95.61
07/31/02	<50	<0.18	1.3	<0.18	<0.26	<0.24	NP	5.49	0.00	98.03	92.54
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	16	NP	6.13	0.00	98.03	91.90
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	2.45	0.00	98.03	95.58
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	7.02	0.00	98.03	91.01
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.15	0.00	98.03	92.88
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	5.13	0.00	98.03	92.90
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	3.92	0.00	98.03	94.11
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	4.54	0.00	98.03	93.49
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	7.01	0.00	98.03	91.02
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.46	0.00	98.03	92.57
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.48	0.00	98.03	92.55
04/20/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	6.99	0.00	98.03	91.04
07/20/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.42	0.00	98.03	91.61
10/19/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.98	0.00	98.03	91.05
01/24/06	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	4.56	0.00	98.03	93.47
04/19/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	3.93	0.00	98.03	94.10
07/19/06	17,100	21	279	388	2,010	128	NP	5.92	0.00	98.03	92.11

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
09/15/06	<5.6	<0.32	<0.10	<0.24	<0.30	33	NP	6.38	0.00	98.03	91.65
10/18/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.99	0.00	98.03	91.04
01/17/07	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.40	0.00	31.55	26.15
04/18/07	<5.6	<0.32	<0.10	<0.24	<0.3	7.1	NP	5.46	0.00	31.55	26.09
07/18/07	<5.6	<0.18	<0.24	<0.21	<0.45	4.9	NP	5.92	0.00	31.55	25.63
10/17/07	<5.6	<0.18	<0.24	<0.21	<0.45	1.6	NP	5.46	0.00	31.55	26.09
01/16/08	<5.6	<0.18	<0.24	<0.21	<0.45	1.3	NP	5.46	0.00	31.55	26.09
04/22/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.45	0.00	31.55	26.10
07/16/08	<6.6	<0.18	<0.24	<0.21	1.2 J	<0.19	NP	6.96	0.00	31.55	24.59
10/15/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.44	0.00	31.55	26.11
01/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.47	0.00	31.55	26.08
04/15/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.48	0.00	31.55	26.07
10/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.46	0.00	31.55	26.09
04/21/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.30	0.00	31.55	26.25
10/20/10	<6.6	<0.18	1.1 J	<0.21	1.7 J	<0.19	NP	5.46	0.00	31.55	26.09
03/16/12	1,560	40	11	130	220	29.0	NP	3.54	0.00	31.55	28.01
06/06/12	1,300	14	3.0 J	48	120	10.0	Sheen	5.26	0.00	31.55	26.29
09/05/12	1,280	6.4	<0.24	<0.21	<0.45	16	NP	5.46	0.00	31.55	26.09
12/04/12	4,340	43.0	990	160	840	<0.19	NP	4.55	0.00	31.55	27.00
06/12/13	<6.6	<0.18	1.2 J	<0.21	1.7 J	<0.19	NP	5.54	0.00	31.55	26.01
09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.49	0.00	31.55	26.06

MONITORING WELL #MW-2											
Screen Interval = 5 to 25 feet											
01/09/92	-	-	-	-	-	-	NP	5.35	0.00	97.44	92.09
04/13/92	-	-	-	-	-	-	NP	7.42	0.00	97.44	90.02
10/05/92	-	-	-	-	-	-	NP	12.15	0.00	97.44	85.29
01/06/93	-	-	-	-	-	-	NP	5.46	0.00	97.44	91.98
04/26/93	-	-	-	-	-	-	NP	5.15	0.00	97.44	92.29
01/04/94	-	-	-	-	-	-	NP	9.45	0.00	97.44	87.99
04/05/94	-	-	-	-	-	-	NP	8.23	0.00	97.44	89.21
10/09/95	33,000	6,000	390	1,700	4,900	-	-	-	-	97.44	-
01/08/96	<50	0.32	<0.3	0.41	2.1	-	NP	5.60	0.00	97.44	91.84
04/08/96	10,000	490	210	210	830	-	NP	5.43	0.00	97.44	92.01
07/22/96	60,000	6,500	1,000	1,500	10,000	8,500	NP	5.65	0.00	97.44	91.79
10/16/96	6,500	12	0.34	0.72	110	4,700	NP	5.82	0.00	97.44	91.62
01/22/97	3,200	<0.3	0.46	0.37	<0.5	8,000	NP	4.30	0.00	97.44	93.14
04/21/97	66,000	5,300	1,000	2,300	14,000	30,000	NP	5.80	0.00	97.44	91.64
07/14/97	17,000	1.8	4.6	4.6	350	24,000	NP	8.92	0.00	97.44	88.52
10/07/97	220,000	5,200	1,700	3,800	15,000	-	NP	6.80	0.00	97.44	90.64
01/19/98	25,000	5.4	2.2	2.1	240	-	NP	8.50	0.00	97.44	88.94
04/23/98	7,700	<0.3	0.55	0.38	4.9	28,000	NP	7.60	0.00	97.44	89.84
07/20/98	430,000	4,200	10,000	5,400	28,000	77,000	NP	6.94	0.00	97.44	90.50
10/14/98	27,000	<0.3	4.5	4.1	4.6	65,000	NP	8.45	0.00	97.44	88.99
01/21/99	16,000	7.6	9.8	4.2	310	* 49,000 / 42,000	NP	6.95	0.00	97.44	90.49
04/15/99	20,000	<0.3	<0.3	<0.3	<0.5	* 31,000 / 30,000	NP	8.45	0.00	97.44	88.99
07/26/99	6,700	<6.0	<6.0	<6.0	<10	*11,000 / 15,000	NP	6.94	0.00	97.44	90.50
10/13/99	7,600	<3.0	3.7	<3.0	11	11,000	NP	5.48	0.00	97.44	91.96
01/20/00	7,500	<6.0	<6.0	<6.0	<10	*14,000 / 16,000	NP	5.84	0.00	97.44	91.60
04/05/00	10,400	<0.25	<0.25	<0.25	<0.5	*10,000 / 14,400	NP	5.41	0.00	97.44	92.03
07/19/00	130	<0.3	<0.3	<0.3	<0.6	*9,620 / 6,520	NP	5.40	0.00	97.44	92.04
10/18/00	150	<0.18	<0.14	<0.18	<0.26	*9,080 / 6,560	NP	6.91	0.00	97.44	90.53

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
01/17/01	75	<0.18	2.0	2.0	3.0	*8,650 / 9,710	NP	5.41	0.00	97.44	92.03
04/19/01	4,380	<0.18	<0.14	<0.18	<0.26	8,890	NP	5.40	0.00	97.44	92.04
07/18/01	3,280	<0.18	<0.14	<0.18	2.0	*7960 / 1,710	NP	6.92	0.00	97.44	90.52
10/10/01	1,780	<0.18	<0.14	<0.18	<0.26	*2,980 / 2,600	NP	3.87	0.00	97.44	93.57
01/30/02	1,770	<0.18	1.0	1.0	2.0	*2,560 / 1,590	NP	8.45	0.00	97.44	88.99
04/17/02	1,470	1.0	<0.14	<0.18	<0.26	*2,460 / 2,080	NP	8.45	0.00	97.44	88.99
07/31/02	3,910	<0.18	1.2	<0.18	2.1	*2,090 / 1,740	NP	9.98	0.00	97.44	87.46
11/14/02	39,400	1,680	728	173	5,120	8,270	NP	5.40	0.00	97.44	92.04
01/29/03	22,100	746	76	<1.0	2,840	8,220	NP	8.43	0.00	97.44	89.01
04/23/03	19,500	<0.8	<0.4	<0.4	<1.2	9,580	NP	5.38	0.00	97.44	92.06
07/10/03	29,900	<2.2	<3.2	<3.1	<4.0	6,690	NP	5.10	0.00	97.44	92.34
10/20/03	13,000	4.79	<0.02	<0.02	<0.06	*6,330 / 5,980	NP	5.10	0.00	97.44	92.34
WELL ABANDONED 01/2004											
MONITORING WELL #MW-2R											
Screen Interval = 5 to 20 feet						Casing Diameter = 4 inches					
02/03/04							-	-	-	-	-
04/08/04	11,600	304	16 J	55	427	4,170	NP	4.58	0.00	-	-
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	6.72	0.00	-	-
10/20/04	20,900	3,180	2,970	259	1,240	92	NP	3.72	0.00	-	-
01/19/05	18,900	537	250	866	2,290	3,340	NP	4.50	0.00	-	-
04/20/05	13,100	<2.2	<3.2	<3.1	<4.0	563	NP	5.27	0.00	-	-
07/07/05	2,500	70	7.6	<0.24	160	1,930	-	-	-	-	-
07/20/05	4,260	392	15 J	175	100	742	NP	6.12	0.00	-	-
10/19/05	321	<0.32	<0.10	<0.24	<0.30	423	NP	5.28	0.00	-	-
01/24/06	3,200	34	331	87	510	86	NP	4.58	0.00	-	-
04/19/06	22,100	440	4,240	234	1,530	195	NP	3.38	0.00	-	-
07/19/06	15,800	377	629	627	578	530	NP	8.10	0.00	-	-
09/15/06	-	-	-	-	-	-	-	-	-	-	-
10/18/06	57,600	75	5,730	1,770	7,820	263	NP	5.28	0.00	-	-
01/17/07	117,000	254	15,200	4,840	28,800	300	NP	6.82	0.00	30.49	23.67
04/18/07	896	<0.32	<0.10	<0.24	117	49	NP	7.60	0.00	30.49	22.89
07/18/07	2,290	106	3.7 J	2.2 J	160	146	NP	5.62	0.00	30.49	24.87
10/17/07	313	<0.18	5.9	1.6 J	20	162	NP	3.41	0.00	30.49	27.08
01/16/08	77	<0.18	<0.24	<0.21	<0.45	105	NP	4.51	0.00	30.49	25.98
04/22/08	30,300	165	3,650	2,060	11,400	<19	NP	7.59	0.00	30.49	22.90
07/16/08	15,100	62	600	186	1,280	148	NP	5.26	0.00	30.49	25.23
10/15/08	291	12	<0.24	<0.21	1.1 J	263	NP	4.52	0.00	30.49	25.97
01/21/09	1,060	11	176	41	243	123	NP	4.52	0.00	30.49	25.97
04/15/09	26,500	154	2,380	874	5,600	66	NP	4.53	0.00	30.49	25.96
10/21/09	12,600	396	2,380	469	2,870	<1.9	NP	3.79	0.00	30.49	26.70
04/21/10	6,350	40	180	109	878	24	NP	4.35	0.00	30.49	26.14
10/20/10	83	<0.18	<0.24	<0.21	<0.45	23	NP	4.51	0.00	30.49	25.98
03/16/12	1,200	2.2	<0.24	29	9.4	12	NP	3.09	0.00	30.49	27.40
06/06/12	1,090	2.2	<0.24	38	4.0 J	16	NP	4.28	0.00	30.49	26.21
09/05/12	163	<0.18	<0.24	<0.21	<0.45	16	NP	4.52	0.00	30.49	25.97

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
12/04/12	762	10	220	34	210	<0.19	NP	4.57	0.00	30.49	25.92
06/12/13	60.5	<0.18	5.3	1.6 J	11	<0.19	NP	4.60	0.00	30.49	25.89
09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.56	0.00	30.49	25.93
MONITORING WELL #MW-3											
Screen Interval = 5 to 25 feet						Casing Diameter = 2 inches					
01/09/92	-	-	-	-	-	-	NP	17.60	0.00	97.69	80.09
04/13/92	-	-	-	-	-	-	NP	17.40	0.00	97.69	80.29
10/05/92	-	-	-	-	-	-	NP	17.35	0.00	97.69	80.34
01/08/93	-	-	-	-	-	-	NP	17.40	0.00	97.69	80.29
04/26/93	-	-	-	-	-	-	NP	17.90	0.00	97.69	79.79
01/04/94	-	-	-	-	-	-	NP	17.60	0.00	97.69	80.09
04/05/94	-	-	-	-	-	-	NP	16.25	0.00	97.69	81.44
01/08/96	-	-	-	-	-	-	NP	7.11	0.00	97.69	90.58
04/08/96	8,800	610	31	530	900	-	NP	7.20	0.00	97.69	90.49
07/22/96	38,000	4,100	1,500	1,600	5,400	2,600	NP	6.82	0.00	97.69	90.87
10/16/96	2,400	<0.3	<0.3	<0.3	<0.5	3,800	NP	6.84	0.00	97.69	90.85
01/22/97	2,200	<0.3	<0.3	<0.3	<0.5	5,500	NP	4.80	0.00	97.69	92.89
04/21/97	15,000	1,500	36	260	710	11,000	NP	9.40	0.00	97.69	88.29
07/14/97	5,400	0.45	<0.3	<0.3	<0.5	14,000	NP	10.92	0.00	97.69	86.77
10/07/97	8,800	0.39	<0.3	<0.3	0.88	-	NP	11.95	0.00	97.69	85.74
01/19/98	22,000	1,300	15	20	310	-	NP	7.85	0.00	97.69	89.84
04/23/98	9,200	3.9	3.1	5.7	9.8	18,000	NP	11.20	0.00	97.69	86.49
07/20/98	750	0.41	1.4	0.47	1.8	2,800	NP	7.36	0.00	97.69	90.33
10/14/98	750	<0.3	<0.3	<0.3	<0.5	15,000	NP	11.95	0.00	97.69	85.74
01/21/99	4,700	0.32	<0.3	<0.3	<0.5	* 12,000 / 16,000	NP	10.45	0.00	97.69	87.24
04/15/99	7,900	0.59	0.69	<0.3	0.94	* 11,000 / 14,000	NP	7.86	0.00	97.69	89.83
07/26/99	5,200	<3.0	<3.0	<3.0	<5.0	*9,600 / 11,000	NP	10.40	0.00	97.69	87.29
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	7.09	0.00	97.69	90.60
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.86	0.00	97.69	90.83
04/05/00	<50	0.8	<0.25	<0.25	<0.5	*5.6 / <5.0	NP	8.85	0.00	97.69	88.84
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5.0	NP	8.86	0.00	97.69	88.83
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	7.32	0.00	97.69	90.37
01/17/01	<50	<0.18	2.0	<0.18	1.0	*39 / 39	NP	5.40	0.00	97.69	92.29
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	8.87	0.00	97.69	88.82
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	7.32	0.00	97.69	90.37
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	8.87	0.00	97.69	88.82
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	5.78	0.00	97.69	91.91
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	7.31	0.00	97.69	90.38
07/31/02	138	1.1	1.2	<0.18	<0.26	<0.24	NP	5.76	0.00	97.69	91.93
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	21	NP	5.73	0.00	97.69	91.96
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	16	NP	7.30	0.00	97.69	90.39
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	16	NP	5.76	0.00	97.69	91.93
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	11	NP	5.63	0.00	97.69	92.06
10/20/03	13,700	4.13	<0.02	<0.02	<0.06	*6,570 / 4,920	NP	5.61	0.00	97.69	92.08
01/14/04	1,160	2.0	2.2	6.1	7.8	*1,510 / 767	NP	4.23	0.00	97.69	93.46
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.48	0.00	97.69	92.21
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	6.66	0.00	97.69	91.03
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	4.20	0.00	97.69	93.49
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.74	0.00	97.69	91.95
04/20/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	7.23	0.00	97.69	90.46
07/20/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.82	0.00	97.69	90.87

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
10/19/05	<2.9	<0.32	<0.10	<0.24	<0.30	7.0	NP	7.26	0.00	97.69	90.43
01/24/06	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.50	0.00	97.69	92.19
04/19/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.72	0.00	97.69	91.97
07/19/05	12,900	539	744	169	296	1,640	NP	5.63	0.00	97.69	92.06
09/15/06	1,750	4.3	68	11	90	502	NP	6.62	0.00	97.69	91.07
10/18/06	75	<0.32	<0.10	1.1 J	1.1 J	47	NP	5.72	0.00	97.69	91.97
01/17/07	<5.6	<0.32	2.1 J	<0.24	1.0 J	13	NP	5.73	0.00	31.15	25.42
04/18/07	<5.6	<0.32	2.0 J	<0.24	6.2	11	NP	5.74	0.00	31.15	25.41
07/18/07	<5.6	<0.18	2.2 J	<0.21	1.3 J	5.3	NP	8.36	0.00	31.15	22.79
10/17/07	<5.6	1.0	<0.24	<0.21	<0.45	1.5	NP	5.74	0.00	31.15	25.41
01/16/08	<5.6	<0.18	<0.24	<0.21	<0.45	1.3	NP	5.73	0.00	31.15	25.42
04/22/08	<6.6	<0.18	<0.24	<0.21	<0.45	1.2	NP	5.73	0.00	31.15	25.42
07/16/08	<6.6	<0.18	1.0 J	<0.21	1.5 J	<0.19	NP	7.23	0.00	31.15	23.92
10/15/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.72	0.00	31.15	25.43
01/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.76	0.00	31.15	25.39
04/15/09	<6.6	<0.18	1.1 J	<0.21	<0.45	<0.19	NP	5.73	0.00	31.15	25.42
10/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.23	0.00	31.15	26.92
04/21/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.90	0.00	31.15	25.25
10/20/10	<6.6	<0.18	<0.24	<0.21	1.2 J	<0.19	NP	5.71	0.00	31.15	25.44
03/16/12	20,600	38	7,600	25	6.9	59	NP	4.42	0.00	31.15	26.73
06/06/12	4,670	36	290	37	<2.25	37	Sheen	5.74	0.00	31.15	25.41
09/05/12	482	8.7	2.3 J	<0.21	3.7 J	42	NP	5.74	0.00	31.15	25.41
12/04/12	10,300	83	2,100	350	1,900	34	NP	5.46	0.00	31.15	25.69
06/12/13	<6.6	<0.18	<0.24	<0.21	<0.45	8.1	NP	5.82	0.00	31.15	25.33
09/26/13	1,430	30	390	84	500	<0.19	NP	5.74	0.00	31.15	25.41
MONITORING WELL #MW-4											
Screen Interval = 4 to 14 feet											
01/09/92	-	-	-	-	-	-	NP	5.25	0.00	97.33	92.08
04/13/92	-	-	-	-	-	-	NP	6.40	0.00	97.33	90.93
10/05/92	-	-	-	-	-	-	NP	9.95	0.00	97.33	87.38
01/06/93	-	-	-	-	-	-	NP	4.10	0.00	97.33	93.23
04/26/93	-	-	-	-	-	-	NP	4.84	0.00	97.33	92.49
01/04/94	-	-	-	-	-	-	NP	9.05	0.00	97.33	88.28
04/05/94	-	-	-	-	-	-	NP	8.10	0.00	97.33	89.23
10/09/95	63,000	9,000	2,100	2,500	9,600	-	-	-	-	97.33	-
01/08/96	23,000	2,200	830	880	3,600	-	NP	5.57	0.00	97.33	91.76
04/08/96	56,000	5,000	2,500	2,600	11,000	-	NP	5.36	0.00	97.33	91.97
07/22/96	33,000	3,700	1,600	1,400	6,000	2,400	NP	4.80	0.00	97.33	92.53
10/16/96	2,800	7.8	0.60	0.41	52	2,000	NP	5.47	0.00	97.33	91.86
01/22/97	1,400	<0.3	<0.3	<0.3	<0.5	3,100	NP	5.15	0.00	97.33	92.18
04/21/97	-	-	-	-	-	-	5.30	6.36	1.06	97.33	91.77
07/14/97	-	-	-	-	-	-	5.21	5.24	0.03	97.33	92.11
10/07/97	-	-	-	-	-	-	7.80	7.82	0.02	97.33	89.53
01/15/98	-	-	-	-	-	-	6.60	6.68	0.08	97.33	90.71
04/23/98	-	-	-	-	-	-	5.30	6.36	1.06	97.33	91.77
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.05	0.00	97.33	91.28
10/14/98	3,100	86	23	2.0	520	1,100	NP	6.85	0.00	97.33	90.48
01/21/99	9,100	3.2	5.6	1.8	130	* 24,000 / 17,000	NP	6.10	0.00	97.33	91.23
04/15/99	14,000	<0.3	0.71	<0.3	<0.5	* 20,000 / 22,000	NP	6.05	0.00	97.33	91.28
07/26/99	4,500	<6.0	<6	<6	<10	* 8,700 / 9,800	NP	6.07	0.00	97.33	91.26
10/13/99	410	<0.3	0.63	<0.3	<0.5	660	NP	5.54	0.00	97.33	91.79

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
01/20/00	770	<0.3	<0.3	<0.3	<0.5	*2,400 / 1,900	NP	5.49	0.00	97.33	91.84
04/05/00	61,200	0.9	<0.25	<0.25	<0.5	*18,500 / 21,900	NP	5.30	0.00	97.33	92.03
07/19/00	96,600	1,770	1,760	2,690	8,730	21,900 / 9,740 J	NP	5.29	0.00	97.33	92.04
10/18/00	34,900	698	1,010	607	4,130	*27,800 / 15,900	NP	6.02	0.00	97.33	91.31
01/17/01	29,100	799	930	614	3,400	*24,300 / 31,400	NP	4.88	0.00	97.33	92.45
04/19/01	103,000	4,880	3,980	3,260	11,800	66,900	NP	4.89	0.00	97.33	92.44
07/18/01	52,200	3,320	2,090	440	5,520	*55,500 / 16,800	NP	6.04	0.00	97.33	91.29
10/10/01	8,580	6.1	14	5.3	70	*40,100 / 30,000	NP	4.51	0.00	97.33	92.82
01/30/02	36,500	<0.18	3.0	1.0	3.0	*43,000 / 24,900	NP	4.51	0.00	97.33	92.82
04/17/02	12,900	8.0	1.0	<0.18	1.0	16,000 / 13,600	NP	4.51	0.00	97.33	92.82
07/31/02	19,300	<0.18	1.2	1.5	2.6	*13,200 / 10,100	NP	5.26	0.00	97.33	92.07
11/14/02	36,200	1,720	940	235	6,190	8,280	NP	5.27	0.00	97.33	92.06
01/29/03	13,000	444	39	<0.4	1,200	8,160	NP	4.50	0.00	97.33	92.83
04/23/03	7,430	130	5.7	<0.2	387	5,830	NP	4.80	0.00	97.33	92.53
07/10/03	16,200	<2.2	<3.2	<3.1	<4.0	3,930	NP	4.55	0.00	97.33	92.78
10/20/03	6,040	672	364	3.4	444	*3,780 / 3,220	NP	4.56	0.00	97.33	92.77
WELL ABANDONED 01/2004											
MONITORING WELL #MW-4R											
Screen interval = 5 to 20 feet Casing Diameter = 4 inches											
02/03/04							-	-	-	-	-
04/08/04	37,900	819	424	159	3,190	18,400	NP	4.96	0.00	-	-
07/21/04	14,500	<2.2	<3.2	<3.1	39 J	18,900	NP	6.60	0.00	-	-
10/20/04	66,000	6,390	6,560	672	3,290	13,300	NP	3.38	0.00	-	-
01/19/05	17,600	513	240	855	2,230	3,310	NP	4.32	0.00	-	-
04/20/05	19,200	190	109	452	974	1,870	NP	4.72	0.00	-	-
07/07/05	11,500	233	68	369	875	2,350	-	-	-	-	-
07/20/05	11,300	251	90	154	1,460	1,280	NP	6.08	0.00	-	-
10/19/05	1,310	<0.32	<0.10	<0.24	<0.30	1,160	NP	5.08	0.00	-	-
01/24/06	41,300	391	2,310	871	5,430	388	NP	4.98	0.00	-	-
04/19/06	26,100	399	1,290	254	3,350	732	NP	4.72	0.00	-	-
07/19/06	34,500	38	1,120	251	3,950	115	NP	6.84	0.00	-	-
09/15/06	-	-	-	-	-	-	-	-	-	-	-
10/18/06	37,000	<32	3,910	1,350	5,770	389	NP	5.85	0.00	-	-
01/17/07	211,000	223	22,800	5,670	33,800	<126	NP	6.62	0.00	30.23	23.61
04/18/07	13,000	52	2,300	97 J	5,140	102	NP	7.02	0.00	30.23	23.21
07/18/07	2,510	88	1.7 J	<0.21	107	124	NP	5.36	0.00	30.23	24.87
10/17/07	580	<0.18	24	3.9 J	81	120	NP	4.72	0.00	30.23	25.51
01/16/08	2,040	14	5.6	33	97	107	NP	4.34	0.00	30.23	25.89
04/22/08	1,310	24	329	111	582	<1.9	NP	7.00	0.00	30.23	23.23
07/16/08	33,400	236	2,030	1,030	6,990	6.6	NP	5.05	0.00	30.23	25.18
10/15/08	1,800	61	2.4 J	<0.21	23	130	NP	4.35	0.00	30.23	25.88
01/21/09	750	15	170	38	221	109	NP	4.35	0.00	30.23	25.88
04/15/09	27,100	197	2,300	834	4,810	<19.0	NP	4.35	0.00	30.23	25.88
10/21/09	5,240	161	712	145	1,000	<1.9	NP	3.40	0.00	30.23	26.83
04/21/10	2,480	22	<1.2	17 J	723	27	NP	4.52	0.00	30.23	25.71
10/20/10	20,300	351	3,600	483	2,780	<3.8	NP	4.32	0.00	30.23	25.91
03/16/12	1,080	1.8	<0.24	15	7.8	8.0	NP	2.78	0.00	30.23	27.45
06/06/12	663	2.4	<0.24	5.6	1.3 J	48	NP	4.03	0.00	30.23	26.20
09/05/12	58.0	<0.18	<0.24	<0.21	<0.45	7.8	NP	4.32	0.00	30.23	25.91
12/04/12	1,010	8.7	170	31	200	<0.19	NP	4.97	0.00	30.23	25.26
06/12/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.41	0.00	30.23	25.82
09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.38	0.00	30.23	25.85

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
MONITORING WELL #MW-5											
Screen Interval = 4 to 14 feet						Casing Diameter = 2 inches					
01/09/92	-	-	-	-	-	-	NP	5.32	0.00	98.85	93.53
04/13/92	-	-	-	-	-	-	NP	4.82	0.00	98.85	94.03
10/05/92	-	-	-	-	-	-	NP	8.78	0.00	98.85	90.07
01/06/93	-	-	-	-	-	-	NP	3.46	0.00	98.85	95.39
04/26/93	-	-	-	-	-	-	NP	4.66	0.00	98.85	94.19
01/04/94	-	-	-	-	-	-	NP	6.36	0.00	98.85	92.49
04/05/94	-	-	-	-	-	-	NP	5.94	0.00	98.85	92.91
07/12/95	<100	<0.5	<0.5	<0.5	<1.0	-	-	-	-	98.85	-
10/09/95	440	31	11	19	84	-	-	-	-	98.85	-
01/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	NP	6.63	0.00	98.85	92.22
04/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	NP	5.22	0.00	98.85	93.63
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	6.62	0.00	98.85	92.23
10/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	6.12	0.00	98.85	92.73
01/22/97	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	5.17	0.00	98.85	93.68
04/21/97	73	2.5	0.34	0.74	3.8	21	NP	6.64	0.00	98.85	92.21
07/14/97	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	6.67	0.00	98.85	92.18
10/07/97	130	<0.3	<0.3	<0.3	<0.5	-	NP	8.20	0.00	98.85	90.65
01/19/98	85	<0.3	<0.3	<0.3	<0.5	-	NP	1.55	0.00	98.85	97.30
04/23/98	220	0.39	<0.3	<0.3	<0.5	350	NP	8.10	0.00	98.85	90.75
07/20/98	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.30	0.00	98.85	92.55
10/14/98	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	7.65	0.00	98.85	91.20
01/21/99	<50	<0.3	<0.3	<0.3	<0.5	*6.7 / <5.0	NP	6.15	0.00	98.85	92.70
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	1.60	0.00	98.85	97.25
07/26/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.13	0.00	98.85	92.72
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.61	0.00	98.85	92.24
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.14	0.00	98.85	92.71
04/05/00	<50	0.5	<0.25	<0.25	<0.5	*5.4 / <5.0	NP	4.58	0.00	98.85	94.27
07/19/00	<50	<0.3	<0.3	<0.3	<0.6	<5.0	NP	4.59	0.00	98.85	94.26
10/18/00	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	6.28	0.00	98.85	92.57
01/17/01	<50	<0.18	<0.14	<0.18	1.0	*5.0 / 4.8	NP	4.58	0.00	98.85	94.27
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	4.58	0.00	98.85	94.27
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	6.12	0.00	98.85	92.73
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	4.58	0.00	98.85	94.27
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	4.48	0.00	98.85	94.37
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	4.58	0.00	98.85	94.27
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	6.10	0.00	98.85	92.75
11/14/02	<50	<0.06	<0.18	<0.17	<0.4	9.0	NP	6.11	0.00	98.85	92.74
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	7.1	NP	4.55	0.00	98.85	94.30
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	7.9	NP	3.03	0.00	98.85	95.82
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	7.4	NP	5.25	0.00	98.85	93.60
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	*9.11 / 9.2	NP	5.25	0.00	98.85	93.60
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	*8.2 / 4.1	NP	3.03	0.00	98.85	95.82
04/08/04	797	<0.22	<0.32	<0.31	<0.4	635	NP	4.35	0.00	98.85	94.50
07/21/04	548	<0.22	<0.32	<0.31	<0.4	768	NP	5.56	0.00	98.85	93.29
10/20/04	901	<0.22	<0.32	<0.31	<0.4	734	NP	4.15	0.00	98.85	94.70
01/19/05	350	<0.22	<0.32	<0.31	<0.4	860	NP	4.57	0.00	98.85	94.28
04/20/05	718	<0.22	<0.32	<0.31	<0.4	848	NP	6.10	0.00	98.85	92.75
07/20/05	255	<0.32	<0.10	<0.24	<0.30	274	NP	5.76	0.00	98.85	93.09
10/19/05	225	<0.32	<0.10	<0.24	<0.30	300	NP	6.10	0.00	98.85	92.75

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
01/24/06	681	<0.32	<0.10	<0.24	<0.30	334	NP	4.34	0.00	98.85	94.51
04/19/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	4.58	0.00	98.85	94.27
07/19/06	3,500	11	584	52	208	<0.63	NP	5.56	0.00	98.85	93.29
09/15/06	<5.6	<0.32	<0.10	<0.24	<0.30	1.8	NP	5.81	0.00	98.85	93.04
10/18/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.08	0.00	98.85	92.77
01/17/07	162	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.09	0.00	32.30	26.21
04/18/07	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.09	0.00	32.30	26.21
07/18/07	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	6.52	0.00	32.30	25.78
10/17/07	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.55	0.00	32.30	27.75
01/16/08	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.56	0.00	32.30	27.74
04/22/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	6.11	0.00	32.30	26.19
07/16/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	6.08	0.00	32.30	26.22
10/15/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.53	0.00	32.30	27.77
01/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.60	0.00	32.30	27.70
04/15/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.60	0.00	32.30	27.70
10/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.17	0.00	32.30	28.13
04/21/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.06	0.00	32.30	28.24
10/20/10	<6.6	<0.18	1.3 J	<0.21	2.0 J	1.2	NP	4.59	0.00	32.30	27.71
03/16/12	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	2.78	0.00	32.30	29.52
06/06/12	6,020	83	830	160	1,100	<0.19	Sheen	5.37	0.00	32.30	26.93
09/05/12	<6.6	<1.8	<2.4	<2.1	<4.5	<1.9	NP	4.57	0.00	32.30	27.73
12/04/12	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.36	0.00	32.30	27.94
06/12/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.66	0.00	32.30	27.62
09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.55	0.00	32.30	27.75
MONITORING WELL #MW-6											
Screen Interval = 4 to 14 feet						Casing Diameter = 2 inches					
01/09/92	-	-	-	-	-	-	NP	6.30	0.00	99.67	93.37
04/13/92	-	-	-	-	-	-	NP	5.47	0.00	99.67	94.20
10/05/92	-	-	-	-	-	-	NP	9.85	0.00	99.67	89.82
01/06/93	-	-	-	-	-	-	NP	4.16	0.00	99.67	95.51
04/26/93	-	-	-	-	-	-	NP	5.75	0.00	99.67	93.92
01/14/94	-	-	-	-	-	-	NP	7.20	0.00	99.67	92.47
04/05/94	-	-	-	-	-	-	NP	6.76	0.00	99.67	92.91
07/10/95	<100	<0.5	0.9	<0.5	1.1	-	-	-	-	99.67	-
10/09/95	250	4.8	5.6	11	58	-	-	-	-	99.67	-
01/08/96	<50	<0.3	<0.3	<0.3	<0.5	-	NP	6.16	0.00	99.67	93.51
04/08/96	230	4.6	4.7	3.2	33	-	NP	4.60	0.00	99.67	95.07
07/22/96	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	7.30	0.00	99.67	92.37
10/16/96	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	5.82	0.00	99.67	93.85
01/22/97	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	4.40	0.00	99.67	95.27
04/21/97	130	<0.3	<0.3	<0.3	<0.5	<20	NP	7.10	0.00	99.67	92.57
07/14/97	<50	<0.3	<0.3	<0.3	0.70	<20	NP	7.35	0.00	99.67	92.32
10/07/97	<50	0.78	0.3	<0.3	<0.5	-	NP	6.98	0.00	99.67	92.69
01/23/98	<50	<0.3	<0.3	<0.3	<0.5	-	NP	2.35	0.00	99.67	97.32
04/23/98	<50	<0.3	<0.3	<0.3	<0.5	<20	NP	6.90	0.00	99.67	92.77
07/20/98	<50	<0.3	1.1	<0.3	1.4	<5.0	NP	5.45	0.00	99.67	94.22
10/14/98	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	4.95	0.00	99.67	94.72
01/21/99	<50	0.35	0.62	<0.3	<0.5	<5.0	NP	3.90	0.00	99.67	95.77
04/15/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	2.35	0.00	99.67	97.32
07/26/99	1,000	<0.3	<0.3	<0.3	<0.5	*2,300 / 3,900	NP	3.93	0.00	99.67	95.74
10/13/99	<50	<0.3	<0.3	<0.3	<0.5	<5.0	NP	6.15	0.00	99.67	98.52

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*42 / 41	NP	5.84	0.00	99.67	93.83
04/05/00	4,600	338	2.8	1.2	55.2	*282 / 230	NP	3.89	0.00	99.67	95.78
07/19/00	60	1.0	2.0	<0.3	<0.6	*87 / 76	NP	3.07	0.00	99.67	96.60
10/18/00	-	-	-	-	-	-	-	-	-	99.67	-
01/17/01	103	<0.18	2.0	<0.18	3.0	*78 / 106	NP	3.87	0.00	99.67	95.80
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.86	0.00	99.67	95.81
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	5.40	0.00	99.67	94.27
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.86	0.00	99.67	95.81
01/30/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.86	0.00	99.67	95.81
04/17/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	3.86	0.00	99.67	95.81
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	<0.24	NP	5.40	0.00	99.67	94.27
11/14/02	140	3.2	<0.18	5.2	<0.4	111	NP	5.42	0.00	99.67	94.25
01/29/03	694 J	<0.04	<0.02	<0.02	<0.06	630	NP	3.88	0.00	99.67	95.79
04/23/03	1,550	<0.04	<0.02	<0.02	<0.06	578	NP	3.86	0.00	99.67	95.81
07/10/03	1,670	<0.22	<0.32	<0.31	<0.4	509	NP	5.31	0.00	99.67	94.36
10/20/03	1,320	<0.04	<0.02	<0.02	<0.06	*656 / 682	NP	5.30	0.00	99.67	94.37
01/14/04	272	<0.04	<0.02	<0.02	<0.06	*304 / 180	NP	3.82	0.00	99.67	95.85
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.18	0.00	99.67	94.49
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	6.42	0.00	99.67	93.25
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.62	0.00	99.67	94.05
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.40	0.00	99.67	94.27
04/20/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.41	0.00	99.67	94.26
07/20/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	4.07	0.00	99.67	95.60
10/19/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	3.86	0.00	99.67	95.81
01/24/06	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.20	0.00	99.67	94.47
04/19/06	78	<0.32	<0.10	<0.24	<0.30	201	NP	3.87	0.00	99.67	95.80
07/19/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.54	0.00	99.67	93.13
09/15/06	-	-	-	-	-	-	-	-	-	-	-
10/18/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.40	0.00	99.67	94.27
01/17/07	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.40	0.00	33.14	27.74
04/18/07	2,110	29	357	37	914	<0.63	NP	5.40	0.00	33.14	27.74
07/18/07	65	<0.18	<0.24	<0.21	<0.45	<0.19	NP	7.38	0.00	33.14	25.76
10/17/07	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	3.86	0.00	33.14	29.28
01/16/08	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.39	0.00	33.14	27.75
04/22/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.42	0.00	33.14	27.72
07/16/08	<6.6	<0.18	3.0 J	<0.21	2.7 J	<0.19	NP	3.84	0.00	33.14	29.30
10/15/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.40	0.00	33.14	27.74
01/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.42	0.00	33.14	27.72
04/15/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.42	0.00	33.14	27.72
10/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.60	0.00	33.14	27.54
04/21/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.75	0.00	33.14	28.39
10/20/10	<6.6	<0.18	1.7 J	<0.21	2.5 J	<0.19	NP	5.40	0.00	33.14	27.74
03/16/12	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	3.12	0.00	33.14	30.02
06/06/12	131,000	5,700	26,000	3,600	19,000	<19	NP	6.31	0.00	33.14	25.83
09/05/12	514	2.3	<0.24	<0.21	1.3 J	15	NP	5.43	0.00	33.14	27.71

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
12/04/12	<6.6	<0.18	<0.24	<0.21	<0.45	2.4	NP	5.16	0.00	33.14	27.98
06/12/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.51	0.00	33.14	27.63
09/25/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.37	0.00	33.14	27.77
MONITORING WELL #MW-7											
Screen Interval = 4 to 14 feet						Casing Diameter = 4 inches					
01/09/92	-	-	-	-	-	-	NP	6.30	0.00	99.02	92.72
04/13/92	-	-	-	-	-	-	NP	6.66	0.00	99.02	92.34
10/05/92	-	-	-	-	-	-	NP	9.60	0.00	99.02	89.42
01/06/93	-	-	-	-	-	-	NP	13.90	0.00	99.02	85.12
04/26/93	-	-	-	-	-	-	NP	5.55	0.00	99.02	93.47
01/04/94	-	-	-	-	-	-	NP	7.58	0.00	99.02	91.44
04/05/94	-	-	-	-	-	-	NP	6.66	0.00	99.02	92.36
10/09/95	27,000	2,400	140	1,700	2,700	-	-	-	-	99.02	-
01/08/96	13,000	800	42	540	860	-	NP	6.94	0.00	99.02	92.08
04/08/94	9,100	840	31	690	1,200	-	NP	5.48	0.00	99.02	93.54
07/22/96	11,000	1,700	22	660	700	840	NP	6.60	0.00	99.02	92.42
10/16/96	180	<0.3	<0.3	<0.3	<0.5	270	NP	6.42	0.00	99.02	92.60
01/22/97	130	<0.3	<0.3	<0.3	<0.5	470	NP	5.70	0.00	99.02	93.32
04/21/97	10,000	1,400	27	820	490	1,100	NP	5.30	0.00	99.02	93.72
07/14/97	8,200	660	15	230	270	560	NP	7.90	0.00	99.02	91.12
10/07/97	7,700	480	15	8.4	350	-	NP	7.70	0.00	99.02	91.32
01/19/98	1,400	20	0.74	0.46	4.4	-	NP	6.05	0.00	99.02	92.97
04/23/98	590	<0.3	<0.3	<0.3	<0.5	1,700	NP	7.60	0.00	99.02	91.42
07/20/98	4,900	570	150	300	500	1,500	NP	5.30	0.00	99.02	93.72
10/14/98	1,100	1.0	<0.3	<0.3	5.3	2,000	NP	8.60	0.00	99.02	90.42
01/21/99	570	0.32	<0.3	<0.3	<0.5	* 1,500 / 1,700	NP	6.70	0.00	99.02	92.32
04/15/99	770	<0.3	<0.3	<0.3	<0.5	* 1,400 / 1,200	NP	6.07	0.00	99.02	92.95
07/26/99	500	<0.3	<0.3	<0.3	<0.5	*710 / 950	NP	7.86	0.00	99.02	91.16
10/13/99	<50	<0.3	0.44	<0.3	0.62	<5.0	NP	6.93	0.00	99.02	92.09
01/20/00	<50	<0.3	<0.3	<0.3	<0.5	*5.0 / <5.0	NP	6.44	0.00	99.02	92.58
04/05/00	5,670	415	19	1.7	60.1	*329 / 194	NP	7.86	0.00	99.02	91.16
07/19/00	1,350	14	<3.0	<3.0	10	*237 / 120	NP	7.10	0.00	99.02	91.92
10/16/00	<50	<0.18	<0.14	<0.18	<0.26	*63 / 41.1	NP	5.28	0.00	99.02	93.74
01/17/01	<50	<0.18	<0.14	<0.18	3.0	*57 / 81	NP	5.27	0.00	99.02	93.75
04/19/01	<50	<0.18	<0.14	<0.18	<0.26	66	NP	7.86	0.00	99.02	91.16
07/18/01	<50	<0.18	<0.14	<0.18	<0.26	*9.0 / 3.5	NP	6.30	0.00	99.02	92.72
10/10/01	<50	<0.18	<0.14	<0.18	<0.26	*9.4 / 7.9	NP	8.23	0.00	99.02	90.79
01/30/02	2,590	40	9.0	8.0	6.0	*45 / 22	NP	5.14	0.00	99.02	93.88
04/17/02	51	<0.18	<0.14	<0.18	<0.26	*58 / 45	NP	5.53	0.00	99.02	93.49
07/31/02	<50	<0.18	<0.14	<0.18	<0.26	*39 / 33	NP	5.93	0.00	99.02	93.09
11/14/02	<50	<0.08	<0.18	<0.17	<0.4	6.8	NP	5.92	0.00	99.02	93.10
01/29/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	5.51	0.00	99.02	93.51
04/23/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	5.14	0.00	99.02	93.88
07/10/03	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.03	0.00	99.02	93.99
10/20/03	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	5.01	0.00	99.02	94.01
01/14/04	<15	<0.04	<0.02	<0.02	<0.06	<0.03	NP	4.38	0.00	99.02	94.64
04/08/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	4.86	0.00	99.02	94.16
07/21/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	6.82	0.00	99.02	92.20
10/20/04	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.71	0.00	99.02	93.31
01/19/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	4.77	0.00	99.02	94.25
04/20/05	<15	<0.22	<0.32	<0.31	<0.4	<0.18	NP	5.54	0.00	99.02	93.48

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
07/20/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.80	0.00	99.02	92.22
10/19/05	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.89	0.00	99.02	93.13
01/24/06	<2.9	<0.32	<0.10	<0.24	<0.30	<0.63	NP	4.89	0.00	99.02	94.13
04/19/06	<5.6	<0.32	<0.10	<0.24	<0.30	2.9	NP	5.13	0.00	99.02	93.89
07/19/06	3,430	58	28 J	<2.4	447	528	NP	6.31	0.00	99.02	92.71
09/15/06	<5.6	<0.32	<0.10	<0.24	<0.30	16	NP	6.72	0.00	99.02	92.30
10/18/06	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	5.13	0.00	99.02	93.89
01/17/07	<5.6	<0.32	<0.10	<0.24	<0.30	<0.63	NP	6.62	0.00	31.61	24.99
04/18/07	<5.6	<0.32	<0.10	<0.24	<0.3	<0.63	NP	5.86	0.00	31.61	25.75
07/18/07	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	6.82	0.00	31.61	24.79
10/17/07	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.87	0.00	31.61	25.74
01/06/08	<5.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.79	0.00	31.61	26.82
04/22/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.84	0.00	31.61	25.77
07/16/08	<6.6	<0.18	2.1 J	<0.21	5.6	<0.19	NP	5.86	0.00	31.61	25.75
10/15/08	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.80	0.00	31.61	26.81
01/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.80	0.00	31.61	26.81
04/15/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.80	0.00	31.61	26.81
10/21/09	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	5.70	0.00	31.61	25.91
04/21/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.15	0.00	31.61	27.46
10/20/10	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.79	0.00	31.61	26.82
03/16/12	1,500	20	1.5 J	4.0 J	<0.45	6.2	NP	3.96	0.00	31.61	27.65
06/06/12	1,880	16	<0.24	1.8 J	1.6 J	7.2	Sheen	5.46	0.00	31.61	26.15
09/05/12	65.7	<0.18	<0.24	<0.21	2.3 J	22	NP	4.79	0.00	31.61	26.82
12/04/12	1,670	9.7	240	41	250	<0.19	NP	4.85	0.00	31.61	26.76
06/12/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.88	0.00	31.61	26.73
09/26/13	<6.6	<0.18	<0.24	<0.21	<0.45	<0.19	NP	4.75	0.00	31.61	26.86
MONITORING WELL #RW-1											
Screen Interval = 5 to 20 feet						Casing Diameter = 4 inches					
01/09/92	-	-	-	-	-	-	NP	14.00	0.00	-	-
04/13/92	-	-	-	-	-	-	NP	14.00	0.00	-	-
10/05/92	-	-	-	-	-	-	NP	15.05	0.00	-	-
01/06/93	-	-	-	-	-	-	NP	5.43	0.00	-	-
04/26/93	-	-	-	-	-	-	NP	13.20	0.00	-	-
01/04/94	-	-	-	-	-	-	NP	14.30	0.00	-	-
04/05/94	-	-	-	-	-	-	NP	14.13	0.00	-	-
01/08/96	-	-	-	-	-	-	NP	14.22	0.00	-	-
04/08/96	-	-	-	-	-	-	NP	14.33	0.00	-	-
07/22/96	8,100	530	84	120	860	-	NP	14.27	0.00	-	-
10/16/96	-	-	-	-	-	-	NP	13.10	0.00	-	-
01/22/97	-	-	-	-	-	-	NP	16.97	0.00	-	-
10/07/97	-	-	-	-	-	-	NP	14.20	0.00	-	-
01/15/98	-	-	-	-	-	-	NP	15.60	0.00	-	-
04/23/98	81,000	0.72	1.4	3.2	5.7	270,000	NP	14.20	0.00	-	-
07/20/98	-	-	-	-	-	-	NP	14.30	0.00	-	-
10/14/98	-	-	-	-	-	-	NP	11.20	0.00	-	-
01/21/99	-	-	-	-	-	-	-	-	-	-	-
04/15/99	-	-	-	-	-	-	NP	13.10	0.00	-	-
07/25/99	4,400	<3.0	<3.0	<3.0	<5.0	*6,800 / 9,000	NP	13.83	0.00	-	-
10/13/99	-	-	-	-	-	-	-	-	-	-	-
01/20/00	-	-	-	-	-	-	NP	13.22	0.00	-	-
04/05/00	-	-	-	-	-	-	-	-	-	-	-

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
07/19/00	-	-	-	-	-	-	NP	13.25	0.00	-	-
10/18/00	-	-	-	-	-	-	NP	11.14	0.00	-	-
01/17/01	-	-	-	-	-	-	NP	11.12	0.00	-	-
04/19/01	-	-	-	-	-	-	-	-	-	-	-
07/18/01	-	-	-	-	-	-	NP	11.20	0.00	-	-
10/10/01	-	-	-	-	-	-	NP	11.20	0.00	-	-
01/30/02	-	-	-	-	-	-	NP	12.30	0.00	-	-
04/17/02	-	-	-	-	-	-	NP	14.30	0.00	-	-
07/31/02	-	-	-	-	-	-	NP	14.21	0.00	-	-
11/14/02	-	-	-	-	-	-	NP	14.13	0.00	-	-
01/29/03	-	-	-	-	-	-	NP	13.12	0.00	-	-
04/23/03	-	-	-	-	-	-	-	No Access	-	-	-
07/10/03	-	-	-	-	-	-	-	No Access	-	-	-
10/20/03	-	-	-	-	-	-	-	No Access	-	-	-
WELL ABANDONED 01/2004											
MONITORING WELL #RW-1R											
Screen Interval = 5 to 20 feet											
02/03/04	-	-	-	-	-	-	-	-	-	-	-
04/08/04	6,740	42	32 J	<3.1	1,160	239	NP	4.76	0.00	-	-
07/21/04	118	<0.22	<0.32	<0.31	<0.4	107	NP	6.85	0.00	-	-
10/20/04	29,900	3,850	4,010	381	1,920	103	NP	4.28	0.00	-	-
01/19/05	13,400	272	243	24 J	2,230	2,110	NP	4.54	0.00	-	-
04/20/05	1,220	<0.22	<0.32	<0.31	<0.4	1,580	NP	4.95	0.00	-	-
07/07/05	6,490	410	74	84	620	2,560	-	-	-	-	-
07/20/05	4,900	133	52	<2.4	750	465	NP	6.32	0.00	-	-
10/19/05	572	<0.32	<0.10	<0.24	<0.30	417	NP	5.68	0.00	-	-
01/24/06	14,500	192	1,150	342	2,980	432	NP	4.78	0.00	-	-
04/19/06	7,430	94	411	<2.4	1,820	571	NP	4.94	0.00	-	-
07/19/06	5,020	55	17 J	<2.4	457	636	NP	7.10	0.00	-	-
09/15/06	-	-	-	-	-	-	-	-	-	-	-
10/18/06	41,500	63	4,710	1,510	6,390	343	NP	6.06	0.00	-	-
01/17/07	164,000	249	25,300	6,040	35,200	217	NP	6.83	0.00	30.59	23.76
04/18/07	13,000	<16	2,230	121 J	5,070	92	NP	7.22	0.00	30.59	23.37
07/18/07	3,930	90	64	291	437	117	NP	5.76	0.00	30.59	24.83
10/17/07	993	<0.18	22	4.7 J	85	108	NP	4.93	0.00	30.59	25.66
01/16/08	1,990	14	5.6	33	99	108	NP	4.56	0.00	30.59	26.03
04/22/08	22,400	330	2,350	517	3,250	15	NP	7.23	0.00	30.59	23.36
07/16/08	5,140	35	315	94	761	3.0	NP	5.65	0.00	30.59	24.94
10/15/08	2,430	71	3.5 J	<0.21	35	179	NP	4.55	0.00	30.59	26.04
01/21/09	75	<0.18	<0.24	<0.21	<0.45	128	NP	4.57	0.00	30.59	26.02
04/15/09	2,740	33	395	89	514	61	NP	4.56	0.00	30.59	26.03
10/21/09	16,400	124	920	358	2,250	5.1	NP	4.30	0.00	30.59	26.29
04/21/10	1,570	18	<1.2	<1.05	276	24	NP	3.92	0.00	30.59	26.67
10/20/10	49,000	425	7,260	2,700	15,900	<19.0	NP	4.55	0.00	30.59	26.04
03/16/12	1,420	2.2	<0.24	27	64	3.4	NP	3.09	0.00	30.59	27.50
06/06/12	1,050	15	<0.24	16	18	32	NP	4.45	0.00	30.59	26.14
09/05/12	186	2.1	<0.24	<0.21	<0.45	5.6	NP	4.57	0.00	30.59	26.02

**TABLE 2A
GROUNDWATER DATA
THRIFTY OIL STATION #049, OAKLAND, CA.**

DATE SAMPLED	ANALYTICAL PARAMETERS						DEPTH TO PRODUCT (feet)	DEPTH TO GROUNDWATER (feet)	PRODUCT THICKNESS (feet)	CASING ELEVATION (feet)	GROUNDWATER ELEVATION (feet)
	TPH (µg/L)	BENZENE (µg/L)	TOLUENE (µg/L)	EthylBenzene (µg/L)	XYLENE (µg/L)	MTBE (µg/L)					
12/04/12	<6.6	<0.18	<0.24	<0.21	<0.45	2.7	NP	4.75	0.00	30.59	25.84
06/12/13	<6.6	<0.18	11	1.3 J	11	<0.19	NP	4.67	0.00	30.59	25.92
09/26/13	2,880	24	330	79	520	<0.19	NP	4.51	0.00	30.59	26.08

NOTE:

* MTBE 8020 / 8260

ND = Nondetectable

NP = No free hydrocarbon product

" - " = Not analyzed / Not available

J = Flag indicating value between MDL and PQL

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 or 8260

On 7/21/04, 4/08/04, 7/10/03 & 11/14/02, BTEX and MTBE done by 8260B

**TABLE 2B
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.**

DATE SAMPLED	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	Methanol (mg/L)
MONITORING WELL # MW-1						
11/14/02	<0.2	<0.12	<0.16	<10	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	<0.28	<10	-	-
10/20/03	-	-	-	-	-	-
01/14/04	-	-	-	-	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	<0.28	12	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	<10	<20,000	<20
04/19/06	<0.29	<0.17	<0.28	<10	<20,000	<20
07/19/06	<2.9	<1.7	<2.8	<100	-	-
09/15/06	<0.29	<0.17	<0.28	<10	-	-
10/18/06	<0.29	<0.17	<0.28	<10	-	-
01/17/07	<0.29	<0.17	<0.28	<10	-	-
04/18/07	<0.29	<0.17	<0.28	<10	-	-
07/18/07	<0.20	<0.23	<0.19	<10	-	-
10/17/07	<0.20	<0.23	<0.19	<10	-	-
01/16/08	<0.20	<0.23	<0.19	<10	-	-
04/22/08	<0.20	<0.23	<0.19	<10	-	-
07/16/08	<0.20	<0.23	<0.19	<5.2	-	-
10/15/08	<0.20	<0.23	<0.19	<5.2	-	-
01/21/09	<0.20	<0.23	<0.19	<5.2	-	-
04/15/09	<0.20	<0.23	<0.19	<5.2	-	-
10/21/09	<0.20	<0.23	<0.19	<5.2	<100	-
04/21/10	<0.20	<0.23	<0.19	<5.2	-	-
10/20/10	<0.20	<0.23	<0.19	<5.2	-	-
03/16/12	<0.2	<0.23	<0.19	18	-	-
06/06/12	<0.2	<0.23	<0.19	<5.2	<100	-
09/05/12	<0.2	<0.23	<0.19	<5.2	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	2,600	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-
MONITORING WELL #MW-2						
11/14/02	<2.0	<1.2	111	341	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<2.9	<1.7	59	449	-	-
10/20/03	-	-	-	-	-	-
WELL ABANDONED 01/2004						
MONITORING WELL #MW-2R						
02/03/04	<0.29	<0.17	76	1,610	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/07/05	<0.29	<0.17	37	1,130	-	-
07/20/05	<0.29	<0.17	95	151	<20,000	<20
10/19/05	<0.29	<0.17	13	33	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	42	<20,000	<20
04/19/06	<5.8	<3.4	<5.6	<200	<20,000	<20
07/19/06	<2.9	<1.7	68	113	-	-
09/15/06	-	-	-	-	-	-
10/18/06	<2.9	<1.7	<2.8	174.0	-	-
01/17/07	<58	<34	<52	<2000	-	-
04/18/07	<0.29	<0.17	5.2	122.0	-	-
07/18/07	<0.20	<0.23	<0.19	39	-	-
10/17/07	<0.20	<0.23	11	119	-	-

**TABLE 2B
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.**

DATE SAMPLED	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	Methanol (mg/L)
01/16/08	<0.20	<0.23	2.9	<10	-	-
04/22/08	<20	<23	<19	<1,000	-	-
07/16/08	<0.20	<0.23	<0.19	9.5 J	-	-
10/15/08	<0.20	<0.23	25	151	-	-
01/21/09	<0.20	<0.23	1.6	<5.2	-	-
04/15/09	<2.0	<2.3	<1.9	<52.0	-	-
10/21/09	<2.0	<2.3	<1.9	<52.0	9,660	-
04/21/10	<0.20	<0.23	<0.19	<5.2	-	-
10/20/10	<0.20	<0.23	1.4	21	-	-
03/16/12	<0.2	<0.23	<0.19	32	-	-
06/06/12	<0.2	<0.23	<0.19	<5.2	<100	-
09/05/12	<0.2	<0.23	4.8	27	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	4,600	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-
MONITORING WELL # MW-3						
11/14/02	<0.2	<0.12	<0.16	<10	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	<0.28	<10	-	-
10/20/03	-	-	-	-	-	-
01/14/04	-	-	-	-	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	<0.28	<10	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	<10	<20,000	<20
04/19/06	<0.29	<0.17	<0.28	<10	<20,000	<20
07/19/06	<2.9	<1.7	173	128	-	-
09/15/06	<0.29	<0.17	38	<10	-	-
10/18/06	<0.29	<0.17	2.8	<10	-	-
01/17/07	<0.29	<0.17	<0.28	<10	-	-
04/18/07	<0.29	<0.17	<0.28	18	-	-
07/18/07	<0.20	<0.23	<0.19	11	-	-
10/17/07	<0.20	<0.23	<0.19	<10	-	-
01/16/08	<0.20	<0.23	<0.19	<10	-	-
04/22/08	<0.20	<0.23	<0.19	<10	-	-
07/16/08	<0.20	<0.23	<0.19	10	-	-
10/15/08	<0.20	<0.23	<0.19	<5.2	-	-
01/21/09	<0.20	<0.23	<0.19	<5.2	-	-
04/15/09	<0.20	<0.23	<0.19	<5.2	-	-
10/21/09	<0.20	<0.23	<0.19	<5.2	<100	-
04/21/10	<0.20	<0.23	<0.19	12	-	-
10/20/10	<0.20	<0.23	<0.19	<5.2	-	-
03/16/12	<0.2	<0.23	<0.19	140	-	-
06/06/12	<1	<1.15	<0.95	100	<500	-
09/05/12	<0.2	<0.23	<0.19	63	<100	-
12/04/12	<0.2	<0.23	3.9	<5.2	13,000	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	3,900	-
MONITORING WELL # MW-4						
11/14/02	<2.0	<1.2	106	281	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<2.9	<1.7	35	<100	-	-
10/20/03	-	-	-	-	-	-
WELL ABANDONED 01/2004						

**TABLE 2B
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.**

DATE SAMPLED	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	Methanol (mg/L)
MONITORING WELL # MW-4R						
02/03/04	<0.29	<0.17	209	1,350	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/07/05	<0.29	<0.17	57	167	-	-
07/20/05	<0.29	<0.17	<0.28	369	<20,000	<20
10/19/05	<0.29	<0.17	39	335	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	<10	<20,000	<20
04/19/06	<2.9	<1.7	36	231	<20,000	<20
07/19/06	<2.9	<1.7	<2.8	<100	-	-
09/15/06	-	-	-	-	-	-
10/18/06	<29	<17	<28	<1000	-	-
01/17/07	<58	<34	<52	<2000	-	-
04/18/07	<14.5	<8.5	<14	<500	-	-
07/18/07	<0.20	<0.23	<0.19	20	-	-
10/17/07	<0.20	<0.23	3.9	89	-	-
01/16/08	<0.20	<0.23	<0.19	25	-	-
04/22/08	<2.0	<2.3	<1.9	<100	-	-
07/16/08	<0.20	<0.23	<0.19	18	-	-
10/15/08	<0.20	<0.23	<0.19	23	-	-
01/21/09	<0.20	<0.23	2.6	51	-	-
04/15/09	<2.0	<2.3	<1.9	<520	-	-
10/21/09	<2.0	<2.3	<1.9	<52.0	25,400	-
04/21/10	<1.0	<1.15	<0.95	<26.0	-	-
10/20/10	<4.0	<4.6	<3.8	<104.0	-	-
03/18/12	<0.2	<0.23	<0.19	<5.2	-	-
06/06/12	<0.2	<0.23	<0.19	77	<100	-
09/05/12	<0.2	<0.23	1.3	<5.2	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	5,400	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-
MONITORING WELL # MW-5						
11/14/02	<0.2	<0.12	<0.16	<10	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	<0.28	<10	-	-
10/20/03	-	-	-	-	-	-
01/14/04	-	-	-	-	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	1.4	<10	<20,000	<20
01/24/06	<0.29	<0.17	1.2	19	<20,000	<20
04/19/06	<0.29	<0.17	<0.28	<10	<20,000	<20
07/19/06	<0.29	<0.17	<0.28	<10	-	-
09/15/06	<0.29	<0.17	<0.28	<10	-	-
10/18/06	<0.29	<0.17	<0.28	<10	-	-
01/17/07	<0.29	<0.17	<0.28	<10	-	-
04/18/07	<0.29	<0.17	<0.28	<10	-	-
07/18/07	<0.20	<0.23	<0.19	<10	-	-
10/17/07	<0.20	<0.23	<0.19	<10	-	-
01/16/08	<0.20	<0.23	<0.19	<10	-	-
04/22/08	<0.20	<0.23	<0.19	<10	-	-
07/16/08	<0.20	<0.23	<0.19	<5.2	-	-
10/15/08	<0.20	<0.23	<0.19	<5.2	-	-
01/21/09	<0.20	<0.23	<0.19	<5.2	-	-
04/15/09	<0.20	<0.23	<0.19	<5.2	-	-
10/21/09	<0.20	<0.23	<0.19	<5.2	<100	-
04/21/10	<0.20	<0.23	<0.19	<5.2	-	-
10/20/10	<0.20	<0.23	<0.19	<5.2	-	-

**TABLE 2B
ADDITIONAL GROUNDWATER DATA
THRIFTY OIL STATION # 049, OAKLAND, CA.**

DATE SAMPLED	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	Methanol (mg/L)
03/16/12	<0.2	<0.23	<0.19	<5.2	-	-
06/06/12	<0.2	<0.23	<0.19	<5.2	9,300	-
09/05/12	<2.0	<2.3	<1.9	<52.0	6,200	-
12/04/12	<0.2	<0.23	<0.19	<5.2	<100	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-
MONITORING WELL # MW-6						
11/14/02	<0.2	<0.12	<0.16	<10	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	2.1	38	-	-
10/20/03	-	-	-	-	-	-
01/14/04	-	-	-	-	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	<0.28	<10	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	<10	<20,000	<20
04/19/06	<0.29	<0.17	<0.28	13	<20,000	<20
07/19/06	<0.29	<0.17	<0.28	<10	-	-
09/15/06	-	-	-	-	-	-
10/18/06	<0.29	<0.17	<0.28	<10	-	-
01/17/07	<0.29	<0.17	<0.28	<10	-	-
04/18/07	<0.29	<0.17	<0.28	<10	-	-
07/18/07	<0.20	<0.23	<0.19	<10	-	-
10/17/07	<0.20	<0.23	<0.19	<10	-	-
01/16/08	<0.20	<0.23	<0.19	<10	-	-
04/22/08	<0.20	<0.23	<0.19	<10	-	-
07/16/08	<0.20	<0.23	<0.19	<5.2	-	-
10/15/08	<0.20	<0.23	<0.19	<5.2	-	-
01/21/09	<0.20	<0.23	<0.19	<5.2	-	-
04/15/09	<0.20	<0.23	<0.19	<5.2	-	-
10/21/09	<0.20	<0.23	<0.19	<5.2	<100	-
04/21/10	<0.20	<0.23	<0.19	<5.2	-	-
10/20/10	<0.20	<0.23	<0.19	<5.2	-	-
03/16/12	<0.2	<0.23	<0.19	<5.2	-	-
06/06/12	<20	<23	<19	<520	51,000	-
09/05/12	<0.2	<0.23	<0.19	<5.2	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	<100	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-
MONITORING WELL # MW-7						
11/14/02	<0.2	<0.12	<0.16	<10	-	-
01/29/03	-	-	-	-	-	-
04/23/03	-	-	-	-	-	-
07/10/03	<0.29	<0.17	<0.28	<10	-	-
10/20/03	-	-	-	-	-	-
01/14/04	-	-	-	-	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	<0.28	<10	<20,000	<20
01/24/06	<0.29	<0.17	<0.28	<10	<20,000	<20
04/19/06	<0.29	<0.17	<0.28	<10	<20,000	<20
07/19/06	<2.9	<1.7	25	216	-	-
09/15/06	<0.29	<0.17	<0.28	<10	-	-
10/18/06	<0.29	<0.17	<0.28	<10	-	-
01/17/07	<0.29	<0.17	<0.28	<10	-	-

**TABLE 2B
 ADDITIONAL GROUNDWATER DATA
 THRIFTY OIL STATION # 049, OAKLAND, CA.**

DATE SAMPLED	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	Methanol (mg/L)
04/18/07	<0.29	<0.17	<0.28	<10	-	-
07/18/07	<0.20	<0.23	<0.19	<10	-	-
10/17/07	<0.20	<0.23	<0.19	<10	-	-
01/06/08	<0.20	<0.23	<0.19	<10	-	-
04/22/08	<0.20	<0.23	<0.19	<10	-	-
07/16/08	<0.20	<0.23	<0.19	<5.2	-	-
10/15/08	<0.20	<0.23	<0.19	<5.2	-	-
01/21/09	<0.20	<0.23	<0.19	<5.2	-	-
04/15/09	<0.20	<0.23	<0.19	<5.2	-	-
10/21/09	<0.20	<0.23	<0.19	<5.2	<100	-
04/21/10	<0.20	<0.23	<0.19	<5.2	-	-
10/20/10	<0.20	<0.23	<0.19	<5.2	-	-
03/16/12	<0.2	<0.23	<0.19	<5.2	-	-
06/06/12	<0.2	<0.23	<0.19	<5.2	<100	-
09/05/12	<0.2	<0.23	4.0	51	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	5,300	-
06/12/13	<0.2	<0.23	<0.19	<5.2	<100	-
09/26/13	<0.2	<0.23	<0.19	<5.2	<100	-

MONITORING WELL # RW-1R

02/03/04	<0.29	<0.17	53	1,370	-	-
04/08/04	-	-	-	-	-	-
07/21/04	-	-	-	-	-	-
10/20/04	-	-	-	-	-	-
01/19/05	-	-	-	-	-	-
04/20/05	-	-	-	-	-	-
07/07/05	<0.29	<0.17	71	1,740	-	-
07/20/05	<0.29	<0.17	<0.28	<10	<20,000	<20
10/19/05	<0.29	<0.17	9.6	65	<20,000	<20
01/24/06	<2.9	<1.7	<2.8	156	<20,000	<20
04/19/06	<2.9	<1.7	11	206	<20,000	<20
07/19/06	<2.9	<1.7	<2.8	217	-	-
09/15/06	-	-	-	-	-	-
10/18/06	<2.9	<1.7	<2.8	209	-	-
01/17/07	<58	<34	<52	<2000	-	-
04/18/07	<14.5	<8.5	<14	<500	-	-
07/18/07	<2.0	<2.3	<1.9	<100	-	-
10/17/07	<0.20	<0.23	<0.19	81	-	-
01/16/08	<0.20	<0.23	<0.19	31	-	-
04/22/08	<2.0	<2.3	<1.9	<100	-	-
07/16/08	<0.20	<0.23	<0.19	<5.2	-	-
10/15/08	<0.20	<0.23	<0.19	31	-	-
01/21/09	<0.20	<0.23	1.6	14	-	-
04/15/09	<2.0	<2.3	<1.9	<52.0	-	-
10/21/09	<1.0	<1.15	<0.95	<26.0	10,600	-
04/21/10	<1.0	<1.15	<0.95	<26.0	-	-
10/20/10	<20.0	<23.0	<19.0	<520.0	-	-
03/16/12	<0.2	<0.23	<0.19	11	-	-
06/06/12	<0.2	<0.23	<0.19	<5.2	<100	-
09/05/12	<0.2	<0.23	<0.19	<5.2	<100	-
12/04/12	<0.2	<0.23	<0.19	<5.2	<100	-
06/12/13	<0.2	<0.23	<0.19	<5.2	230	-
09/26/13	<0.2	<0.23	<0.19	<5.2	2,200	-

NOTE:

ug/L = micrograms per liter
 mg/L = milligrams per liter
 DIPE = di-isopropyl ether
 ETBE = ethyl tertbutyl ether
 TAME = tert amylmethylether
 TBA = tertiary butyl alcohol

Analysis:

DIPE, ETBE, TAME, TBA analyzed by EPA Method 8260B

TABLE 3
WELL COMPLETION DETAILS
 Thrifty Oil Station #049 - Oakland, CA

Well ID	Date Constructed	Total Depth	Casing Diameter	Screen Interval	TOC Elevation *
MW-1	07/31/86	25'	2-inch	5-25'	98.03
MW-2	07/31/86	25'	2-inch	5-25'	abandoned
MW-3	07/31/86	25'	2-inch	5-25'	97.69
MW-4	11/14/86	14'	4-inch	4-14'	abandoned
MW-5	11/14/86	14'	2-inch	4-14'	93.53
MW-6	11/14/86	14'	2-inch	4-14'	93.37
MW-7	11/14/86	14'	4-inch	4-14'	92.72
RW-1	1992	20'	4-inch	5-20'	abandoned
RW-1R	01/15/04	20'	4-inch	5-20'	-
MW-2R	01/15/04	20'	2-inch	5-20'	-
MW-4R	01/15/04	20'	4-inch	5-20'	-

NOTES: * Feet above mean sea level

-- = Not surveyed

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
4/8/1991	1,310	0	-	-	<0.3	<0.3	<0.3	<0.9	-	910	2000	160	2000	-
4/15/1991	1,434	124	18	-	<0.3	<0.3	<0.3	<0.3	-	2800	4600	310	5000	-
4/22/1991	1,510	200	11	-	<15	<15	<15	<45	-	3100	3300	<15	2800	-
4/29/1991	1,660	350	21	-	<0.3	<0.3	<0.3	<0.9	-	3600	4500	300	5000	-
5/6/1991	1,740	430	11	-	<0.3	<0.3	<0.3	<0.9	-	3600	3500	300	3800	-
5/13/1991	1,880	570	20	-	<0.3	<0.3	<0.3	<0.9	-	3300	3200	230	3900	-
5/20/1991	2,010	700	19	-	<0.3	<0.3	<0.3	<0.9	-	3300	3400	260	5100	-
5/28/1991	2,050	740	5	-	<0.3	<0.3	<0.3	<0.9	-	2900	3000	230	4200	-
6/3/1991	2,110	800	10	-	<0.3	<0.3	<0.3	<0.9	-	2500	2100	110	2800	-
6/10/1991	2,160	850	7	-	<0.3	<0.3	<0.3	<0.9	-	1800	1700	120	2100	-
6/17/1991	2,219	909	8	-	<0.3	<0.3	<0.3	<0.9	-	2100	1900	170	2700	-
6/24/1991	2,263	953	6	-	<0.3	<0.3	<0.3	<0.9	-	2100	1800	150	2700	-
07/01/91	2,313	1,003	7	-	<0.5	<0.5	<1	<1	-	2,700	2,000	150	2,900	-
07/08/91	2,700	1,390	55	-	<0.5	<0.5	<1	<1	-	4,000	2,500	130	4,400	-
07/15/91	2,872	1,562	25	-	<0.5	<0.5	<1	<1	-	3,100	1,900	140	3,200	-
07/22/91	3,144	1,834	39	-	<0.5	<0.5	<1	<1	-	3,400	2,100	110	2,800	-
07/29/91	3,220	1,910	11	-	<0.5	<0.5	<1	<1	-	5,100	2,200	180	2,700	-
08/05/91	3,348	2,038	18	-	<0.5	<0.5	<1	<1	-	5,100	3,900	400	4,200	-
08/12/91	3,472	2,162	18	-	<0.5	<0.5	<1	<1	-	11,000	6,200	440	8,400	-
08/19/91	3,548	2,238	11	-	<0.5	<0.5	<1	<1	-	4,500	2,400	130	2,600	-
08/26/91	3,655	2,345	15	-	<0.5	<0.5	<1	<1	-	4,400	2,500	260	3,600	-
09/09/91	3,822	2,512	12	-	<0.5	<0.5	<1	<1	-	5,200	3,000	390	3,700	-
09/16/91	3,884	2,574	9	-	<0.5	<0.5	<1	<1	-	4,100	2,000	460	4,900	-
09/23/91	4,013	2,703	18	-	<0.5	<0.5	<1	<1	-	4,600	1,600	710	6,400	-
09/30/91	4,092	2,782	11	-	<0.5	<0.5	<1	<1	-	5,700	2,000	380	6,200	-
10/07/91	4,131	2,821	6	System shut down	-	-	-	-	-	-	-	-	-	-
10/14/91	4,195	2,885	9	-	<0.5	<0.5	<1	<1	-	4,400	2,000	370	8,100	-
10/21/91	4,406	3,096	30	-	<0.5	<0.5	<1	<1	-	2,300	1,100	190	4,200	-
10/28/91	4,474	3,164	10	-	<0.5	<0.5	<1	<1	-	6,400	4,100	620	6,100	-
11/03/91	4,613	3,303	23	-	<0.5	<0.5	<1	<1	-	6,100	2,800	200	5,600	-
11/11/91	4,700	3,390	11	-	<0.5	<0.5	<1	<1	-	6,500	2,300	<30	4,900	-
11/18/91	4,887	3,577	27	-	<0.5	<0.5	<1	<1	-	5,600	2,500	300	4,600	-
11/25/91	5,042	3,732	22	-	<0.5	<0.5	<1	<1	-	5,400	2,800	230	5,700	-
12/03/91	5,263	3,953	28	-	<0.5	<0.5	<1	<1	-	7,200	3,300	490	5,500	-
12/09/91	5,362	4,052	17	-	<0.5	<0.5	<1	<1	-	4,400	1,700	140	3,900	-
12/16/91	5,486	4,176	18	-	<0.5	<0.5	<0.5	<0.5	-	4,700	2,300	310	4,600	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
12/23/91	5,516	4,206	4	-	<0.5	<0.5	<0.5	<0.5	-	4,000	2,200	290	5,900	-
12/30/91	5,575	4,265	8	-	<0.5	<0.5	<0.5	<0.5	-	5,200	2,500	350	5,800	-
01/15/92	5,720	4,410	9	-	<0.5	<0.5	<0.5	<0.5	-	3,400	1,900	300	6,300	-
02/10/92	6,264	4,954	21	-	<0.5	<0.5	<0.5	<0.5	-	5,800	2,800	320	7,200	-
03/09/92	8,520	7,210	81	<200	<0.5	1.6	<0.5	<0.5	47,000	7,100	4,800	630	10,300	-
04/13/92	22,888	21,578	411	<200	<0.5	<0.5	<0.5	<0.5	29,000	4,500	2,200	160	4,800	-
05/11/92	24,920	23,610	73	<200	<0.5	<0.5	<0.5	<0.5	22,000	4,300	1,500	130	3,800	-
06/01/92	28,330	27,020	162	<200	<0.5	<0.5	<0.5	<0.5	18,000	3,400	1,500	660	4,200	-
07/13/92	72,675	27,020	-	-	<0.5	<0.5	<0.5	<0.5	-	1,800	750	150	5,600	-
07/13/92	72,675	27,020	-	The system pumped air and flowmeter jumped from 30,000 gallons to 70,000 gallons.					-	-	-	-	-	-
08/17/92	75,046	29,311	68	-	<0.5	<0.5	<0.5	<0.5	-	1,100	350	200	1,100	-
09/14/92	75,582	29,927	19	-	<0.5	<0.5	<0.5	<1	-	2,100	520	<25	3,500	-
10/05/92	75,680	30,025	5	<200	<0.5	<0.5	<0.5	<1	19,000	1,700	270	<25	4,000	-
11/09/92	77,280	31,625	46	-	<0.5	<0.5	<0.5	<0.5	-	4,000	1,400	120	5,900	-
12/14/92	79,420	33,765	61	-	<0.5	<0.5	<0.5	<1	-	7,300	4,900	1,800	16,000	-
01/04/93	84,720	39,065	252	-	<0.5	<0.5	<0.5	<1	-	5,400	2,100	450	7,800	-
02/15/93	102,689	57,034	428	<200	<0.5	<0.5	<0.5	<1	41,000	6,600	3,200	260	9,600	-
02/22/93	146,430	57,034	-	The system pumped air and flowmeter jumped from 102,689 gallons to 146,430 gallons.					-	-	-	-	-	-
03/08/93	147,500	58,104	76	-	<0.5	<0.5	<0.5	<1	-	7,400	3,400	56	11,000	-
04/26/93	151,200	61,804	76	<100	<0.5	<0.5	<0.5	<1	36,000	4,300	2,200	420	8,300	-
04/26/93	151,200	61,804	-	Shut down system for repair					-	-	-	-	-	-
07/21/93	151,240	61,824	0	Restart the system					-	-	-	-	-	-
08/11/93	151,650	62,254	20	-	<0.5	<0.5	<0.5	<1	-	6,500	2,300	390	6,200	-
09/16/93	154,005	64,609	65	<60	<0.3	<0.3	<0.3	<0.6	43,000	2,300	320	<4.4	2,900	-
10/04/93	154,895	65,500	50	<60	<0.3	<0.3	<0.3	<0.6	33,000	2,900	470	6.9	3,500	-
11/05/93	157,431	68,035	79	<50	<0.3	<0.3	<0.3	<0.5	15,000	1,100	27	<0.3	920	-
12/03/93	159,324	69,928	68	<50	<0.3	<0.3	<0.3	<0.5	16,000	1,100	88	<6.6	2,300	-
01/06/94	166,440	77,044	209	-	<0.3	<0.3	<0.3	<0.5	-	3,800	730	<13	1,200	-
02/03/94	170,720	81,324	153	-	<0.3	<0.3	<0.3	<0.5	-	3,600	610	<4.4	4,800	-
03/03/94	178,168	88,772	266	-	<0.3	<0.3	<0.3	<0.5	-	2,800	2,000	270	3,400	-
04/07/94	185,670	96,274	214	<50	<0.3	<0.3	<0.3	<0.5	26,000	2,200	550	<6.6	1,900	-
05/12/94	188,840	99,444	91	<50	<0.3	<0.3	<0.3	<0.5	4,600	100	10	8.4	280	-
06/16/94	194,680	105,284	167	<50	<0.3	<0.3	<0.3	<0.5	<50	<0.3	<0.3	<0.3	<0.5	-
07/11/94	199,135	109,739	178	<50	<0.3	<0.3	<0.3	<0.5	4,000	220	<2.6	<2.6	320	-
08/04/94	200,910	111,514	74	<50	<0.3	<0.3	<0.3	<0.5	7,800	480	6.2	<0.3	630	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)						
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
09/15/94	203,450	114,054	60	<50	<0.3	<0.3	<0.3	<0.5	3,200	150	2.4	2.6	170	-	
10/10/94	205,210	115,814	70	<50	<0.3	<0.3	<0.5	<0.5	1,300	8.6	1.5	1.1	15	-	
11/07/94	206,060	116,664	30	<50	<0.3	<0.3	<0.5	<0.5	170	1.5	<0.3	<0.5	0.5	-	
12/05/94	207,093	117,697	37	<50	<0.3	<0.3	<0.5	<0.5	75	1.3	<0.3	<0.5	<0.5	-	
01/09/95	207,293	117,897	6	<50	<0.3	<0.3	<0.5	<0.5	<50	<0.3	<0.3	<0.5	<0.5	-	
02/01/95	207,650	118,254	16	<50	<0.3	<0.3	<0.5	<0.5	<50	<0.3	<0.3	<0.5	<0.5	-	
02/06/95	207,810	118,414	32	<50	<0.3	<0.3	<0.5	<0.5	<50	2.7	<0.3	<0.5	<0.5	-	
03/10/95	208,430	119,034	19	<100	<0.5	<0.5	<0.5	<1	<100	<0.5	<0.5	<0.5	<1	-	
04/10/95	208,564	119,168	4	<100	<0.5	<0.5	<0.5	<1	3,300	180	7.6	2.1	150	-	
05/08/95	208,608	119,212	2	<100	<0.5	<0.5	<0.5	<1	11,000	640	9.2	<5	1,100	-	
06/05/95	208,926	119,530	11	<100	<0.5	<0.5	<0.5	<1	5,100	270	2.2	<0.5	49	-	
07/10/95	214,182	124,786	150	<100	<0.5	<0.5	<0.5	<1	13,000	1,600	120	24	1,300	-	
08/07/95	221,876	132,480	275	Shut down system for repair				-	-	-	-	-	-	-	-
08/28/95	221,997	132,601	6	Restart the system				-	-	-	-	-	-	-	-
09/06/95	222,003	132,607	1	<100	<0.5	<0.5	<0.5	<1	2,300	<0.5	<0.5	<0.5	<1	-	
10/09/95	222,343	132,947	10	<100	<0.5	<0.5	<0.5	<1	2,000	5.6	0.77	0.66	3.8	-	
11/06/95	222,704	133,308	13	<50	0.3	0.31	<0.3	0.68	3,000	27	1.7	3.7	48	-	
12/11/95	223,792	134,396	31	<50	<0.3	<0.3	<0.3	<0.5	<50	<0.3	<0.3	<0.3	0.96	-	
01/08/96	224,661	135,265	31	970	<0.3	<0.3	<0.3	0.67	1,800	39	<0.3	<0.3	<0.5	-	
02/12/96	227,812	138,416	90	<50	10	0.37	<0.3	0.53	3,300	190	<7.5	<7.5	20	-	
03/12/96	229,301	139,905	51	<50	<0.3	<0.3	<0.3	<0.5	2,700	250	2.3	<1.5	<2.5	-	
04/08/96	242,320	152,924	482	<50	<0.3	<0.3	<0.3	<0.5	1,000	90	5	<0.3	67	-	
05/06/96	247,840	158,444	197	100	<0.3	<0.3	<0.3	<0.5	15,000	2,200	600	32	2,400	-	
06/03/96	248,423	159,027	21	Shut down system for carbon change				-	-	-	-	-	-	-	-
08/08/96	248,423	159,027	-	Start-up system				-	-	-	-	-	-	-	-
08/20/96	248,630	159,234	17	<50	<0.3	<0.3	<0.3	<0.5	2,100	24	<0.3	<0.3	49	-	
09/23/96	259,030	169,634	306	<50	<0.3	<0.3	<0.3	<0.5	4,100	260	<3	<3	34	-	
10/16/96	263,610	174,214	199	<50	<0.3	<0.3	<0.3	<0.5	2,700	220	3.8	<0.6	44	-	
11/19/96	263,986	174,590	11	<50	<0.3	<0.3	<0.3	<0.5	1,200	<0.3	<0.3	<0.3	<0.5	-	
12/16/96	264,210	174,814	8	<50	<0.3	<0.3	<0.3	1.5	29,000	410	2,300	120	1,100	-	
01/22/97	266,220	176,824	54	<50	<0.3	<0.3	<0.3	<0.5	68,000	<0.3	<0.3	<0.3	<0.5	-	
02/24/97	267,030	177,634	25	<50	<0.3	<0.3	<0.3	<0.5	51,000	3,500	3,200	390	2,200	-	
03/17/97	267,230	177,834	10	<50	<0.3	<0.3	<0.3	<0.5	89,000	<6	11	<6	14	-	
04/21/97	267,415	178,019	5	<50	<0.3	<0.3	<0.3	<0.5	61,000	730	18	130	360	-	
05/22/97	276,535	187,139	294	<50	<0.3	<0.3	<0.3	<0.5	850	1.3	<0.3	0.4	4.6	-	
06/23/97	281,214	191,818	146	-	-	-	-	-	-	-	-	-	-	-	

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Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
07/14/97	284,210	194,814	143	<50	<0.3	<0.3	<0.3	<0.5	6,600	<0.3	0.59	<0.3	9	-
08/18/97	298,610	209,214	411	-	-	-	-	-	-	-	-	-	-	-
09/15/97	301,043	211,647	87	-	-	-	-	-	-	-	-	-	-	-
10/07/97	333,480	244,084	1,474	<50	<0.3	<0.3	<0.3	<0.5	94,000	<0.3	<0.3	<0.3	<0.5	-
11/17/97	334,286	244,890	20	-	-	-	-	-	-	-	-	-	-	-
12/08/97	334,382	244,986	5	-	-	-	-	-	-	-	-	-	-	-
12/12/97	334,382	244,986	-	Shut down system due to stolen equipment					-	-	-	-	-	-
04/08/98	334,382	244,986	-	<50	<0.3	<0.3	<0.3	<0.5	3,100	12	1	<0.3	490	2,600
05/11/98	334,382	244,986	-	-	-	-	-	-	-	-	-	-	-	-
06/22/98	334,382	244,986	-	-	-	-	-	-	-	-	-	-	-	-
07/20/98	334,382	244,986	-	<50	<0.3	<0.3	<0.3	<0.5	52,000	8	0.52	0.83	1.5	-
08/03/98	346,521	257,125	867	Shut down system for carbon canisters replacement					-	-	-	-	-	-
09/17/98	354,985	265,589	188	-	-	-	-	-	-	-	-	-	-	-
10/14/98	358,015	268,619	112	<50	<0.3	<0.3	<0.3	1.6	3,100	45	13	3.5	350	-
11/05/98	359,600	270,204	72	System shut down due to vandalism and stolen equipment					-	-	-	-	-	
11/20/98	359,600	270,204	-	Restart					-	-	-	-	-	
12/11/98	369,452	280,056	469	-	-	-	-	-	-	-	-	-	-	-
12/24/98	-	280,056	-	No reading, meter broken					-	-	-	-	-	
01/15/99	0	280,056	-	Replaced Flowmeter started at 0					-	-	-	-	-	
01/21/99	986	281,042	164	57	<0.3	<0.3	<0.3	0.76	380	6.2	1	<0.3	9.1	-
02/12/99	1,971	282,027	45	-	-	-	-	-	-	-	-	-	-	-
03/12/99	4,390	284,416	86	-	-	-	-	-	-	-	-	-	-	-
04/15/99	8,595	288,651	124	<50	<0.3	<0.3	<0.3	<0.5	410	1.6	0.78	<0.3	5	*580 / 330
05/04/99	9,410	289,466	43	-	-	-	-	-	-	-	-	-	-	-
05/18/99	9,410	289,466	-	Shut down system for pump controller repair by manufacturer					-	-	-	-	-	
09/20/99	9,411	289,467	0	Restart the system					-	-	-	-	-	
09/24/99	9,412	289,468	0	-	-	-	-	-	-	-	-	-	-	-
10/13/99	9,510	289,566	5	<50	<0.3	<0.3	<0.3	<0.5	6,000	<0.3	<0.3	<0.3	<0.5	13,000
11/12/99	9,702	289,758	6	-	-	-	-	-	-	-	-	-	-	-
12/17/99	9,894	289,950	5	-	-	-	-	-	-	-	-	-	-	-
01/20/00	10,052	290,108	5	<50	<0.3	<0.3	<0.3	<0.5	<50	<0.3	<0.3	<0.3	<0.5	-
02/17/00	10,157	290,213	4	-	-	-	-	-	-	-	-	-	-	-
03/13/00	10,355	290,411	8	-	-	-	-	-	-	-	-	-	-	-
04/05/00	10,546	290,602	8	72.7	1.8	4.1	0.7	6.7	119,000	2,360	6,440	6,240	25,200	*30,800 / 21,800
05/19/00	11,072	291,128	12	Shut down system for carbon drum replacement					-	-	-	-	-	
06/05/00	11,075	291,131	0	Restart the system					-	-	-	-	-	

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				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
06/14/00	11,132	291,188	6	<50	<0.3	<0.3	<0.3	<0.6	<1,000	<6	<6	<6		14	24,500
07/06/00	11,362	291,418	10	Shut down system for carbon replacement					-	-	-	-	-	-	-
07/17/00	0	291,418	-	Restart the system after carbon change, repipe and flowmeter change (starting at 0.0)											
07/24/00	411	291,829	59	<50	<0.3	<0.3	<0.3	<0.6	205	<0.3	1	<0.3	<0.6	*99 / 104	
08/21/00	8,193	299,611	278	-	-	-	-	-	-	-	-	-	-	-	
09/18/00	27,251	318,669	681	-	-	-	-	-	-	-	-	-	-	-	
10/18/00	54,280	345,698	901	<50	<0.18	<0.14	<0.18	<0.26	357,000	2,380	2,960	1,290	6,850	9,630	
10/30/00	64,610	356,028	861	-	-	-	-	-	-	-	-	-	-	-	
11/27/00	79,870	371,288	545	-	-	-	-	-	-	-	-	-	-	-	
12/22/00	99,240	390,658	775	-	-	-	-	-	-	-	-	-	-	-	
01/17/01	101,250	392,668	77	<50	<0.18	<0.14	<0.18	<0.26	24,700	783	373	2	3,480	15,000	
02/23/01	144,120	435,538	1,159	-	-	-	-	-	-	-	-	-	-	-	
03/30/01	195,400	486,818	1,465	-	-	-	-	-	-	-	-	-	-	-	
04/06/01	199,090	490,508	527	System shut down for carbon replacement; Replaced on 4/11/01, restart on 4/13/01.											
04/20/01	207,050	498,468	569	88	<0.18	<0.14	<0.18	<0.26	36,500	855	716	659	1,570	11,400	
04/27/01	210,640	502,058	513	System shut down for repair/replacement of compressor's pressure switch and exhaust valve											
04/30/01	210,640	502,058	-	320	<0.18	<0.14	<0.18	<0.26	7,620	268	22	10	124	**13,600/9,130	
05/11/01	210,640	502,058	-	Replaced pressure switch on 5/7/01, system still off for carbon replacement.					-	-	-	-	-	-	
05/21/01	210,640	502,058	-	Restart the system					-	-	-	-	-	-	
05/30/01	226,830	518,248	1,799	<50	<0.18	<0.14	<0.18	<0.26	96,600	4,980	1,660	2,770	11,300	**53,800/41,600	
06/29/01	267,230	558,648	1,347	-	-	-	-	-	-	-	-	-	-	-	
07/11/01	310,010	601,428	3,565	<50	<0.18	<0.14	<0.18	<0.26	162,000	<0.18	4,140	4,760	24,000	<0.24	
08/17/01	441,270	732,688	3,548	-	-	-	-	-	-	-	-	-	-	-	
09/28/01	498,310	789,728	1,358	-	-	-	-	-	-	-	-	-	-	-	
10/03/01	503,930	795,348	1,124	<50	<0.18	<0.14	<0.18	<0.26	31,600	<1.8	150	294	5,280	<2.4	
11/12/01	664,700	956,118	4,019	-	-	-	-	-	-	-	-	-	-	-	
12/28/01	706,300	997,718	904	-	-	-	-	-	-	-	-	-	-	-	
01/11/02	721,050	1,012,468	1,054	System shut down for carbon replacement					-	-	-	-	-		
01/21/02	721,050	1,012,468	-	Restart the system					-	-	-	-	-		
02/01/02	731,320	1,022,738	934	<100	<0.3	<0.3	<0.3	<0.6	1,172	1	1	1	6	<5	
02/22/02	751,340	1,042,758	953	-	-	-	-	-	-	-	-	-	-	-	
03/27/02	813,240	1,104,658	1,876	-	-	-	-	-	-	-	-	-	-	-	
04/12/02	835,170	1,126,588	1,371	<50	<0.18	<0.14	<0.18	<0.26	12,100	5	1	<0.18	<0.26	18,400	
04/26/02	918,670	1,210,088	5,964	System shut down					-	-	-	-	-		

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				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
05/10/02	918,680	1,210,098	1	Restart	-	-	-	-	-	-	-	-	-	-	-
05/17/02	928,670	1,220,088	1,427	-	-	-	-	-	-	-	-	-	-	-	-
06/03/02	-	-	-	<50	<0.18	<0.14	<0.18	<0.26	Split-sample results during EBMUD inspection & sampling						
06/07/02	971,240	1,262,658	2,027	-	-	-	-	-	-	-	-	-	-	-	-
06/28/02	1,012,150	1,303,568	1,948	-	-	-	-	-	-	-	-	-	-	-	-
07/15/02	1,045,670	1,337,088	1,972	<50	<0.18	<0.14	<0.18	<0.26	10,600	<0.18	<0.14	<0.18	<0.26	10,000	-
07/31/02	1,052,380	1,343,798	419	System shut down for carbon replacement					-	-	-	-	-	-	-
08/16/02	1,052,390	1,343,808	1	Restart	-	-	-	-	-	-	-	-	-	-	-
08/30/02	1,057,310	1,348,728	351	-	-	-	-	-	-	-	-	-	-	-	-
09/20/02	1,061,730	1,353,148	210	<50	<0.1	<0.15	<0.06	-	Split-sample results during EBMUD inspection & sampling						
09/27/02	1,064,020	1,355,438	327	-	-	-	-	-	-	-	-	-	-	-	-
10/04/02	1,069,130	1,360,548	730	<50	<0.18	<0.14	<0.18	<0.26	4,500	<0.18	<0.14	<0.18	<0.26	2,570	-
10/25/02	1,082,500	1,373,918	637	-	-	-	-	-	-	-	-	-	-	-	-
11/29/02	1,108,680	1,400,098	748	-	-	-	-	-	-	-	-	-	-	-	-
12/27/02	1,123,890	1,415,308	543	-	-	-	-	-	-	-	-	-	-	-	-
01/03/03	1,128,910	1,420,328	717	System shut down for carbon replacement					-	-	-	-	-	-	
01/10/03	1,128,970	1,420,388	9	Restart	-	-	-	-	-	-	-	-	-	-	-
01/17/03	1,132,560	1,423,978	513	<50	<0.14	<0.07	<0.08	1.1	32,400	11	64	<0.8	6,050	706	-
01/31/03	1,143,290	1,434,708	766	<15	<0.04	0.58	<0.02	1.1	22,700	14	34	18	5,160	550	-
02/14/03	1,153,670	1,445,088	741	System shut down for carbon replacement					-	-	-	-	-	-	
04/04/03	1,153,670	1,445,088	-	System kept off and dismantled for upgrade					-	-	-	-	-	-	
06/18/04	0.0	1,445,088	-	Startup of upgraded system					-	-	-	-	-	-	
06/21/04	2,322.2	1,447,410	774	-	<0.22	<0.32	<0.31	<0.4	-	-	-	-	-	-	-
06/23/04	3,361.0	1,448,449	519	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
06/25/04	4,398.0	1,449,486	519	-	<0.14	<0.16	<0.18	<0.45	-	-	-	-	-	-	-
07/01/04	6,395.7	1,451,484	333	-	-	-	-	-	-	-	-	-	-	-	-
07/09/04	8,606.5	1,453,695	276	-	-	-	-	-	-	-	-	-	-	-	-
07/19/04	11,130.0	1,456,218	252	-	-	-	-	-	-	-	-	-	-	-	-
07/29/04	11,346.0	1,456,434	22	-	-	-	-	-	-	-	-	-	-	-	-
08/09/04	12,511.0	1,457,599	106	-	-	-	-	-	27,000	201	247	<0.18	2,060	11,300	-
08/30/04	19,294.0	1,464,382	323	-	-	-	-	-	-	-	-	-	-	-	-
09/03/04	20,211.0	1,465,299	229	-	<0.14	<0.16	<0.18	<0.45	18,900	280	290	27	3,600	9,810	-
09/21/04	24,766.0	1,469,854	253	-	-	-	-	-	-	-	-	-	-	-	-
10/07/04	28,244.9	1,473,333	217	-	<0.14	<0.16	<0.18	<0.45	24,100	221	151	74	3,100	11,800	-
10/18/04	28,288.1	1,473,376	4	-	<0.14	<0.16	<0.18	<0.45	Split-sample results during EBMUD inspection & sampling						
10/21/04	28,463.5	1,473,552	58	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
10/28/04	34,435.8	1,479,524	853	-	-	-	-	-	-	-	-	-	-	-
11/02/04	37,200.4	1,482,288	553	-	-	-	-	-	-	-	-	-	-	-
11/09/04	39,902.6	1,484,991	386	-	-	-	-	-	29,500	564	628	173	4,550	11,800
11/17/04	43,165.9	1,488,254	408	-	-	-	-	-	-	-	-	-	-	-
11/22/04	43,760.3	1,488,848	119	-	-	-	-	-	-	-	-	-	-	-
12/03/04	43,827.9	1,488,916	6	-	-	-	-	-	-	-	-	-	-	-
12/09/04	43,862.7	1,488,951	6	-	-	-	-	-	-	-	-	-	-	-
12/17/04	44,034.6	1,489,123	21	-	-	-	-	-	-	-	-	-	-	-
12/23/04	45,408.0	1,490,496	229	-	<0.14	<0.16	<0.18	1.2	23,200	473	256	488	2,100	6,080
12/29/04	47,405.4	1,492,493	333	-	-	-	-	-	-	-	-	-	-	-
01/07/05	54,048.5	1,499,137	738	-	-	-	-	-	-	-	-	-	-	-
01/12/05	56,143.5	1,501,232	419	EMC took over operation and maintenance of system					-	-	-	-	-	-
01/14/05	56,307.2	1,501,395	82	Carbon change					-	-	-	-	-	-
01/19/05	56,307.2	1,501,395	-	Restarted after carbon change					-	-	-	-	-	-
01/27/05	57,610.1	1,502,698	163	<15	<0.14	1.1	<0.18	<0.45	4,850	189	205	255	1,450	966
02/03/05	63,253.1	1,508,341	806	-	-	-	-	-	-	-	-	-	-	-
02/11/05	65,739.0	1,510,827	311	-	-	-	-	-	-	-	-	-	-	-
02/18/05	67,326.3	1,512,414	227	-	-	-	-	-	-	-	-	-	-	-
02/24/05	67,392.1	1,512,480	11	-	-	-	-	-	-	-	-	-	-	-
03/09/05	67,984.2	1,513,072	46	-	-	-	-	-	-	-	-	-	-	-
03/17/05	69,219.3	1,514,307	154	-	-	-	-	-	-	-	-	-	-	-
03/23/05	70,454.2	1,515,542	206	-	-	-	-	-	-	-	-	-	-	-
03/30/05	71,783.1	1,516,871	190	-	-	-	-	-	-	-	-	-	-	-
04/06/05	75,721.2	1,520,809	563	<15	<0.14	0.91	<0.18	<0.45	10,900	247	112	356	892	2,010
04/07/05	-	-	-	<15	<0.14	<0.16	<0.18	<0.45	Split-sample results during EBMUD inspection & sampling					
04/14/05	79,730.2	1,524,818	501	System was turned off for QWS					-	-	-	-	-	-
04/21/05	79,885.1	1,524,973	22	Restarted system					-	-	-	-	-	-
04/27/05	80,674.2	1,525,762	132	-	-	-	-	-	-	-	-	-	-	-
05/12/05	83,901.3	1,528,989	215	-	-	-	-	-	-	-	-	-	-	-
05/20/05	84,601.7	1,529,690	88	-	-	-	-	-	-	-	-	-	-	-
05/27/05	86,432.1	1,531,520	261	-	-	-	-	-	-	-	-	-	-	-
06/02/05	87,654.3	1,532,742	204	-	-	-	-	-	-	-	-	-	-	-
06/09/05	87,981.1	1,533,069	47	-	-	-	-	-	-	-	-	-	-	-
06/16/05	88,340.0	1,533,428	51	-	-	-	-	-	-	-	-	-	-	-
06/16/05	0.0	1,533,428	-	Changed battery for flow meter (reset to 0.0 gallons)					-	-	-	-	-	-
06/23/05	2,914.2	1,536,342	416	-	-	-	-	-	-	-	-	-	-	-
06/28/05	4,751.3	1,538,179	367	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
07/07/05	7,125.7	1,540,554	264	<2.9	<0.17	<0.22	<0.14	<0.38	7,530	301	71 J	132	800	2,580
07/12/05	8,534.3	1,541,962	282	-	-	-	-	-	-	-	-	-	-	-
07/19/05	9,145.3	1,542,573	87	-	-	-	-	-	-	-	-	-	-	-
07/26/05	10,570.5	1,543,999	204	System was turned off for QWS and carbon change					-	-	-	-	-	-
08/03/05	10,572.1	1,544,000	0	Restarted system					-	-	-	-	-	-
08/09/05	10,827.1	1,544,255	43	-	-	-	-	-	-	-	-	-	-	-
08/19/05	-	-	-	-	<0.05	<0.07	<0.08	<0.33	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)					
08/19/05	11,219.6	1,544,648	39	-	<0.10	<0.15	<0.06	<0.40	Split-sample results during EBMUD inspection & sampling					
08/23/05	11,311.2	1,544,739	23	-	-	-	-	-	-	-	-	-	-	-
09/07/05	11,713.1	1,545,141	27	-	-	-	-	-	-	-	-	-	-	-
09/13/05	11,816.3	1,545,244	17	-	-	-	-	-	-	-	-	-	-	-
09/20/05	11,930.2	1,545,358	16	-	-	-	-	-	-	-	-	-	-	-
09/26/05	12,241.6	1,545,670	52	-	-	-	-	-	-	-	-	-	-	-
10/04/05	12,314.2	1,545,742	9	<2.9	<0.17	<0.22	<0.14	<0.38	4,250	129	113	3.9 J	237	2,120
10/11/05	12,578.6	1,546,007	38	-	-	-	-	-	-	-	-	-	-	-
10/17/05	12,781.3	1,546,209	34	System was turned off for QWS					-	-	-	-	-	-
10/21/05	12,796.1	1,546,224	4	Restarted system					-	-	-	-	-	-
11/01/05	13,383.2	1,546,811	53	-	-	-	-	-	-	-	-	-	-	-
11/08/05	13,399.2	1,546,827	2	-	<0.10	<0.15	<0.06	<0.40	Split-sample results during EBMUD inspection & sampling					
11/08/05	-	-	-	-	-	-	-	-	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)					
11/16/05	13,807.4	1,547,235	51	-	-	-	-	-	-	-	-	-	-	-
11/23/05	0.0	1,547,235	-	Changed battery for flow meter (reset to 0.0 gallons)					-	-	-	-	-	-
11/29/05	717.2	1,547,953	120	-	-	-	-	-	-	-	-	-	-	-
12/07/05	1,038.1	1,548,274	40	-	-	-	-	-	-	-	-	-	-	-
12/14/05	1,669.4	1,548,905	90	-	-	-	-	-	-	-	-	-	-	-
12/20/05	1,874.3	1,549,110	34	-	-	-	-	-	-	-	-	-	-	-
12/28/05	2,022.1	1,549,258	18	-	-	-	-	-	-	-	-	-	-	-
01/04/06	4,413.3	1,551,649	342	-	-	-	-	-	-	-	-	-	-	-
01/10/06	5,614.3	1,552,850	200	<2.9	<0.32	<0.1	<0.24	<0.3	12,000	16	51	2.3 J	1,300	338
01/18/06	6,414.4	1,553,650	100	-	-	-	-	-	-	-	-	-	-	-
01/20/06	6,728.3	1,553,984	157	System was turned off for QWS and carbon change					-	-	-	-	-	-
01/27/06	6,731.2	1,553,967	0	Restarted system					-	-	-	-	-	-
01/31/06	6,842.3	1,554,078	28	-	-	-	-	-	-	-	-	-	-	-
02/01/06	-	-	-	-	<0.70	<0.67	<0.65	<2.0	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)					
02/01/06	6,903.0	1,554,138	61	-	<0.17	<0.22	<0.14	<0.38	Split-sample results during EBMUD inspection & sampling					
02/01/06	-	-	-	-	-	-	-	-	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)					

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)						
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
02/01/06	0.0	1,554,138	-	Changed battery for flow meter (reset to 0.0 gallons)					-	-	-	-	-	-	-
02/07/06	308	1,554,447	51	-	-	-	-	-	-	-	-	-	-	-	
02/21/06	978	1,555,116	48	-	-	-	-	-	-	-	-	-	-	-	
02/24/06	1,268	1,555,406	97	-	-	-	-	-	-	-	-	-	-	-	
02/24/06	10	1,555,406	-	Replaced flow meter with nonresettable analog type, start with 10					-	-	-	-	-	-	
02/28/06	978	1,556,374	242	-	-	-	-	-	-	-	-	-	-	-	
03/07/06	3,254	1,558,650	325	-	-	-	-	-	-	-	-	-	-	-	
03/14/06	4,672	1,560,068	203	-	-	-	-	-	-	-	-	-	-	-	
03/21/06	6,793	1,562,189	303	-	-	-	-	-	-	-	-	-	-	-	
03/28/06	8,214	1,563,610	203	-	-	-	-	-	-	-	-	-	-	-	
04/04/06	12,513	1,567,909	614	<5.6	<0.32	<0.1	<0.24	<0.3	2,580	15	5.0	<0.24	193	341	
04/11/06	15,720	1,571,116	458	-	-	-	-	-	-	-	-	-	-	-	
04/18/06	21,010	1,576,406	756	System was turned off for QWS					-	-	-	-	-	-	
04/21/06	21,030	1,576,426	7	Restarted system					-	-	-	-	-	-	
04/25/06	22,410	1,577,806	345	-	-	-	-	-	-	-	-	-	-	-	
04/26/06	23,010	1,578,406	600	Turned off system for carbon change					-	-	-	-	-	-	
05/02/06	23,030	1,578,426	3	Restarted after carbon change					-	-	-	-	-	-	
05/09/06	27,710	1,583,106	669	-	-	-	-	-	-	-	-	-	-	-	
05/17/06	28,900	1,584,296	149	-	-	-	-	-	-	-	-	-	-	-	
05/23/06	31,430	1,586,826	422	<5.6	<0.32	<0.1	<0.24	<0.3	1,020,000	3,330	111,000	7,440	38,400	<630	
05/31/06	37,710	1,593,106	785	-	-	-	-	-	-	-	-	-	-	-	
06/09/06	39,890	1,595,286	242	-	-	-	-	-	71,000	520	16,300	820	6,840	-	
06/13/06	40,460	1,595,856	143	-	-	-	-	-	-	-	-	-	-	-	
06/21/06	41,240	1,596,636	98	-	-	-	-	-	-	-	-	-	-	-	
06/27/06	42,360	1,597,756	187	-	-	-	-	-	-	-	-	-	-	-	
07/11/06	46,380	1,601,776	287	<5.6	<0.32	<0.10	<0.24	<0.30	8070	18	385	73	1530	40	
07/18/06	47,270	1,602,666	127	System was turned off for QWS					-	-	-	-	-	-	
07/25/06	47,280	1,602,676	1	Restarted system					-	-	-	-	-	-	
08/01/06	47,860	1,603,256	83	-	-	-	-	-	-	-	-	-	-	-	
08/18/06	50,000	1,605,396	126	-	-	-	-	-	-	-	-	-	-	-	
08/22/06	50,060	1,605,456	15	-	-	-	-	-	-	-	-	-	-	-	
08/29/06	50,940	1,606,336	126	-	-	-	-	-	-	-	-	-	-	-	
09/06/06	51,360	1,606,756	53	-	-	-	-	-	-	-	-	-	-	-	
09/12/06	53,150	1,608,546	298	-	-	-	-	-	-	-	-	-	-	-	
09/14/06	53,730	1,609,126	290	System was turned off for groundwater well sampling					-	-	-	-	-	-	
09/19/06	53,940	1,609,336	42	Restarted system					53,600	59	3,630	4,510	7,400	96	

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)						
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
09/27/06	54,160	1,609,556	28	-	-	-	-	-	-	-	-	-	-	-	-
10/04/06	54,370	1,609,766	30	<5.6	<0.32	<0.10	<0.24	<0.30	573	14	34	44	97	230	
10/13/06	56,380	1,611,776	223												
10/17/06	56,780	1,612,176	100	System was turned off for groundwater well sampling					-	-	-	-	-	-	-
10/27/06	56,780	1,612,176	-	Restarted system					-	-	-	-	-	-	-
10/31/06	57,010	1,612,406	35	-	-	-	-	-	-	-	-	-	-	-	-
11/07/06	58,720	1,614,116	244	-	-	-	-	-	-	-	-	-	-	-	-
11/16/06	59,010	1,614,406	32	-	-	-	-	-	-	-	-	-	-	-	-
11/22/06	59,100	1,614,496	15	-	-	-	-	-	-	-	-	-	-	-	-
11/30/06	61,302	1,616,698	275	-	-	-	-	-	-	-	-	-	-	-	-
12/06/06	61,860	1,617,256	93	-	-	-	-	-	-	-	-	-	-	-	-
12/13/06	61,930	1,617,326	10	System was shut down for maintenance					-	-	-	-	-	-	-
01/03/07	61,930	1,617,326	-	Restarted system					-	-	-	-	-	-	-
01/05/07	62,140	1,617,536	105	-	-	-	-	-	-	-	-	-	-	-	-
01/09/07	62,870	1,618,266	183	-	-	-	-	-	-	-	-	-	-	-	-
01/16/07	63,140	1,618,536	39	<5.6	<0.17	<0.22	<0.14	<0.38	144,000	<64.0	12,100	4,650	28,300	<126	
01/25/07	63,740	1,619,136	67	Restarted system (shut down on 1/16/07 for groundwater sampling.)					-	-	-	-	-	-	-
01/30/07	64,140	1,619,536	80	-	-	-	-	-	-	-	-	-	-	-	-
02/02/07	64,530	1,619,926	130	Shut down for carbon change-out					-	-	-	-	-	-	-
02/09/07	64,540	1,619,936	1	Restarted after carbon change-out					-	-	-	-	-	-	-
02/13/07	64,920	1,620,316	95	-	-	-	-	-	-	-	-	-	-	-	-
02/19/07	65,213	1,620,609	49	-	-	-	-	-	-	-	-	-	-	-	-
02/28/07	65,730	1,621,126	57	-	-	-	-	-	-	-	-	-	-	-	-
03/08/07	66,370	1,621,766	80	-	-	-	-	-	-	-	-	-	-	-	-
03/13/07	67,240	1,622,636	174	-	-	-	-	-	-	-	-	-	-	-	-
03/20/07	68,410	1,623,806	167	-	-	-	-	-	-	-	-	-	-	-	-
03/27/07	68,630	1,624,026	31	-	-	-	-	-	-	-	-	-	-	-	-
04/03/07	68,900	1,624,296	39	-	-	-	-	-	-	-	-	-	-	-	-
04/10/07	69,780	1,625,176	126	<5.6	<0.17	<0.22	<0.14	<0.38	4,390	30	514	45 J	595	51	
04/13/07	69,940	1,625,336	53	System was turned off for groundwater well sampling					-	-	-	-	-	-	-
04/20/07	69,940	1,625,336	-	Restarted system					-	-	-	-	-	-	-
04/26/07	70,130	1,625,526	32	-	-	-	-	-	-	-	-	-	-	-	-
05/02/07	-	-	-	-	<0.7	<0.67	<0.65	<1.3	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)						
05/02/07	71,300	1,626,696	195	<5.6	<0.17	<0.22	<0.14	<0.38	Split-sample results during EBMUD inspection & sampling						
05/08/07	71,630	1,627,026	55	-	-	-	-	-	-	-	-	-	-	-	-
05/17/07	72,710	1,628,106	120	-	-	-	-	-	-	-	-	-	-	-	-
05/24/07	73,120	1,628,516	59	-	-	-	-	-	-	-	-	-	-	-	-

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GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
06/01/07	75,340	1,630,736	278	-	-	-	-	-	-	-	-	-	-	-
06/14/07	76,840	1,632,236	115	-	-	-	-	-	-	-	-	-	-	-
06/19/07	77,234	1,632,630	79	-	-	-	-	-	-	-	-	-	-	-
06/21/07	77,289	1,632,685	28	-	-	-	-	-	416,000	3,330	49,400	7,250	39,700	<19
06/28/07	77,690	1,633,086	57	-	-	-	-	-	-	-	-	-	-	-
07/03/07	80,230	1,635,626	508	-	-	-	-	-	-	-	-	-	-	-
07/10/07	86,310	1,641,706	869	-	-	-	-	-	-	-	-	-	-	-
07/17/07	87,620	1,643,016	187	System was turned off for groundwater well sampling					-	-	-	-	-	-
07/20/07	87,620	1,643,016	-	Restarted system					-	-	-	-	-	-
07/24/07	87,930	1,643,326	78	-	-	-	-	-	-	-	-	-	-	-
07/31/07	88,260	1,643,656	47	-	-	-	-	-	-	-	-	-	-	-
08/07/07	88,930	1,644,326	96	-	-	-	-	-	-	-	-	-	-	-
08/14/07	89,620	1,645,016	99	-	-	-	-	-	-	-	-	-	-	-
08/21/07	91,200	1,646,596	226	54	<0.15	<0.12	<0.09	<0.26	-	-	-	-	-	-
08/30/07	92,300	1,647,696	122	-	-	-	-	-	-	-	-	-	-	-
09/05/07	92,720	1,648,116	70	Shut down for carbon change-out					-	-	-	-	-	-
09/11/07	92,720	1,648,116	-	-	-	-	-	-	-	-	-	-	-	-
09/17/07	92,760	1,648,166	7	Restart system after carbon change-out					-	-	-	-	-	-
09/24/07	100,590	1,655,966	1,119	-	-	-	-	-	-	-	-	-	-	-
10/02/07	109,100	1,664,496	1,064	-	-	-	-	-	-	-	-	-	-	-
10/10/07	118,640	1,674,036	1,193	-	-	-	-	-	-	-	-	-	-	-
10/16/07	124,630	1,680,026	998	Shut down for QWS					-	-	-	-	-	-
10/19/07	124,690	1,680,086	20	Restart system after QWS					-	-	-	-	-	-
10/23/07	124,860	1,680,256	43	-	-	-	-	-	-	-	-	-	-	-
10/30/07	127,680	1,683,076	403	-	-	-	-	-	-	-	-	-	-	-
11/20/07	139,850	1,695,246	580	<5.6	<0.15	<0.12	<0.09	<0.26	251	<0.18	<0.24	1.8 J	6.1	138
11/30/07	154,320	1,709,716	1,447	-	-	-	-	-	-	-	-	-	-	-
12/04/07	154,400	1,709,796	20	-	-	-	-	-	-	-	-	-	-	-
12/14/07	164,210	1,719,606	981	-	-	-	-	-	12,400	302	2170	853	5090	<1.9
12/21/07	167,300	1,722,696	441	-	-	-	-	-	-	-	-	-	-	-
12/28/07	169,420	1,724,816	303	-	-	-	-	-	-	-	-	-	-	-
01/02/08	172,430	1,727,826	602	-	-	-	-	-	-	-	-	-	-	-
01/11/08	178,960	1,734,356	726	-	-	-	-	-	-	-	-	-	-	-
01/15/08	179,240	1,734,636	70	<5.6	<0.15	<0.12	<0.09	<0.26	793	31	32	16	46	63
01/18/08	179,240	1,734,636	-	Restart system after QWS					-	-	-	-	-	-
01/25/08	188,920	1,744,316	1,383	-	-	-	-	-	-	-	-	-	-	-
02/01/08	192,200	1,747,596	469	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
02/05/08	195,150	1,750,546	738	-	-	-	-	-	444	2.4	137	21	100	84
02/15/08	195,570	1,750,966	42	-	-	-	-	-	-	-	-	-	-	-
02/22/08	198,380	1,753,776	401	-	-	-	-	-	-	-	-	-	-	-
02/29/08	203,160	1,758,556	683	-	-	-	-	-	-	-	-	-	-	-
03/07/08	210,490	1,765,886	1,047	-	-	-	-	-	-	-	-	-	-	-
03/12/08	216,700	1,772,096	1,242	<5.6	<0.15	<0.12	<0.09	<0.26	111	<0.18	<0.24	<0.21	7.8	23
03/25/08	233,240	1,788,636	1,272	-	-	-	-	-	-	-	-	-	-	-
03/27/08	233,970	1,789,366	365	-	-	-	-	-	-	-	-	-	-	-
04/23/08	234,000	1,789,396	1	<6.6	<0.15	<0.12	<0.09	<0.26	4,520	16	<0.24	<0.21	1040	6.6
05/01/08	245,000	1,800,396	1,375	-	-	-	-	-	-	-	-	-	-	-
05/06/08	254,850	1,810,246	1,970	-	-	-	-	-	-	-	-	-	-	-
05/13/08	258,100	1,813,496	464	-	-	-	-	-	29,200	219	3,130	913	4,860	<3.8
05/20/08	267,970	1,823,366	1,410	-	-	-	-	-	-	-	-	-	-	-
05/28/08	277,550	1,832,946	1,198	-	-	-	-	-	-	-	-	-	-	-
06/04/08	277,600	1,832,996	7	-	-	-	-	-	-	-	-	-	-	-
06/10/08	279,660	1,835,076	347	-	-	-	-	-	-	-	-	-	-	-
06/17/08	279,690	1,835,086	1	-	-	-	-	-	-	-	-	-	-	-
06/25/08	288,300	1,843,696	1,076	-	-	-	-	-	19,700	78	416	210	1,120	5.9
07/08/08	300,310	1,855,706	924	<6.6	<0.15	3.0	0.6	3.4	20,100	526	3,160	607	3,220	52
07/15/08	302,720	1,858,116	344	SHUT DOWN SYSTEM FOR QWS				-	-	-	-	-	-	-
07/22/08	307,280	1,862,676	651	RESTART SYSTEM AFTER QWS				-	-	-	-	-	-	-
07/29/08	314,840	1,870,236	1,080	SHUT DOWN SYSTEM FOR CARBON CHANGEOUT				-	-	-	-	-	-	-
08/06/08	314,840	1,870,236	-	CARBON CHANGEOUT				-	-	-	-	-	-	-
08/08/08	314,880	1,870,276	20	RESTART SYSTEM AFTER CARBON CHANGEOUT				-	-	-	-	-	-	-
08/15/08	323,520	1,878,916	1,234	-	-	-	-	-	8,430	95	705	259	1,340	21
08/22/08	326,970	1,882,366	493	-	-	-	-	-	-	-	-	-	-	-
08/29/08	336,510	1,891,906	1,363	-	-	-	-	-	-	-	-	-	-	-
09/03/08	336,940	1,892,336	86	-	-	-	-	-	-	-	-	-	-	-
09/09/08	345,120	1,900,516	1,363	-	-	-	-	-	-	-	-	-	-	-
09/16/08	353,740	1,909,136	1,231	-	-	-	-	-	-	-	-	-	-	-
09/23/08	362,360	1,917,756	1,231	-	-	-	-	-	-	-	-	-	-	-
09/30/08	367,980	1,923,376	803	-	-	-	-	-	-	-	-	-	-	-
10/07/08	374,190	1,929,586	887	-	-	-	-	-	-	-	-	-	-	-
10/14/08	380,700	1,936,096	930	SHUT DOWN SYSTEM FOR QWS				-	335	21	4.5 J	<0.21	7.1	185
10/21/08	380,730	1,936,126	4	RESTARTED AFTER QWS				-	-	-	-	-	-	-
10/28/08	389,750	1,945,146	1,289	-	-	-	-	-	-	-	-	-	-	-
11/04/08	397,700	1,953,096	1,136	-	-	-	-	-	-	-	-	-	-	-
11/13/08	403,340	1,958,736	627	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)					
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE
11/19/08	411,970	1,967,366	1,438	-	-	-	-	-	-	-	-	-	-	-
11/25/08	419,910	1,975,306	1,323	-	-	-	-	-	-	-	-	-	-	-
12/03/08	428,530	1,983,926	1,078	-	-	-	-	-	-	-	-	-	-	-
12/09/08	436,480	1,991,876	1,325	<6.6	<0.23	<0.23	<0.26	<0.81	89	2.2	<0.24	<0.21	4.8 J	35
12/17/08	445,440	2,000,836	1,120	-	-	-	-	-	-	-	-	-	-	-
12/24/08	455,270	2,010,666	1,404	-	-	-	-	-	-	-	-	-	-	-
12/30/08	464,210	2,019,606	1,490	-	-	-	-	-	-	-	-	-	-	-
01/08/09	473,310	2,028,706	1,011	-	-	-	-	-	-	-	-	-	-	-
01/09/09	473,550	2,028,946	240	-	-	-	-	-	-	-	-	-	-	-
01/14/09	480,890	2,036,286	1,468	-	-	-	-	-	-	-	-	-	-	-
01/15/09	481,090	2,036,486	200	-	-	-	-	-	-	-	-	-	-	-
01/16/09	481,380	2,036,776	290	SHUT DOWN SYSTEM FOR QWS					-	-	-	-	-	-
01/22/09	481,460	2,036,856	13	RESTARTED AFTER QWS					-	-	-	-	-	-
01/26/09	488,740	2,044,136	1,820	-	-	-	-	-	-	-	-	-	-	-
02/02/09	499,400	2,054,796	1,523	-	-	-	-	-	-	-	-	-	-	-
02/09/09	509,270	2,064,666	1,410	-	-	-	-	-	-	-	-	-	-	-
02/19/09	509,390	2,064,786	12	SYSTEM SHUTDOWN DUE TO BREAK-IN/THEFT					-	-	-	-	-	-
02/27/09	509,410	2,064,806	3	RESTARTED SYSTEM					-	-	-	-	-	-
03/02/09	509,750	2,065,146	113	-	-	-	-	-	-	-	-	-	-	-
03/06/09	513,540	2,068,936	948	-	-	-	-	-	-	-	-	-	-	-
03/09/09	516,010	2,071,406	823	-	-	-	-	-	-	-	-	-	-	-
03/16/09	524,240	2,079,636	1,176	-	-	-	-	-	-	-	-	-	-	-
03/23/09	525,740	2,081,136	214	-	-	-	-	-	-	-	-	-	-	-
04/02/09	528,090	2,083,486	235	-	-	-	-	-	-	-	-	-	-	-
04/10/09	532,790	2,088,186	588	SHUT DOWN SYSTEM FOR QWS					-	-	-	-	-	-
04/16/09	532,830	2,088,226	7	RESTARTED AFTER QWS					-	-	-	-	-	-
04/22/09	541,390	2,096,786	1,427	-	-	-	-	-	<6.6	<0.18	<0.24	<0.21	1.0 J	<0.19
04/27/09	547,630	2,103,026	1,248	-	-	-	-	-	-	-	-	-	-	-
05/04/09	555,260	2,110,656	1,090	-	-	-	-	-	-	-	-	-	-	-
05/13/09	563,400	2,118,796	904	-	-	-	-	-	-	-	-	-	-	-
05/18/09	569,380	2,124,776	1,196	-	-	-	-	-	-	-	-	-	-	-
05/26/09	574,820	2,130,216	680	-	-	-	-	-	-	-	-	-	-	-
06/09/09	577,540	2,132,936	194	FOUND SYSTEM OFF. AIR COMPRESSOR OVERLOAD					-	-	-	-	-	-
06/15/09	583,360	2,138,756	970	<6.6	<0.18	<0.24	<0.21	<0.45	451	94	50	1.3 J	44	80
06/17/09	585,430	2,140,826	1,035	-	-	-	-	-	-	-	-	-	-	-
06/23/09	592,510	2,147,906	1,180	-	-	-	-	-	-	-	-	-	-	-
07/07/09	600,510	2,155,906	571	-	-	-	-	-	-	-	-	-	-	-
07/15/09	609,430	2,164,826	1,115	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)							
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE		
07/21/09	615,570	2,170,966	1,023	-	-	-	-	-	-	-	-	-	-	-	-	
07/28/09	622,400	2,177,796	976	-	-	-	-	-	-	-	-	-	-	-	-	
08/04/09	629,960	2,185,356	1,080	-	-	-	-	-	-	-	-	-	-	-	-	
08/10/09	633,250	2,188,646	548	<6.6	<0.23	<0.23	<0.26	<0.81	Split-sample results during EBMUD inspection & sampling							
08/13/09	-	-	-	-	<0.51	<0.51	<0.41	<1.3 / <0.37	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)							
08/19/09	639,790	2,195,186	727	-	-	-	-	-	-	-	-	-	-	-	-	
08/26/09	647,390	2,202,786	1,086	-	-	-	-	-	-	-	-	-	-	-	-	
09/02/09	654,650	2,210,046	1,037	-	-	-	-	-	-	-	-	-	-	-	-	
09/10/09	661,090	2,216,486	805	-	-	-	-	-	-	-	-	-	-	-	-	
09/21/09	669,140	2,224,536	732	-	-	-	-	-	-	-	-	-	-	-	-	
09/29/09	675,680	2,231,076	818	-	-	-	-	-	-	-	-	-	-	-	-	
10/09/09	683,890	2,239,266	821	-	-	-	-	-	-	-	-	-	-	-	-	
10/13/09	688,400	2,243,796	1,128	-	-	-	-	-	-	-	-	-	-	-	-	
10/20/09	693,420	2,248,816	717	Shut down for QWS					-	-	-	-	-	-	-	-
10/22/09	693,480	2,248,876	30	Restart system after QWS					-	-	-	-	-	-	-	-
10/27/09	697,020	2,252,416	708	-	-	-	-	-	-	-	-	-	-	-	-	
11/04/09	704,580	2,259,976	945	-	-	-	-	-	-	-	-	-	-	-	-	
11/10/09	711,470	2,266,866	1,148	-	-	-	-	-	-	-	-	-	-	-	-	
11/17/09	718,410	2,273,806	991	-	-	-	-	-	-	-	-	-	-	-	-	
11/24/09	725,250	2,280,646	977	-	-	-	-	-	-	-	-	-	-	-	-	
12/01/09	733,890	2,289,286	1,234	-	-	-	-	-	-	-	-	-	-	-	-	
12/08/09	742,030	2,297,426	1,163	-	-	-	-	-	-	-	-	-	-	-	-	
12/15/09	750,980	2,306,376	1,279	-	-	-	-	-	-	-	-	-	-	-	-	
12/17/09	751,230	2,306,626	125	<6.6	<0.18	<0.24	<0.21	<0.45	120,000	1,480	18,400	4,480	24,000	<19.0	-	
12/22/09	753,280	2,308,676	410	-	-	-	-	-	-	-	-	-	-	-	-	
12/29/09	755,690	2,311,086	344	-	-	-	-	-	-	-	-	-	-	-	-	
01/05/10	757,120	2,312,516	204	System found off due to air compressor pressure switch					-	-	-	-	-	-	-	-
01/08/10	757,120	2,312,516	-	System restarted after repairs					-	-	-	-	-	-	-	-
01/12/10	761,770	2,317,166	1,163	-	-	-	-	-	-	-	-	-	-	-	-	
01/21/10	771,570	2,326,966	1,089	-	-	-	-	-	-	-	-	-	-	-	-	
01/26/10	780,510	2,335,906	1,788	-	-	-	-	-	-	-	-	-	-	-	-	
02/02/10	789,430	2,344,826	1,274	-	-	-	-	-	-	-	-	-	-	-	-	
02/09/10	797,830	2,353,226	1,200	-	-	-	-	-	-	-	-	-	-	-	-	
02/16/10	806,450	2,361,846	1,231	-	-	-	-	-	-	-	-	-	-	-	-	
02/23/10	815,070	2,370,466	1,231	-	-	-	-	-	-	-	-	-	-	-	-	
03/02/10	817,550	2,372,946	354	<6.6	<0.18	<0.24	<0.21	<0.45	Split-sample results during EBMUD inspection & sampling							
03/02/10	-	-	-	-	<0.51	<0.51	<0.41	<1.67	Outlet sampling results from EBMUD (sample collected by EBMUD inspector)							
03/03/10	817,930	2,373,326	380	-	-	-	-	-	-	-	-	-	-	-	-	

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GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
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Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)						
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
03/09/10	824,830	2,380,226	1,150	-	-	-	-	-	-	-	-	-	-	-	-
03/16/10	833,550	2,388,946	1,246	-	-	-	-	-	-	-	-	-	-	-	-
03/31/10	842,130	2,397,526	572	System shut down for carbon canister changeout											
04/16/10	855,750	2,411,146	851	System Restarted											
04/20/10	858,730	2,414,126	745	System Shutdown for QWS											
04/22/10	858,790	2,414,186	30	System Restarted											
04/29/10	866,600	2,421,993	1,116	-	-	-	-	-	-	-	-	-	-	-	-
05/04/10	874,460	2,429,856	1,572	-	-	-	-	-	-	-	-	-	-	-	-
05/12/10	883,380	2,438,776	1,115	-	-	-	-	-	-	-	-	-	-	-	-
05/18/10	891,590	2,446,986	1,368	-	-	-	-	-	-	-	-	-	-	-	-
05/26/10	900,550	2,455,946	1,120	-	-	-	-	-	-	-	-	-	-	-	-
06/04/10	910,390	2,465,786	1,093	-	-	-	-	-	-	-	-	-	-	-	-
06/09/10	918,350	2,473,746	1,592	-	-	-	-	-	-	-	-	-	-	-	-
06/16/10	927,110	2,482,506	1,251	-	-	-	-	-	-	-	-	-	-	-	-
06/24/10	935,830	2,491,226	1,090	-	-	-	-	-	-	-	-	-	-	-	-
07/02/10	943,720	2,499,116	986	-	-	-	-	-	-	-	-	-	-	-	-
07/08/10	952,310	2,507,706	1,432	-	-	-	-	-	-	-	-	-	-	-	-
07/14/10	961,730	2,517,126	1,570	-	-	-	-	-	-	-	-	-	-	-	-
07/22/10	970,680	2,526,076	1,119	-	-	-	-	-	-	-	-	-	-	-	-
07/23/10	970,840	2,526,236	160	-	-	-	-	-	829	3.0	125	2.1	134	6.5	-
07/29/10	978,400	2,533,796	1,260	-	-	-	-	-	-	-	-	-	-	-	-
08/03/10	986,380	2,541,776	1,596	System shutdown for pilot test											
09/08/10	999,270	2,554,666	358	System Restarted											
09/10/10	999,870	2,555,266	300	System Shutdown											
09/23/10	999,870	2,555,266	-	System Restarted											
09/27/10	1,000,080	2,555,476	53	System Shutdown for rebound											
10/05/10	1,000,080	2,555,476	-	-	-	-	-	-	-	-	-	-	-	-	-
10/27/10	1,000,100	2,555,496	1	System Restarted after water sampling.											
11/03/10	1,000,480	2,555,876	54	-	-	-	-	-	-	-	-	-	-	-	-
11/09/10	1,001,122	2,556,518	107	-	-	-	-	-	-	-	-	-	-	-	-
11/16/10	1,001,550	2,556,946	61	-	-	-	-	-	-	-	-	-	-	-	-
11/23/10	1,002,440	2,557,836	127	-	-	-	-	-	-	-	-	-	-	-	-
12/06/10	1,003,690	2,559,086	96	-	-	-	-	-	-	-	-	-	-	-	-
12/14/10	1,010,030	2,565,426	793	-	-	-	-	-	-	-	-	-	-	-	-
12/16/10	1,010,230	2,565,626	100	-	-	-	-	-	477	2.4	8.5	0.9	26	19	-
12/21/10	1,013,910	2,569,306	736	-	-	-	-	-	-	-	-	-	-	-	-
12/30/10	1,014,790	2,570,186	98	-	-	-	-	-	-	-	-	-	-	-	-
01/04/11	1,019,310	2,574,706	904	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GROUNDWATER REMEDIATION SYSTEM MONITORING PROGRAM
 Thrifty Oil Co. Station No 049, OAKLAND, CA

Date	Totalizer (gallons)	Total/Cum. Discharge (gallons)	Flow (gal/day)	OUTLET / EFFLUENT (ug/L)					INLET / INFLUENT (ug/L)						
				TPH-g	B	T	E	X	TPH-g	B	T	E	X	MTBE	
01/11/11	1,025,520	2,580,915	887	-	-	-	-	-	-	-	-	-	-	-	-
01/13/11	1,026,750	2,582,145	615	-	-	-	-	-	149,000	1,880	24,000	4,430	37,500	<1.9	
01/19/11	1,031,010	2,586,405	710	System shutdown for water sampling.					-	-	-	-	-	-	-
01/20/11	1,031,080	2,586,475	70	System Restarted after water sampling.					-	-	-	-	-	-	-
01/25/11	1,033,760	2,589,155	536	-	-	-	-	-	-	-	-	-	-	-	-
02/01/11	1,042,370	2,597,765	1,230	-	-	-	-	-	57,800	1,080	13,700	2,230	11,000	<19.0	
02/08/11	1,048,890	2,604,285	931	-	-	-	-	-	-	-	-	-	-	-	-
02/16/11	1,055,710	2,611,105	853	-	-	-	-	-	-	-	-	-	-	-	-
02/21/11	1,062,600	2,617,995	1,378	-	-	-	-	-	-	-	-	-	-	-	-
03/01/11	1,069,440	2,624,835	855	-	-	-	-	-	-	-	-	-	-	-	-
03/09/11	1,076,570	2,632,065	904	-	-	-	-	-	-	-	-	-	-	-	-
03/15/11	1,083,650	2,639,045	1,163	-	-	-	-	-	-	-	-	-	-	-	-
03/23/11	1,090,230	2,645,625	823	-	-	-	-	-	<6.6	<0.18	<0.24	<0.21	<0.45	69	
03/30/11	1,099,180	2,654,575	1,279	-	-	-	-	-	-	-	-	-	-	-	-
04/05/11	1,108,710	2,664,105	1,588	-	-	-	-	-	-	-	-	-	-	-	-
04/13/11	1,116,330	2,671,725	953	-	-	-	-	-	-	-	-	-	-	-	-
04/20/11	1,126,150	2,681,545	1,403	-	-	-	-	-	-	-	-	-	-	-	-
04/28/11	1,129,040	2,684,435	361	System shutdown per agency approval.					-	-	-	-	-	-	-

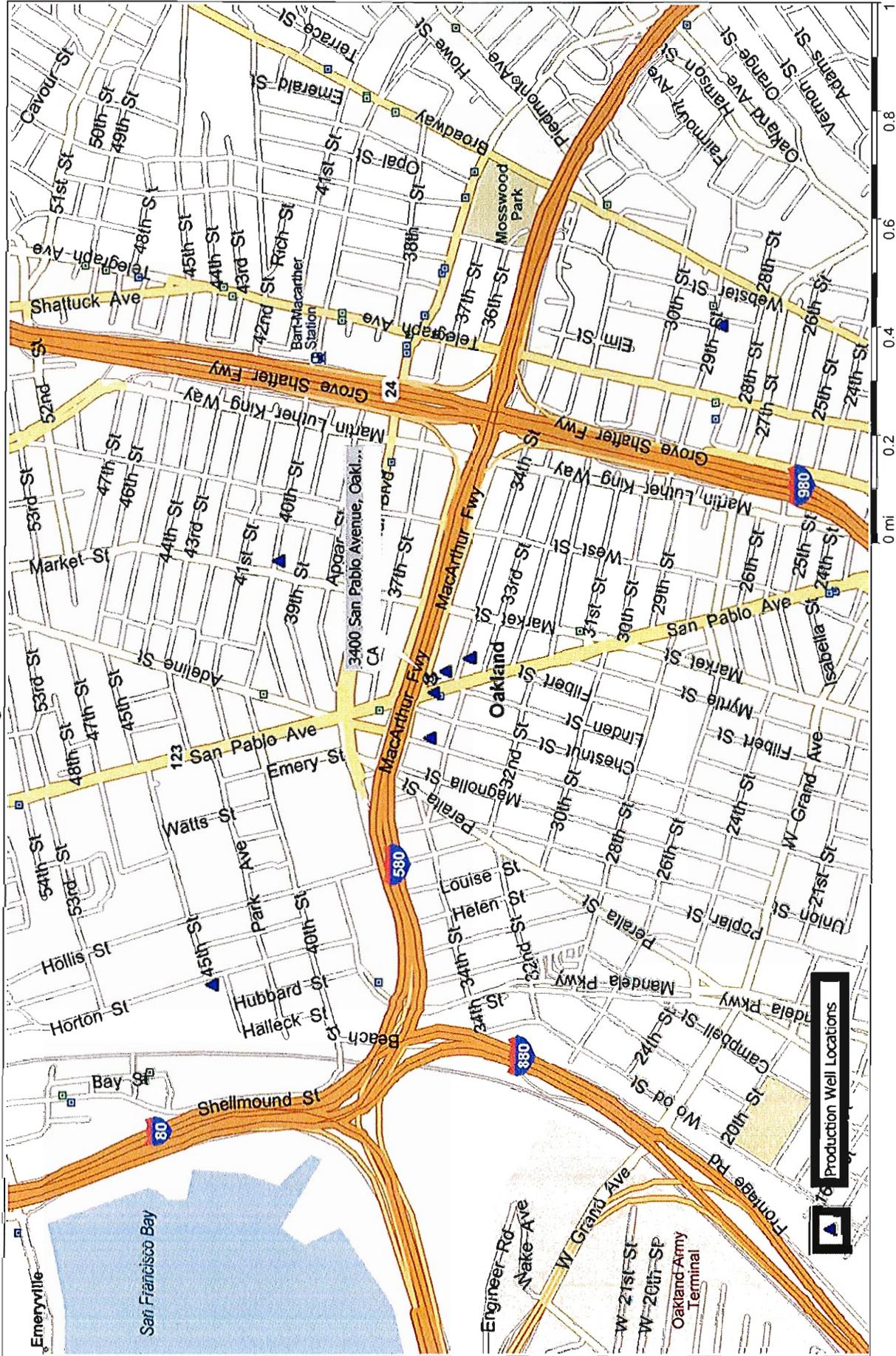
WD PERMIT LIMITS:	NE	5.0	5.0	5.0	5.0
--------------------------	----	-----	-----	-----	-----

Note: < = less than laboratory detection level indicated
 - = no sample / not analyzed
 NE = Permit Limit not established
 Total Hydrocarbons Removed = From 4/8/91 to 2/10/92, the influent TPHg is assumed to be 47,000 (3/9/92)
 In February 2000, the total cumulative discharge amount was corrected to reflect all system maintenance and flowmeter changeouts since the startup of the system.
 The total number may be different from previous versions of this table.

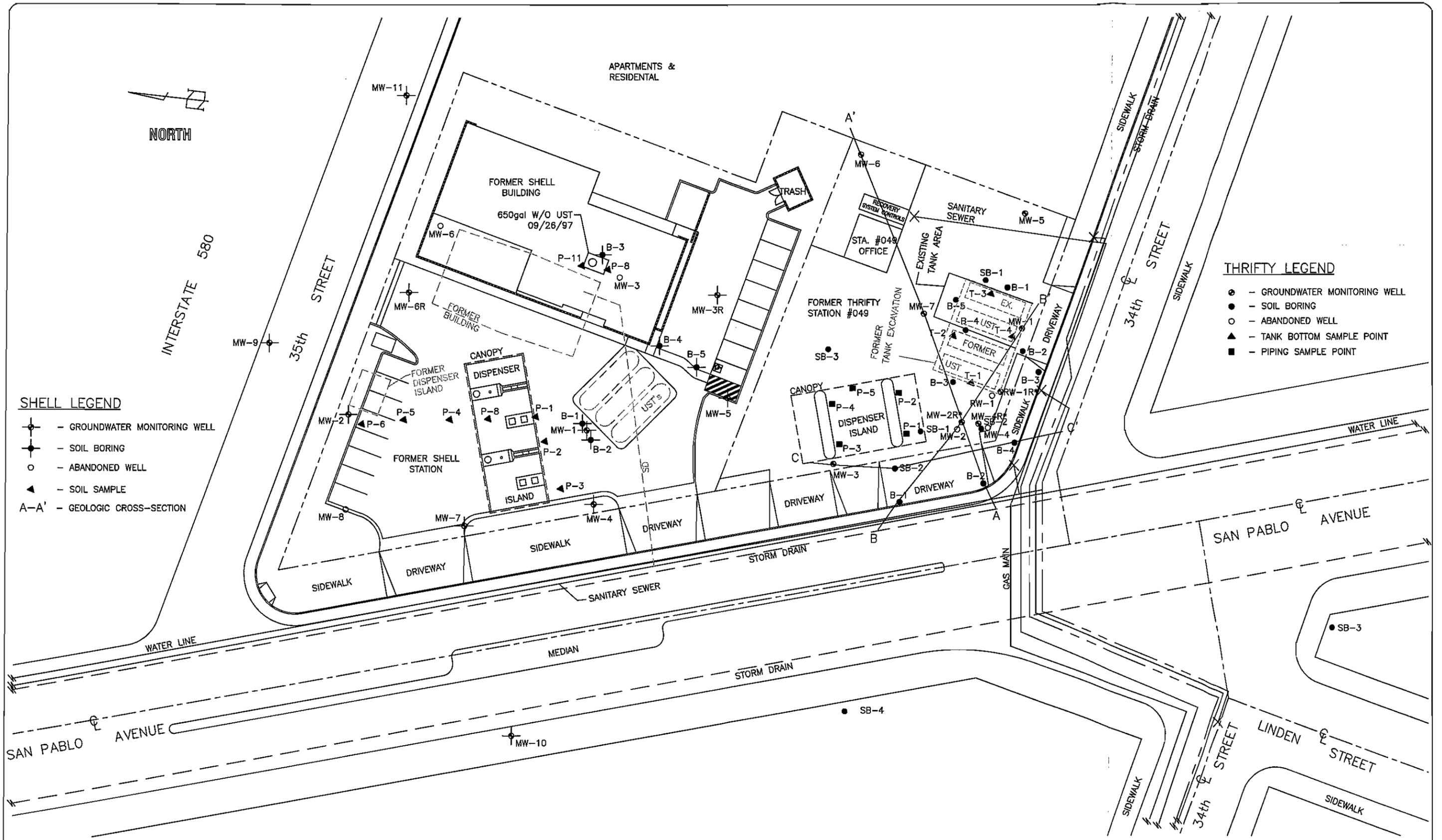
TPH is analyzed by EPA Method 8015 M
 BTEX is analyzed by EPA Method 8021 or 8260
 *MTBE by 8021/8260

Figures

Fig-01-049



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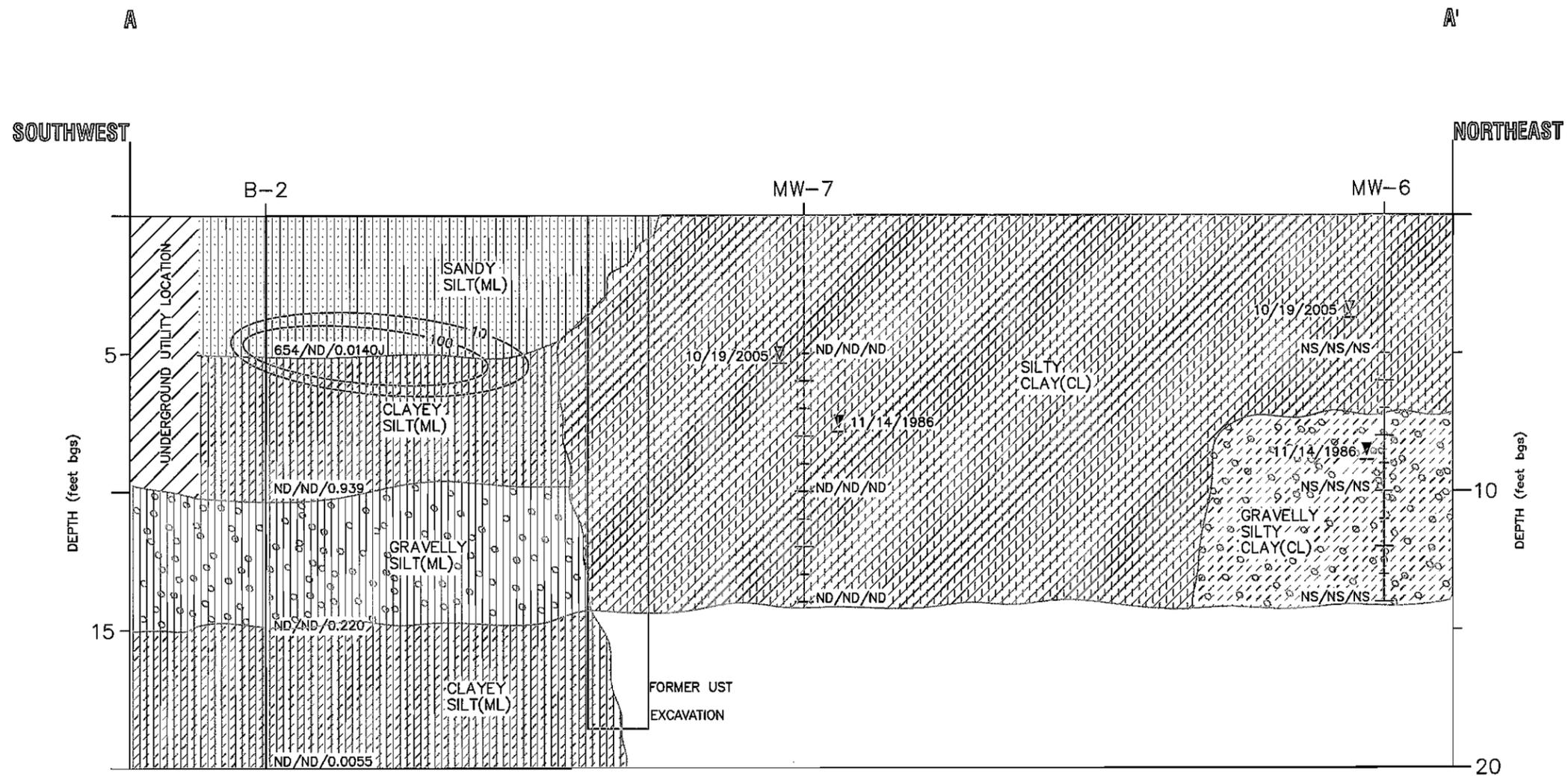
- SHELL LEGEND**
- ⊕ - GROUNDWATER MONITORING WELL
 - ⊙ - SOIL BORING
 - - ABANDONED WELL
 - ▲ - SOIL SAMPLE
 - A-A' - GEOLOGIC CROSS-SECTION

- THRIFTY LEGEND**
- ⊕ - GROUNDWATER MONITORING WELL
 - ⊙ - SOIL BORING
 - - ABANDONED WELL
 - ▲ - TANK BOTTOM SAMPLE POINT
 - - PIPING SAMPLE POINT



DATE: 10/16/13	Waterstone Environmental, Inc. 2936 East Cororando Street Anaheim, California 92806 (714) 414-1122; Fax (714) 414-1166	FIGURE 2 SITE PLAN with Cross Section Lines THRIFTY SERVICE STATION #049 3400 San Pablo Avenue Oakland, CA
----------------	---	---

VIEW NORTHWEST



HORIZONTAL 1"=20'
VERTICAL 1"=5'



LEGEND

- ▼ - RECENT ENCOUNTERED
- ▽ - 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

DATE: 10/16/13	Waterstone Environmental, Inc. 2936 East Cororando Street Anaheim, California 92806 (714) 414-1122; Fax (714) 414-1166	FIGURE 3A GEOLOGIC CROSS-SECTION A-A' THRIFTY SERVICE STATION #049 3400 San Pablo Avenue Oakland, CA
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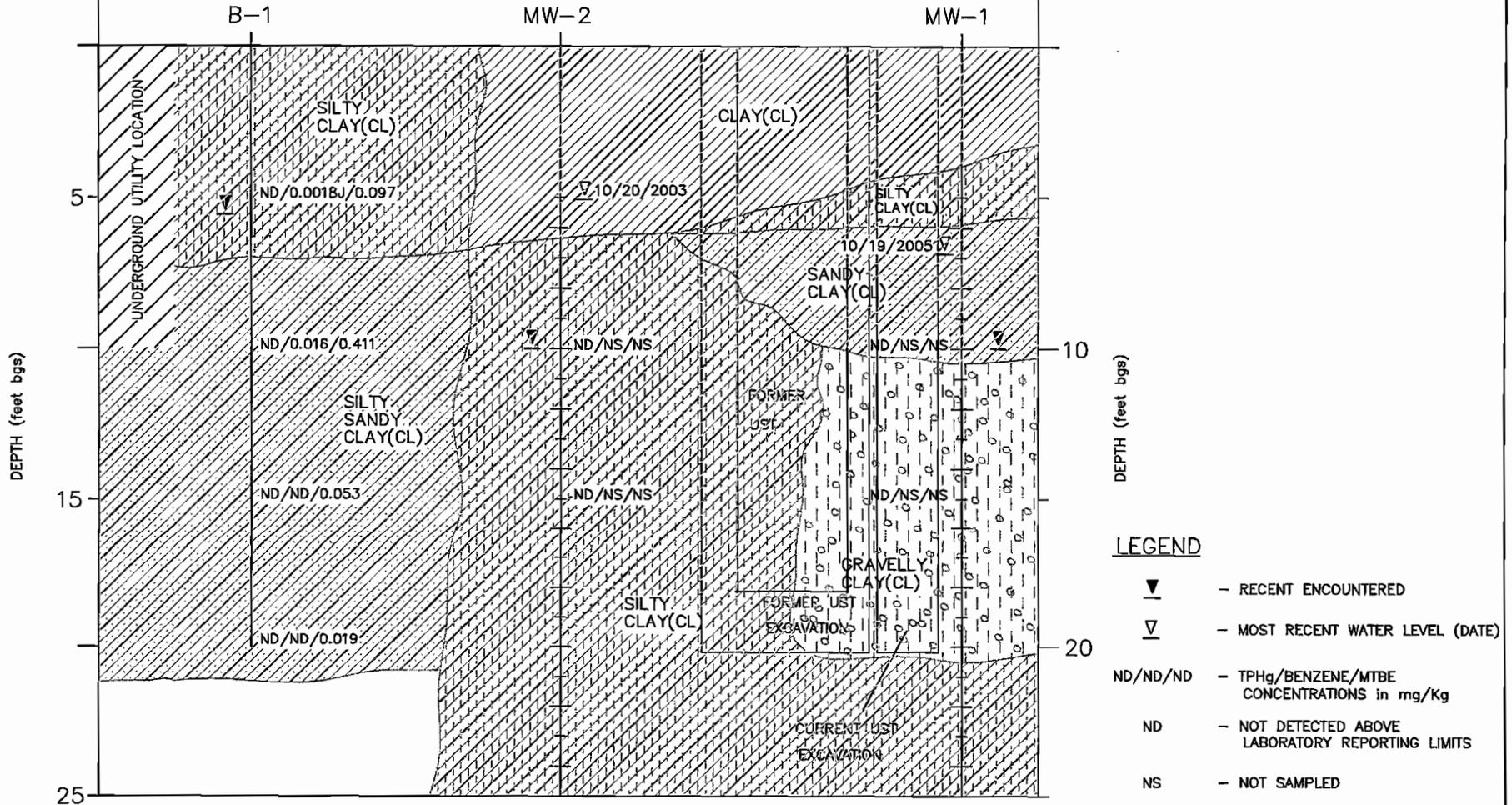
VIEW NORTHEAST

B

B'

NORTHWEST

SOUTHEAST



HORIZONTAL 1"=20'
VERTICAL 1"=5'

APPROXIMATE SCALE IN FEET

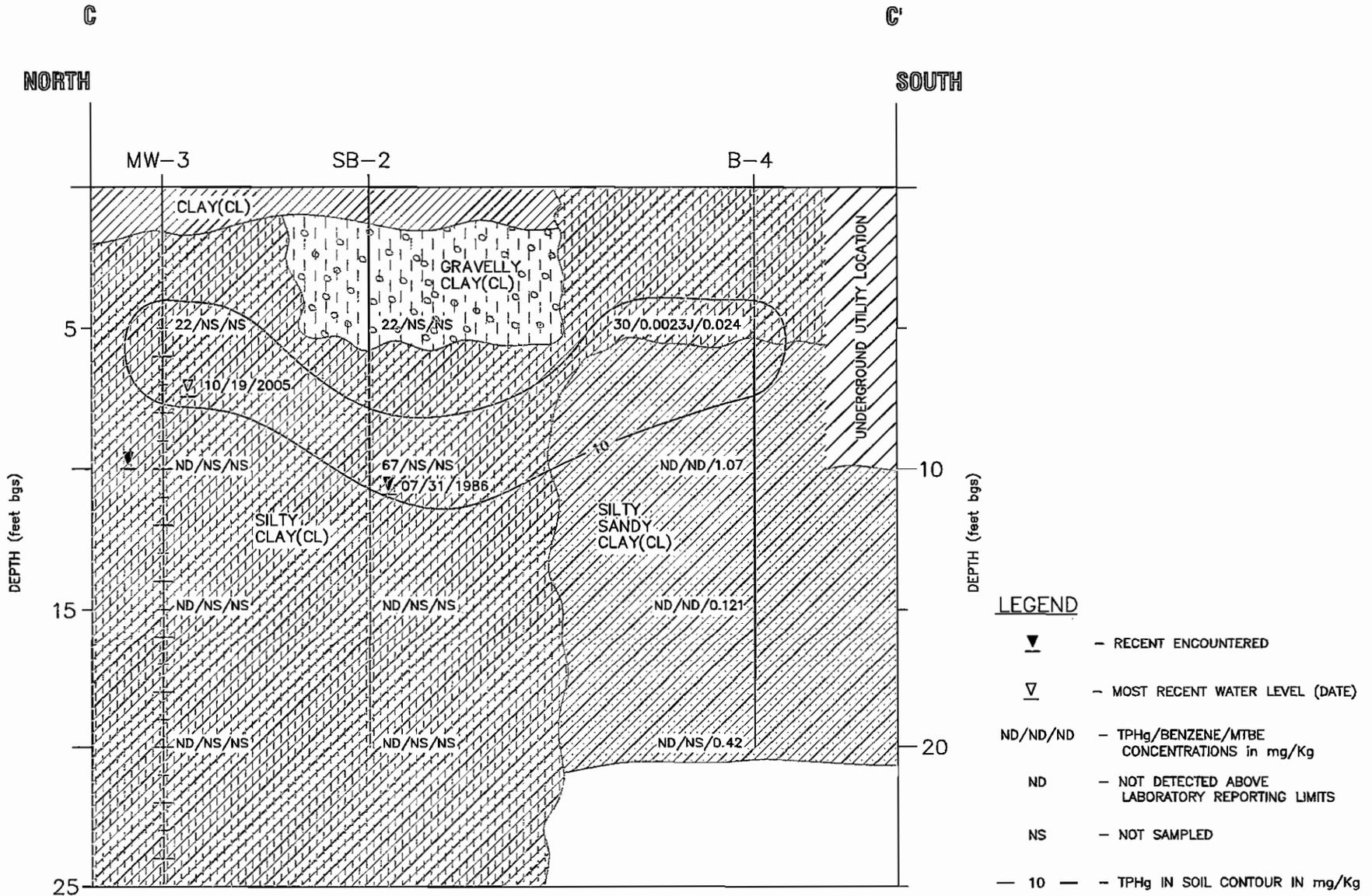


DATE: 10/17/13

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FIGURE 3B
GEOLOGIC CROSS-SECTION B-B'
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA

VIEW EAST



HORIZONTAL 1"=20'
VERTICAL 1"=5'

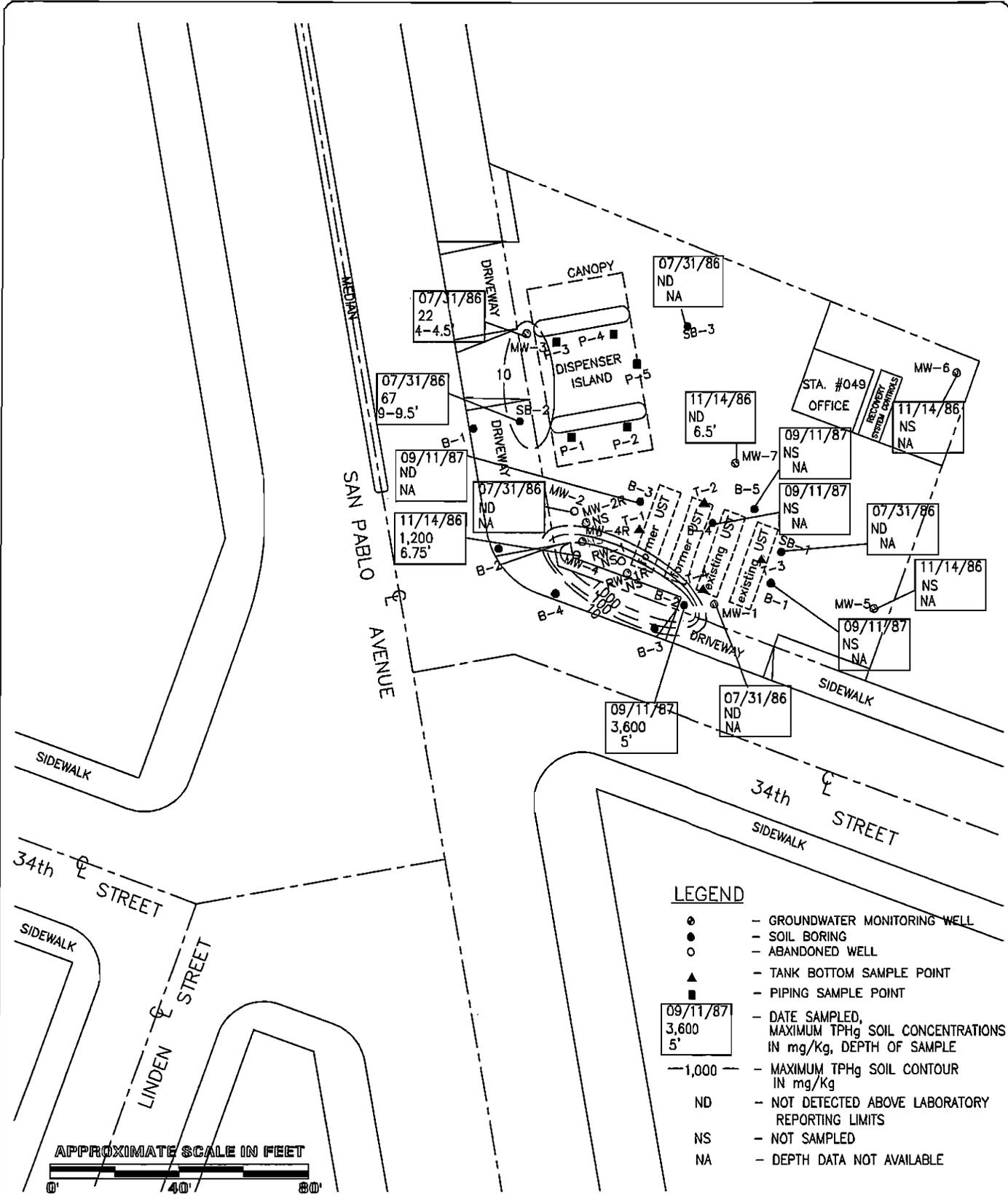
APPROXIMATE SCALE IN FEET



DATE: 10/16/13

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FIGURE 3C
GEOLOGIC CROSS-SECTION C-C'
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA



Waterstone Environmental, Inc.

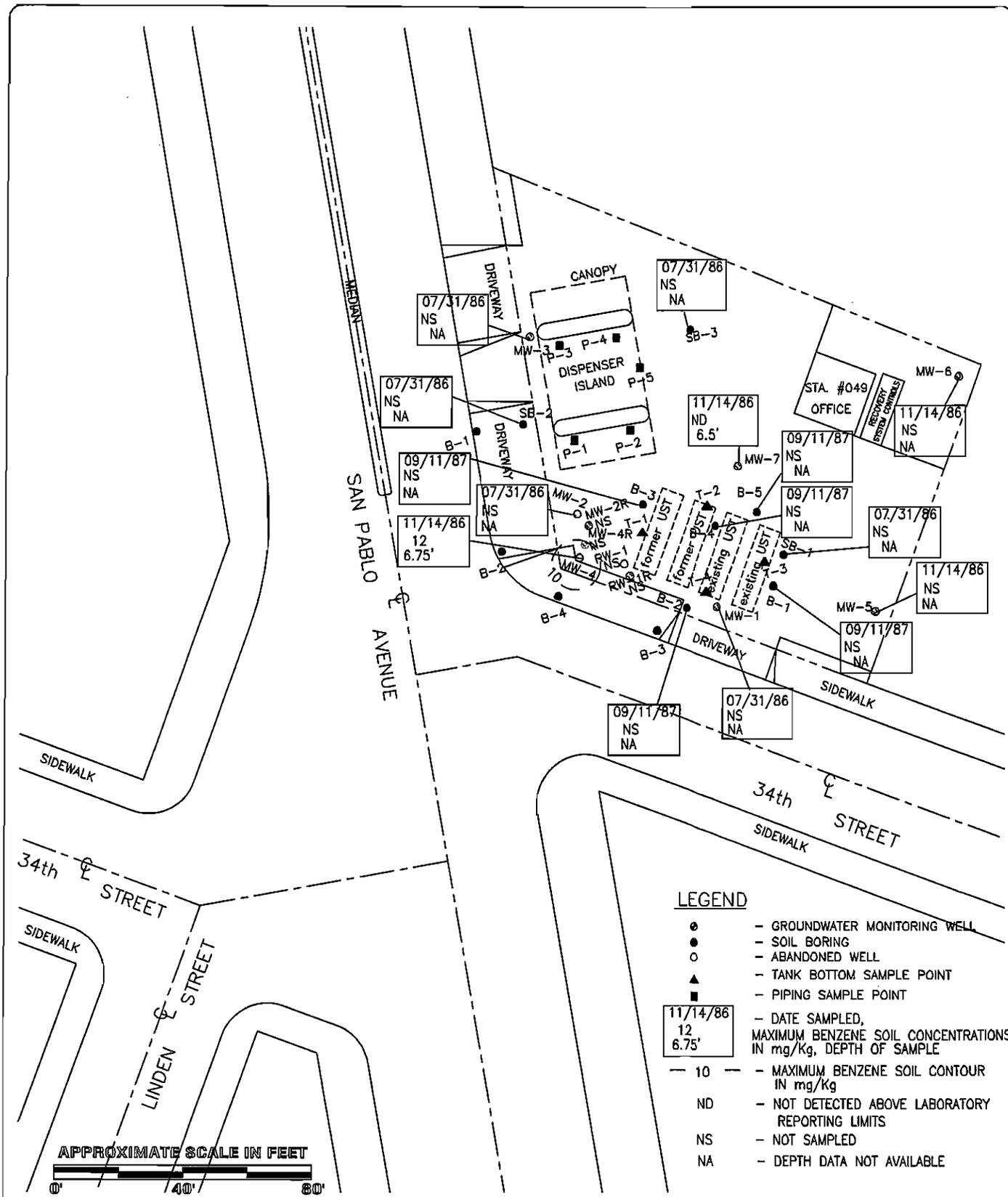
2936 East Cororando Street
 Anaheim, California 92806
 (714) 414-1122; Fax (714) 414-1166

NORTH



DATE: 10/16/13

FIGURE 4A
DISTRIBUTION OF TPHg IN SOIL
 (Pre-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

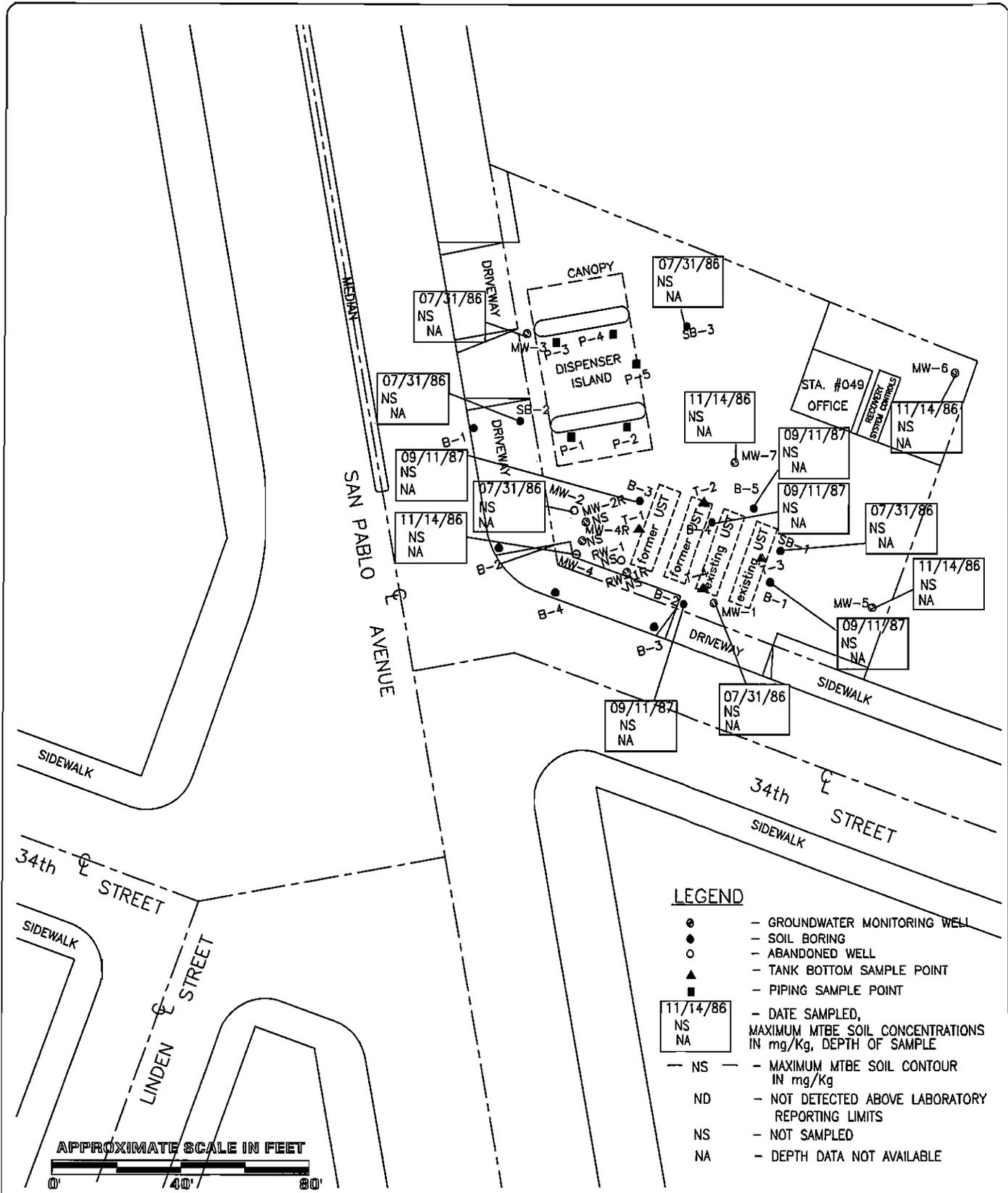
2936 East Cororando Street
 Anaheim, California 92806
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NORTH



DATE: 12/26/10

FIGURE 4B
DISTRIBUTION OF BENZENE IN SOIL
 (Pre-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

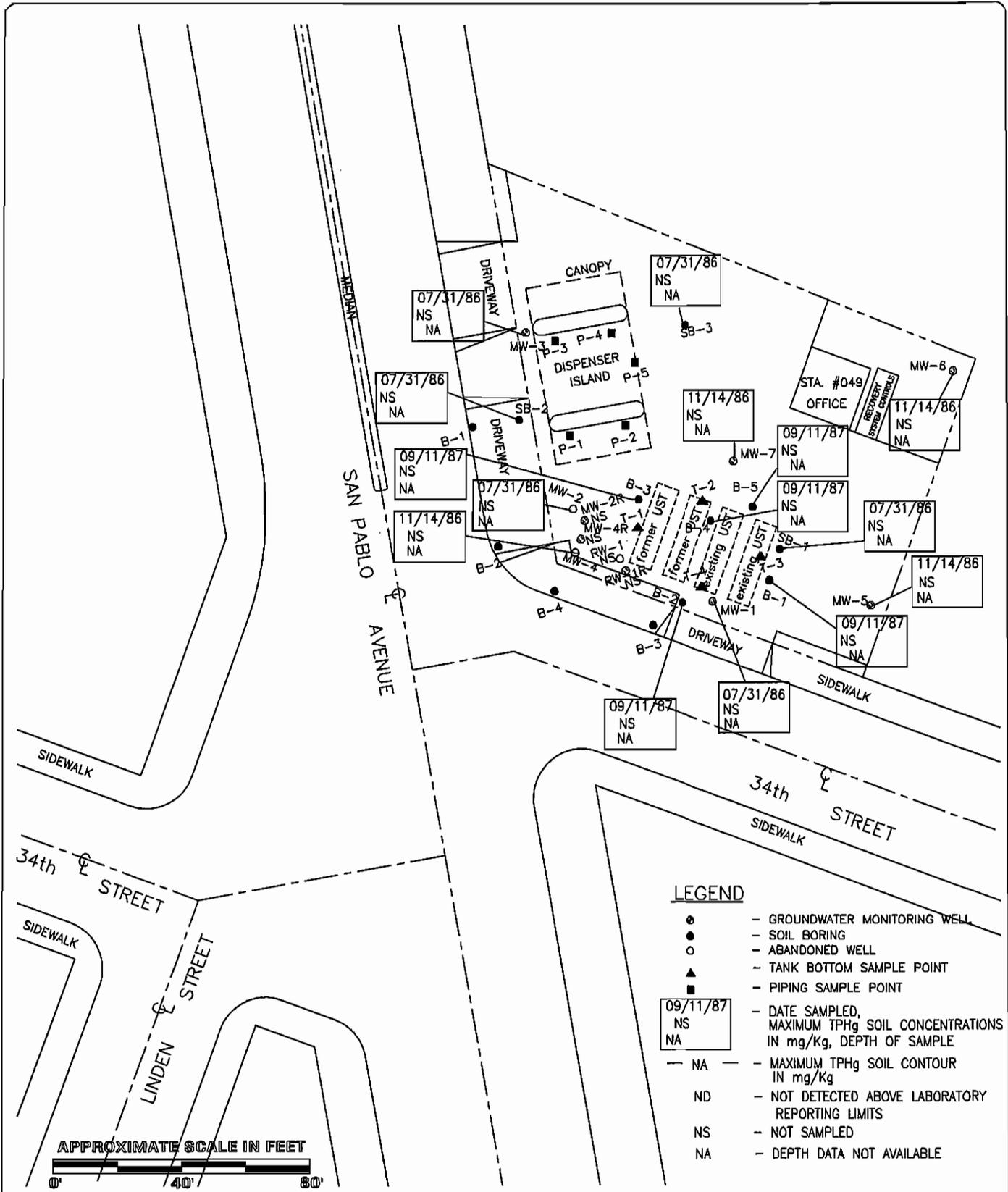
2936 East Cororando Street
 Anaheim, California 92806
 (714) 414-1122; Fax (714) 414-1166

NORTH

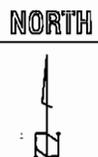


DATE: 10/16/10

FIGURE 4C
DISTRIBUTION OF MTBE IN SOIL
 (Pre-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA

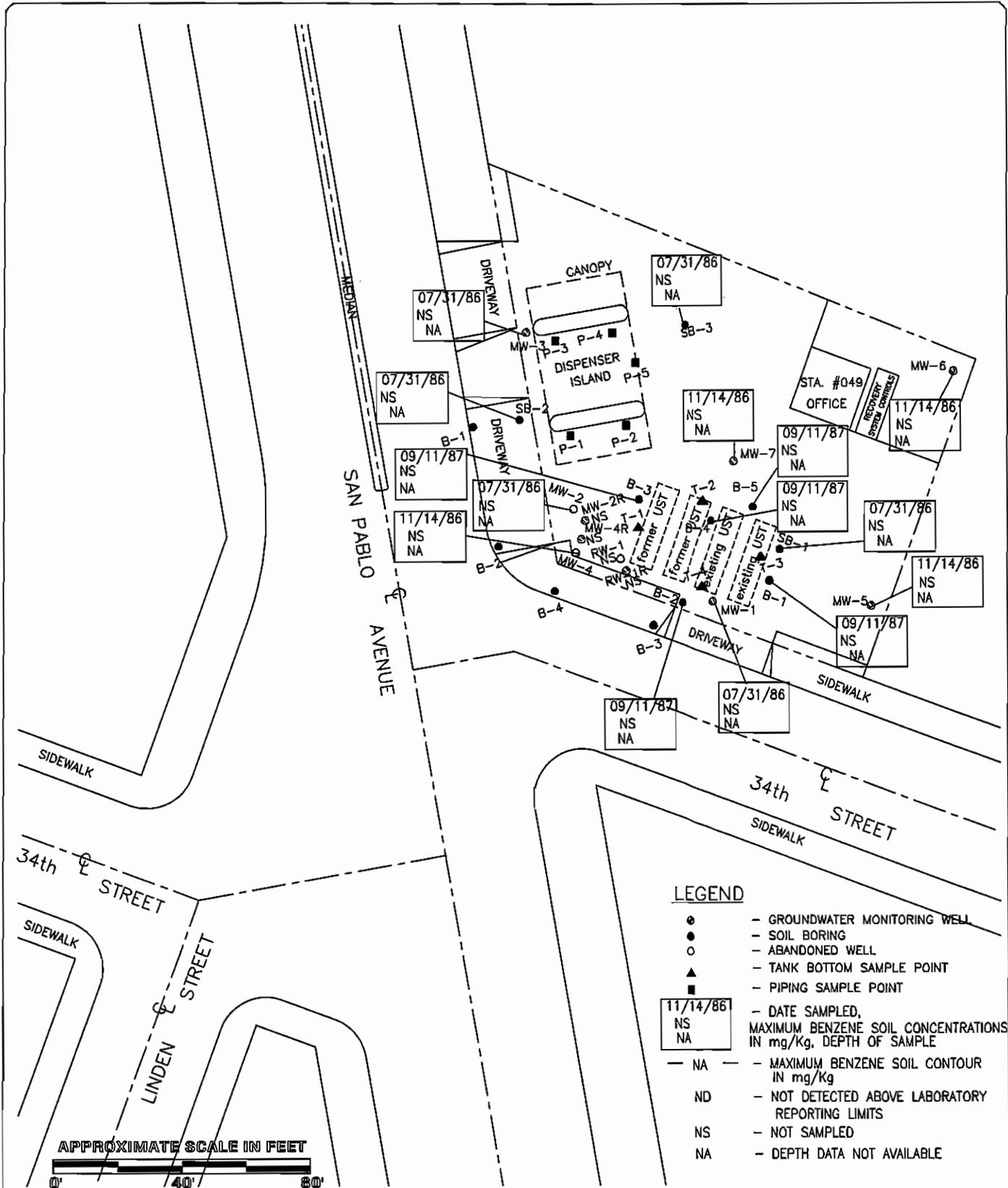


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DATE: 12/26/10

FIGURE 4D
DISTRIBUTION OF TPHg IN SOIL
 (Pre-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



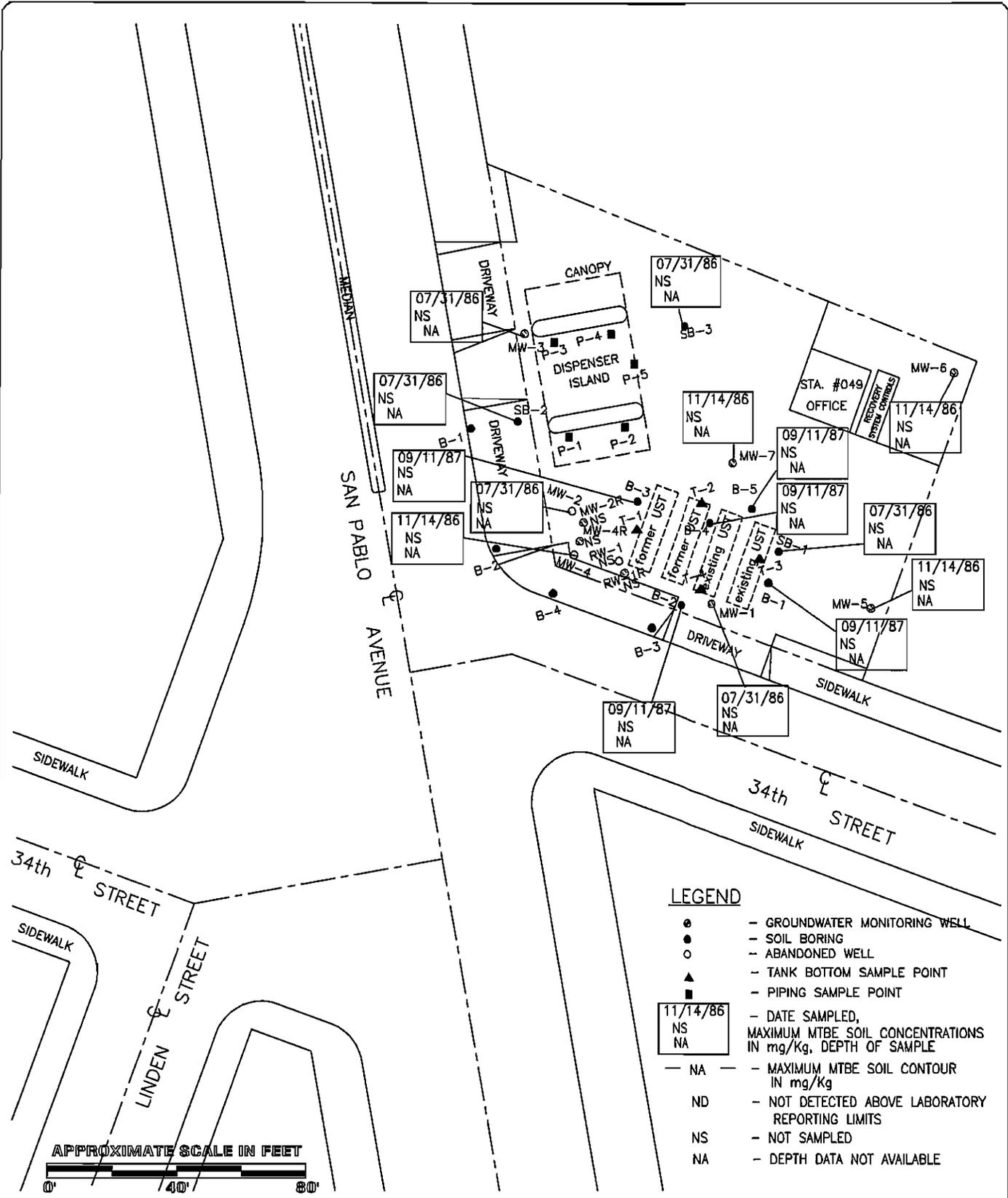
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NORTH



DATE: 12/26/10

FIGURE 4E
DISTRIBUTION OF BENZENE IN SOIL
 (Pre-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

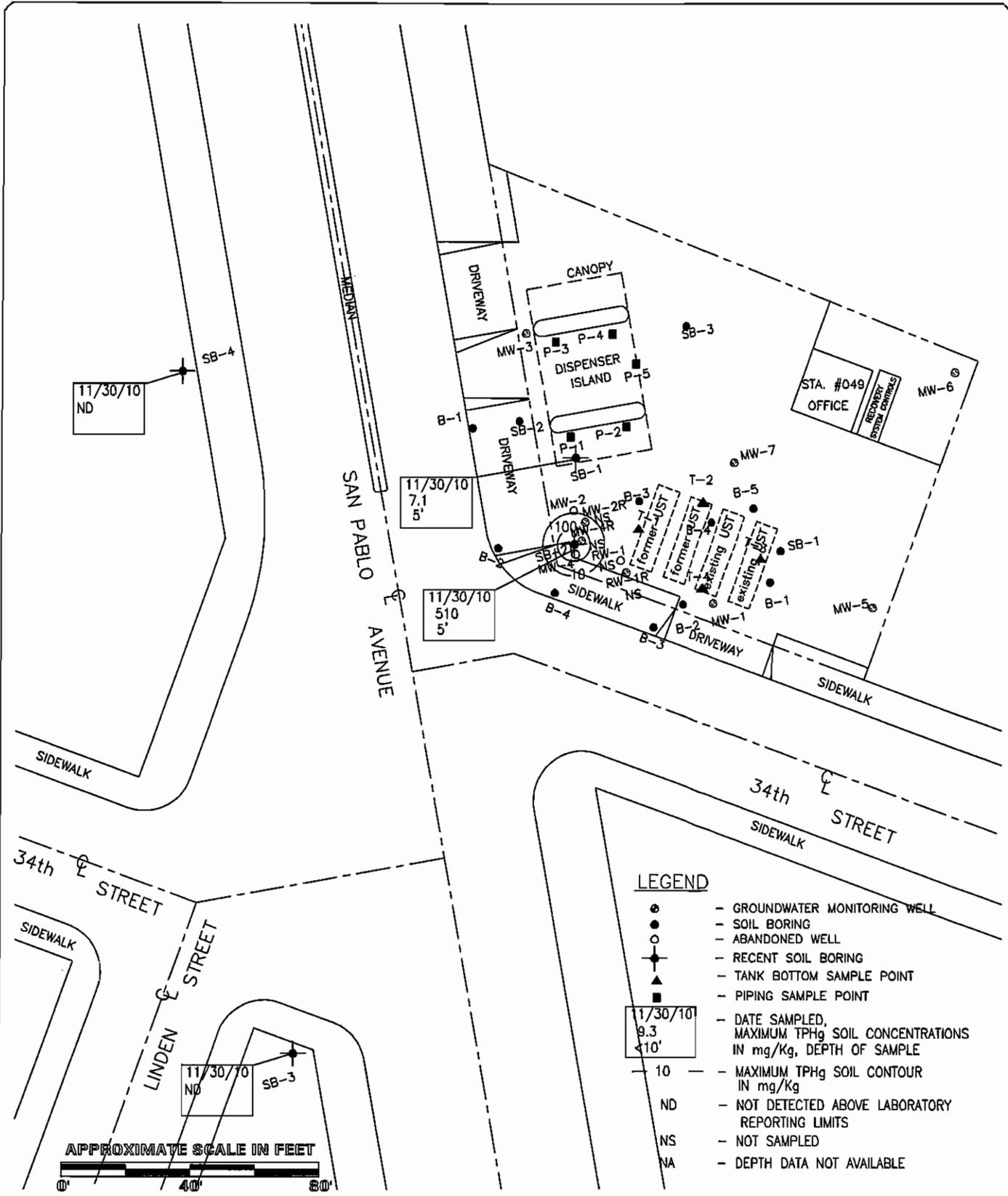
2936 East Cororando Street
 Anaheim, California 92806
 (714) 414-1122; Fax (714) 414-1166

NORTH



DATE: 10/16/13

FIGURE 4F
DISTRIBUTION OF MTBE IN SOIL
 (Pre-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

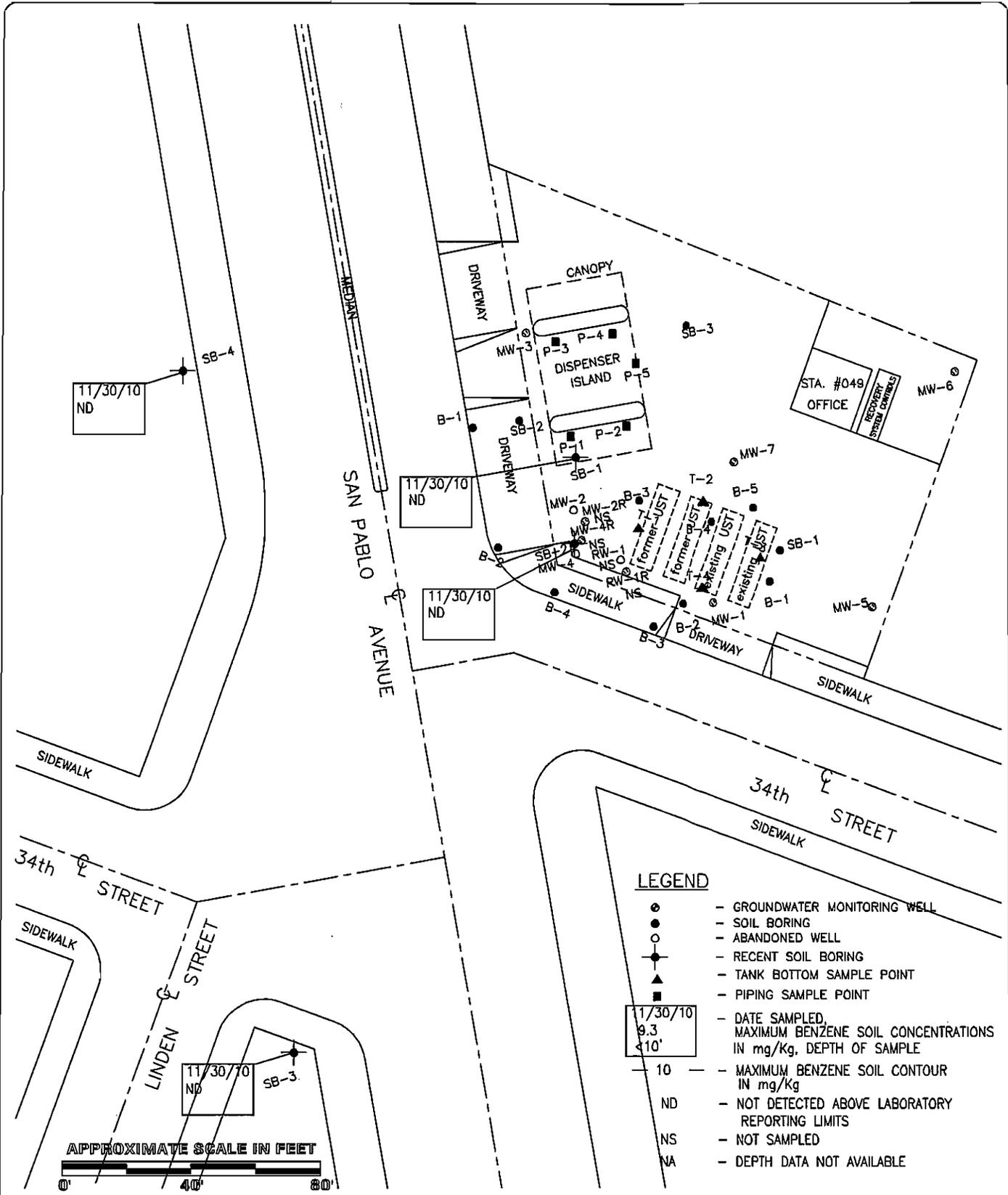
2936 East Cororando Street
 Anaheim, California 92806
 (714) 414-1122; Fax (714) 414-1166

NORTH



DATE: 10/16/13

FIGURE 4G
DISTRIBUTION OF TPHg IN SOIL
 (Post-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

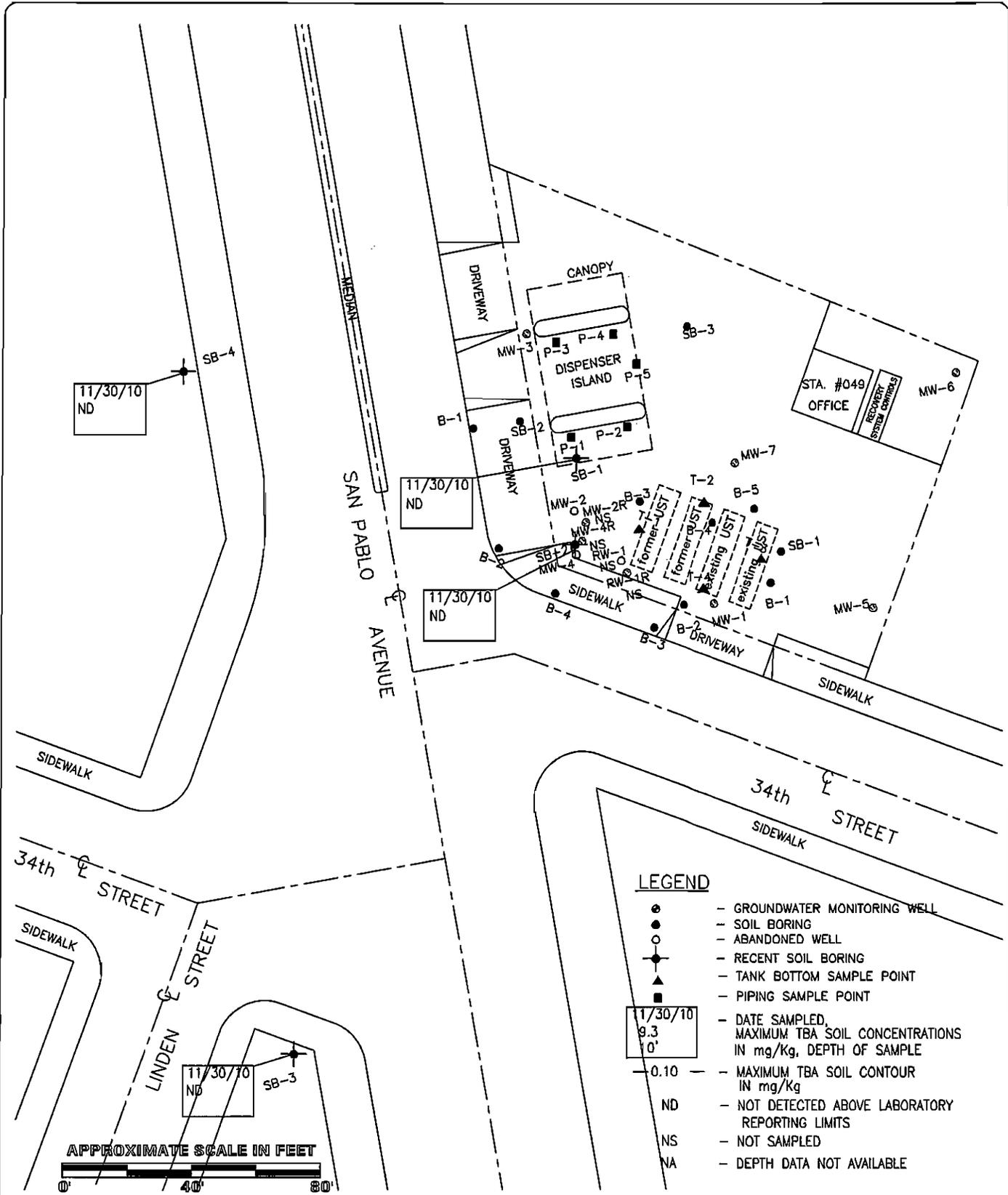
2936 East Cororando Street
 Anaheim, California 92806
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NORTH



DATE: 10/16/13

FIGURE 4H
DISTRIBUTION OF BENZENE IN SOIL
 (Post-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

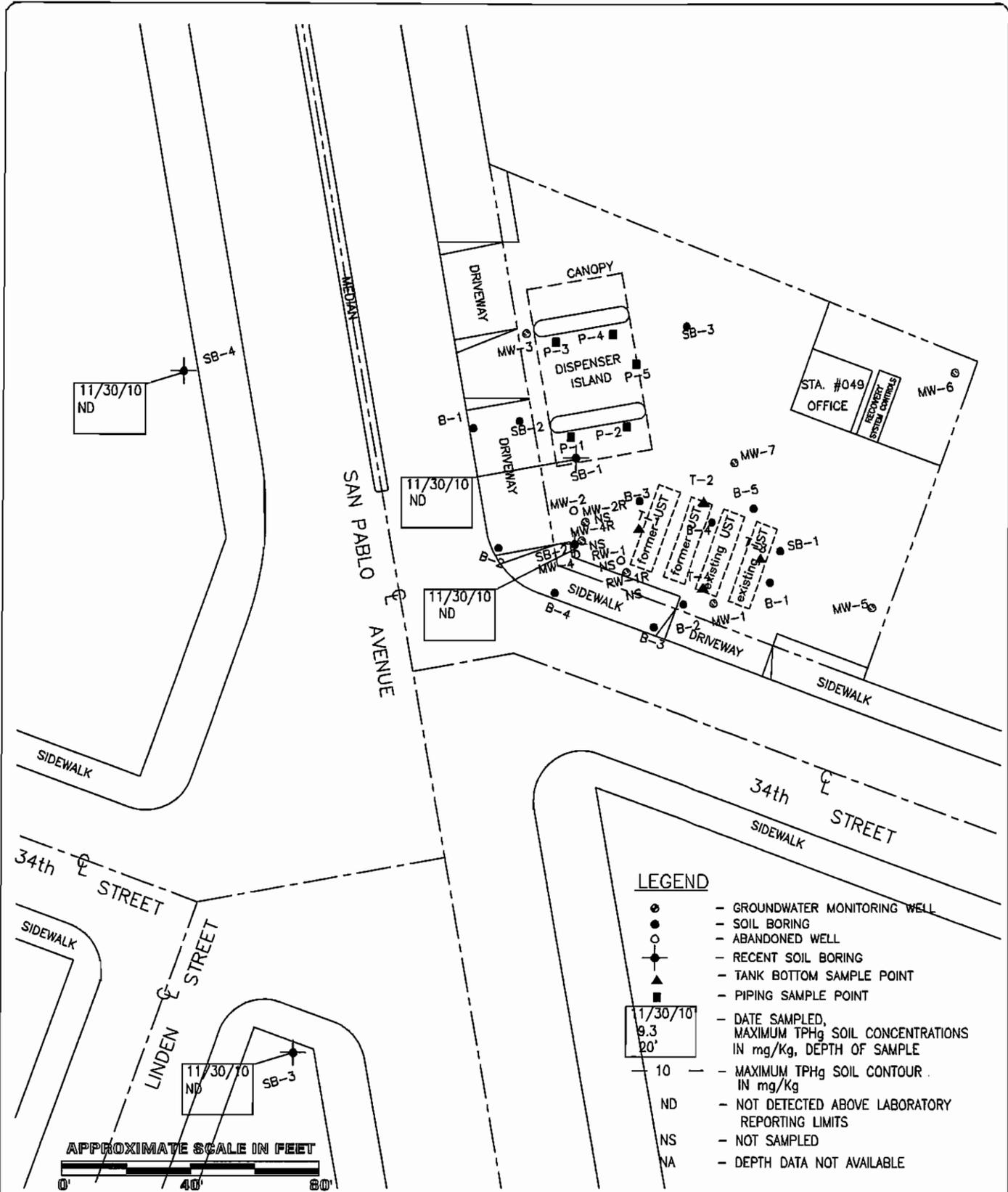
2936 East Cororando Street
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NORTH



DATE: 10/16/13

FIGURE 4J
DISTRIBUTION OF TBA IN SOIL
 (Post-Remediation, 0-10 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



LEGEND

- - GROUNDWATER MONITORING WELL
- - SOIL BORING
- - ABANDONED WELL
- ⊙ - RECENT SOIL BORING
- ▲ - TANK BOTTOM SAMPLE POINT
- - PIPING SAMPLE POINT
- 11/30/10
9.3
20' - DATE SAMPLED, MAXIMUM TPHg SOIL CONCENTRATIONS IN mg/Kg, DEPTH OF SAMPLE
- 10 — - MAXIMUM TPHg SOIL CONTOUR IN mg/Kg
- ND - NOT DETECTED ABOVE LABORATORY REPORTING LIMITS
- NS - NOT SAMPLED
- NA - DEPTH DATA NOT AVAILABLE

Waterstone Environmental, Inc.

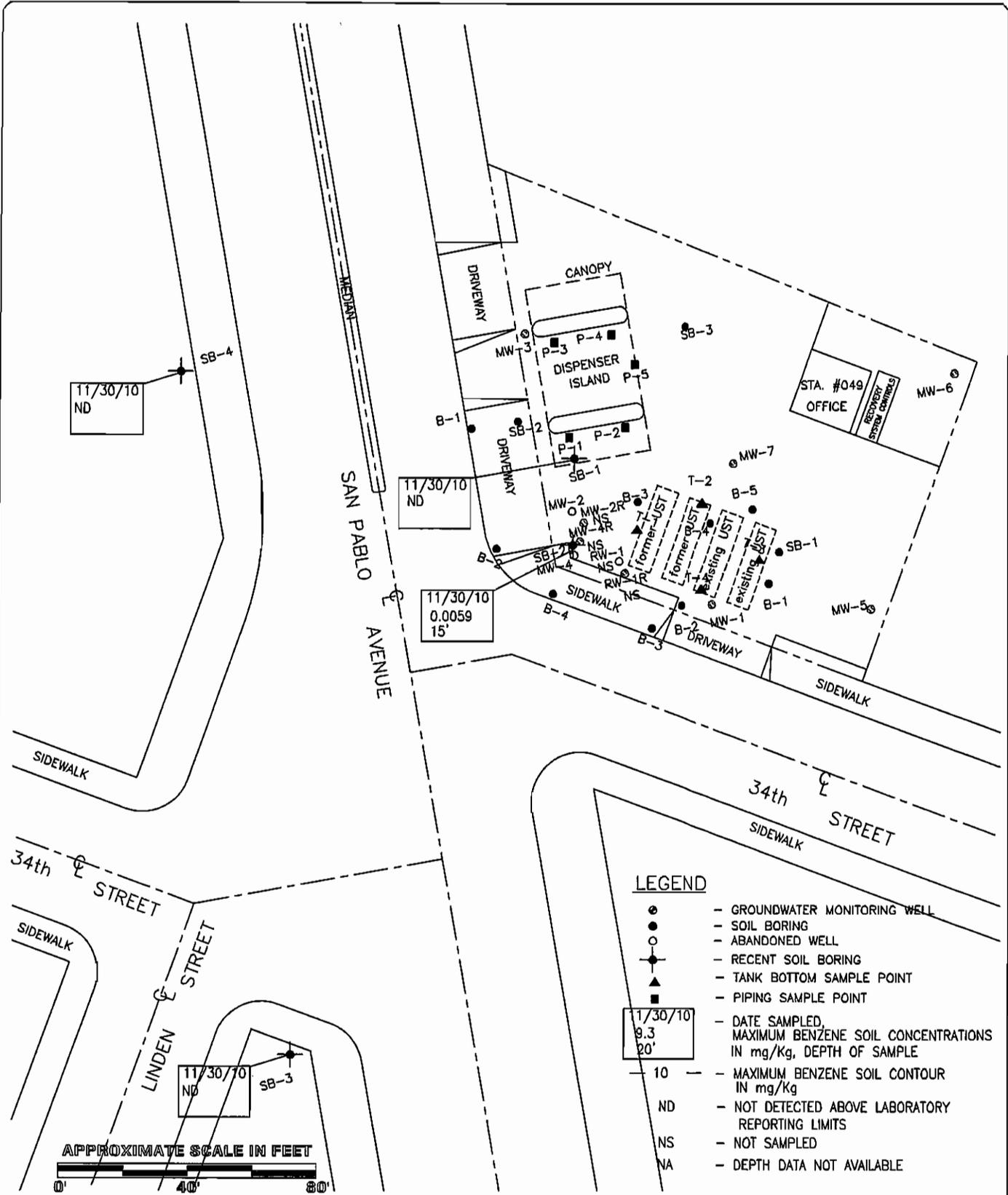
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 Anaheim, California 92806
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NORTH



DATE: 10/16/13

FIGURE 4K
DISTRIBUTION OF TPHg IN SOIL
 (Post-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

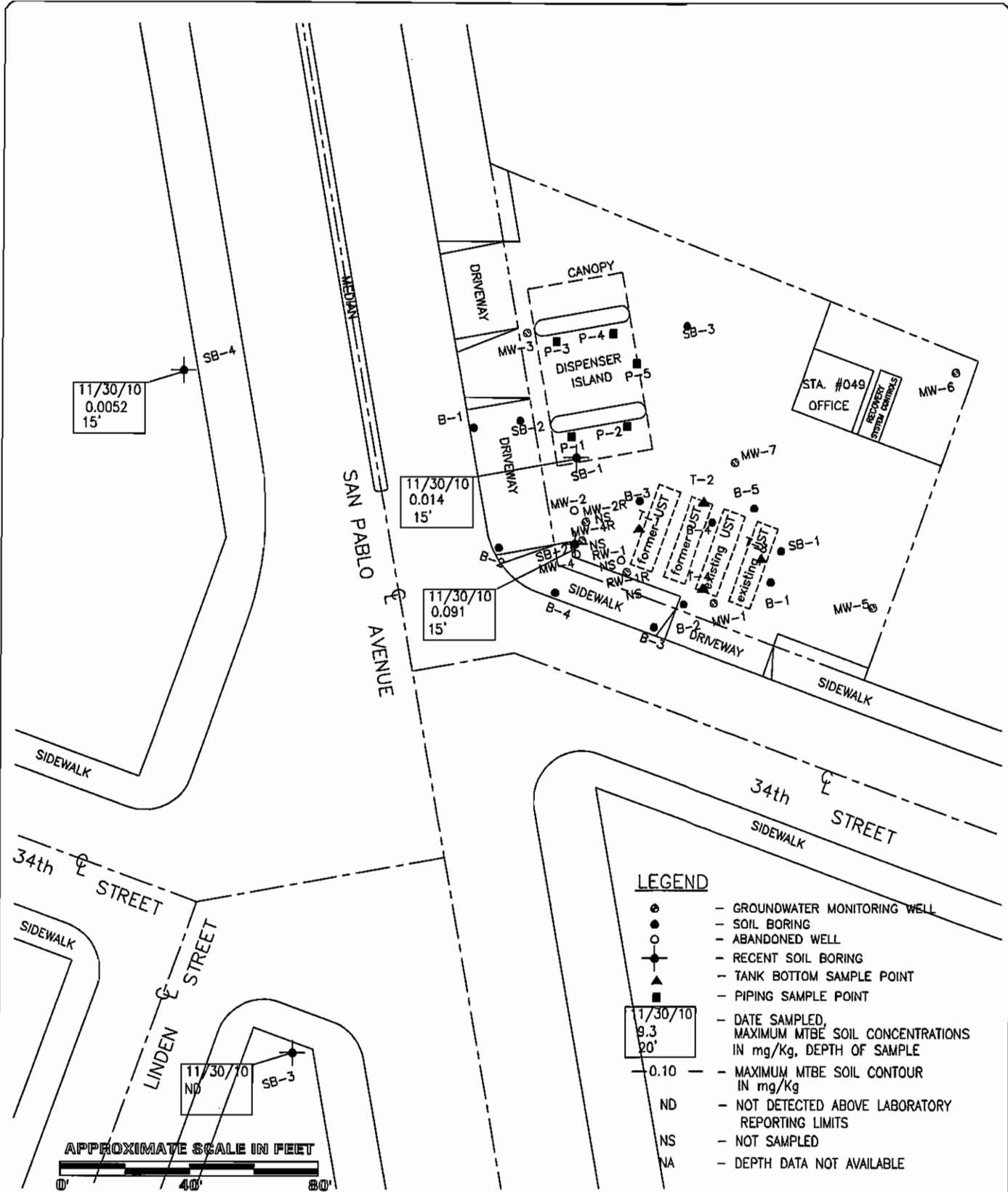
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 Anaheim, California 92806
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NORTH



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FIGURE 4L
DISTRIBUTION OF BENZENE IN SOIL
 (Post-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

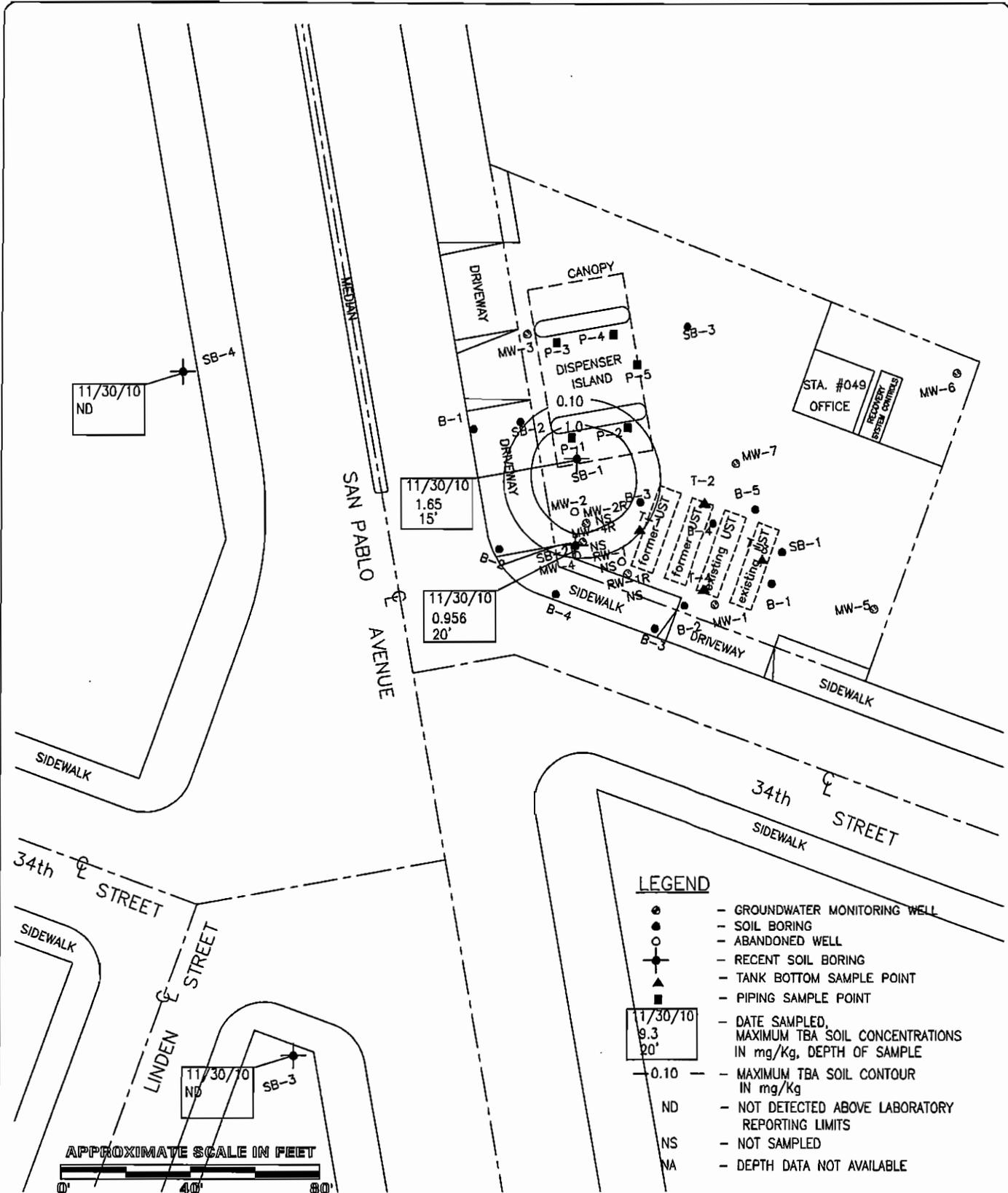
2936 East Cororando Street
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NORTH



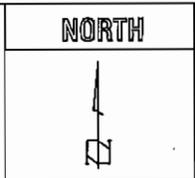
DATE: 10/16/13

FIGURE 4M
DISTRIBUTION OF MTBE IN SOIL
 (Post-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



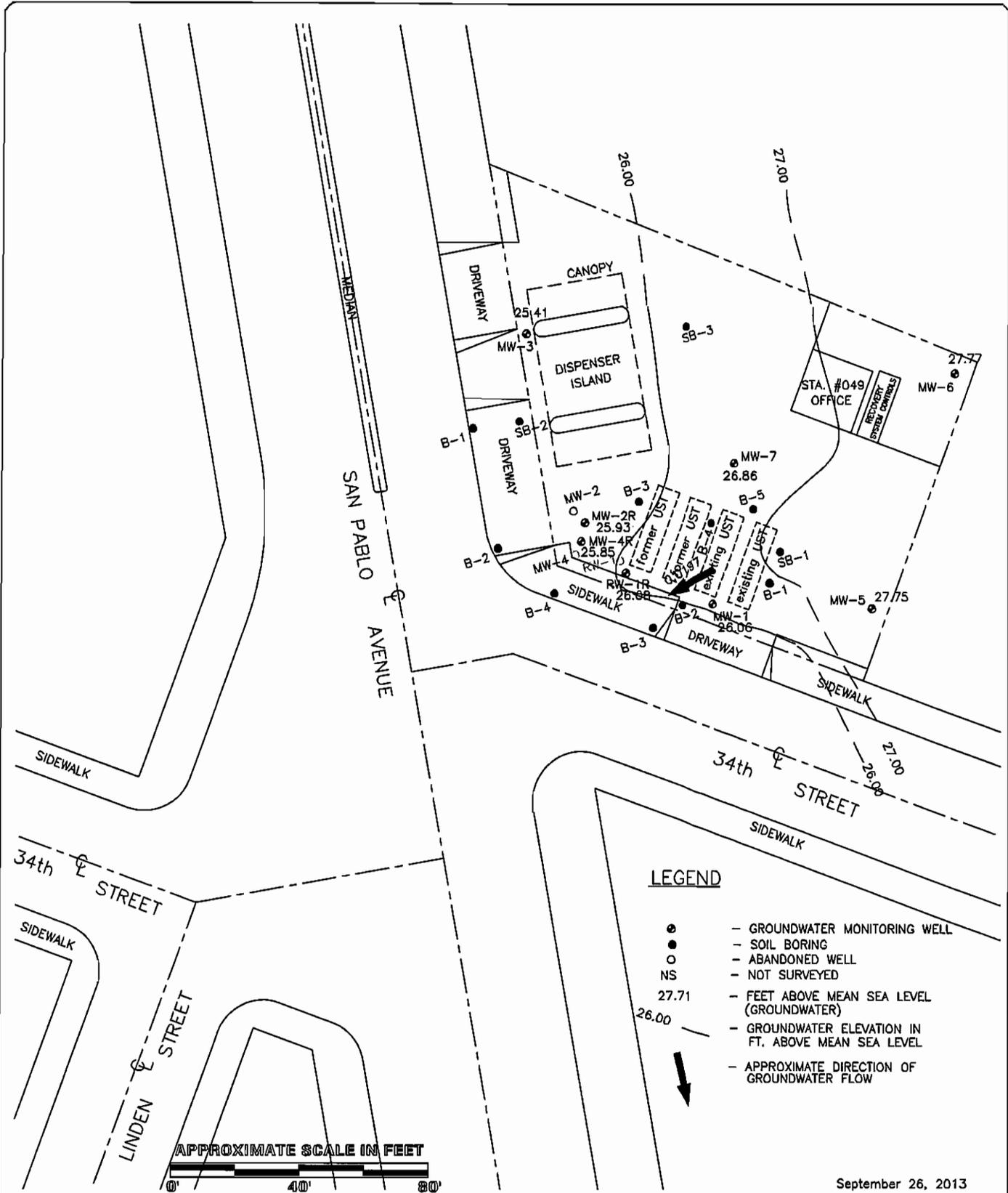
- LEGEND**
- - GROUNDWATER MONITORING WELL
 - - SOIL BORING
 - - ABANDONED WELL
 - ⊕ - RECENT SOIL BORING
 - ▲ - TANK BOTTOM SAMPLE POINT
 - - PIPING SAMPLE POINT
- 11/30/10
 9.3
 20'
- 0.10 - MAXIMUM TBA SOIL CONTOUR IN mg/Kg
 - ND - NOT DETECTED ABOVE LABORATORY REPORTING LIMITS
 - NS - NOT SAMPLED
 - NA - DEPTH DATA NOT AVAILABLE

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DATE: 10/16/13

FIGURE 4N
DISTRIBUTION OF TBA IN SOIL
 (Post-Remediation, 11-20 Feet Below Ground Surface)
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA



Waterstone Environmental, Inc.

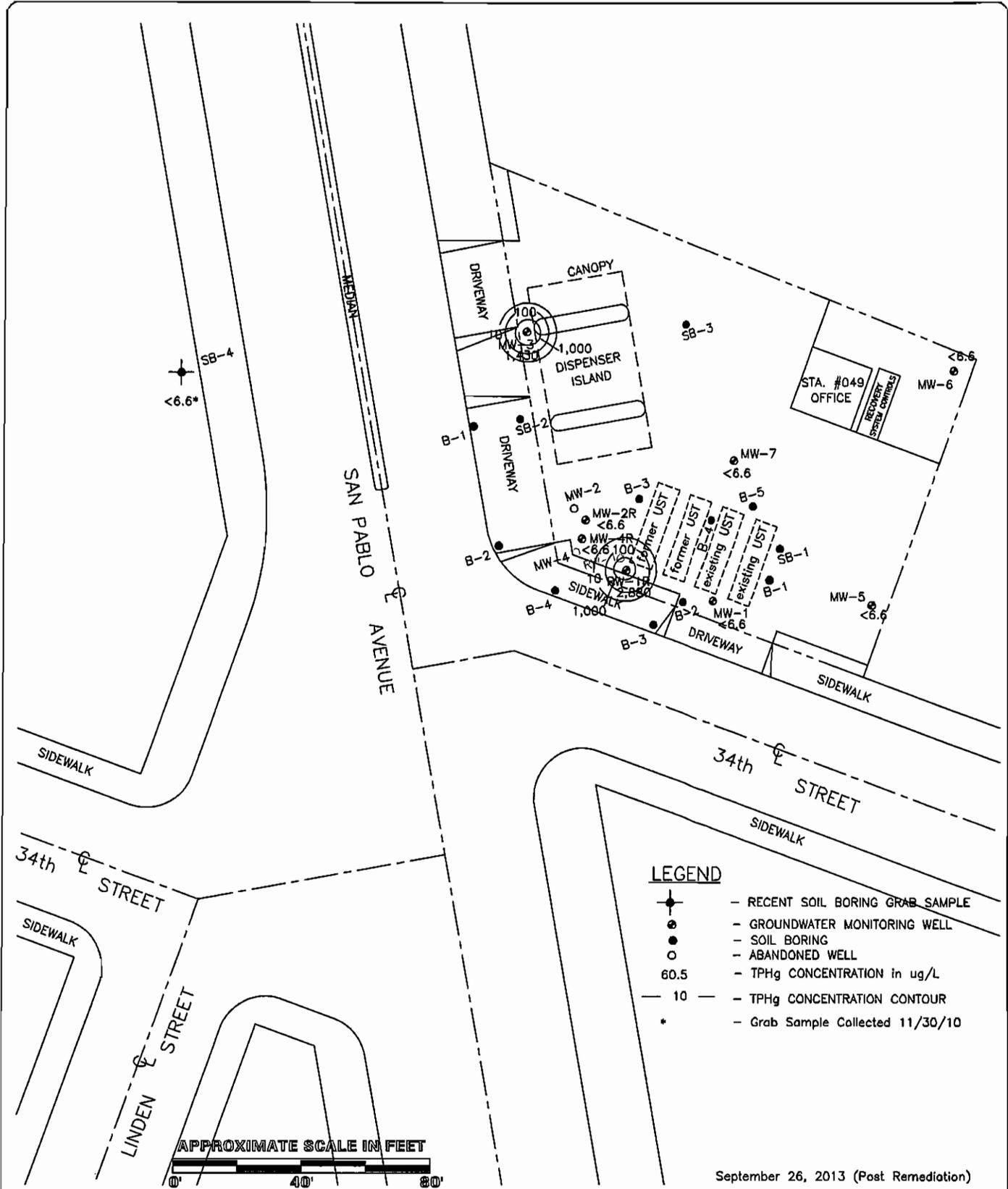
2936 East Cororando Street
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NORTH

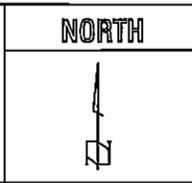


DATE: 10/16/13

FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP
THRIFTY SERVICE STATION #049
 3400 San Pablo Avenue
 Oakland, CA

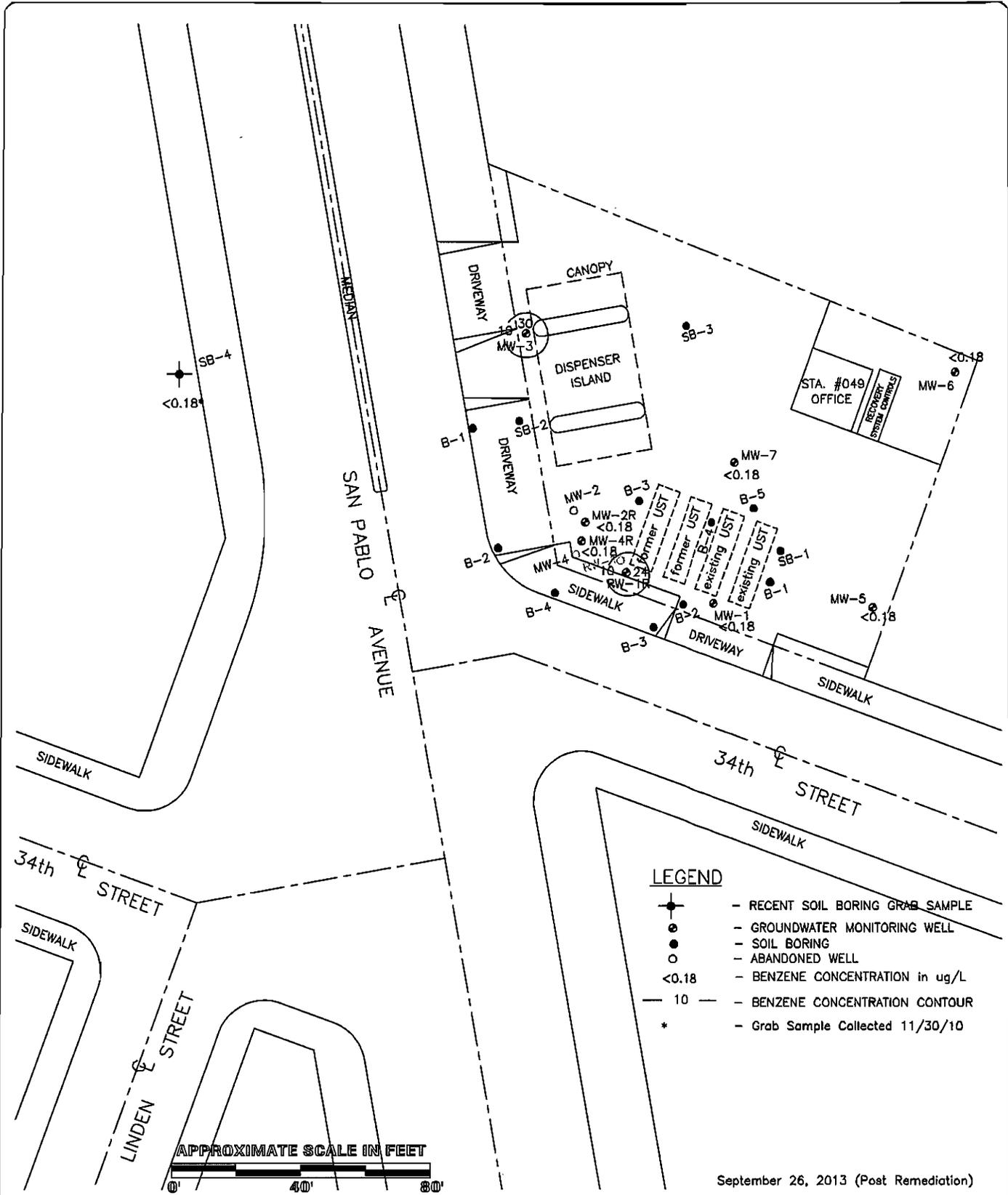


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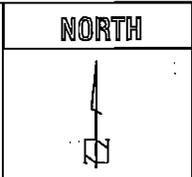


DATE: 10/16/13

FIGURE 6A
DISTRIBUTION OF TPHg IN GROUNDWATER
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA

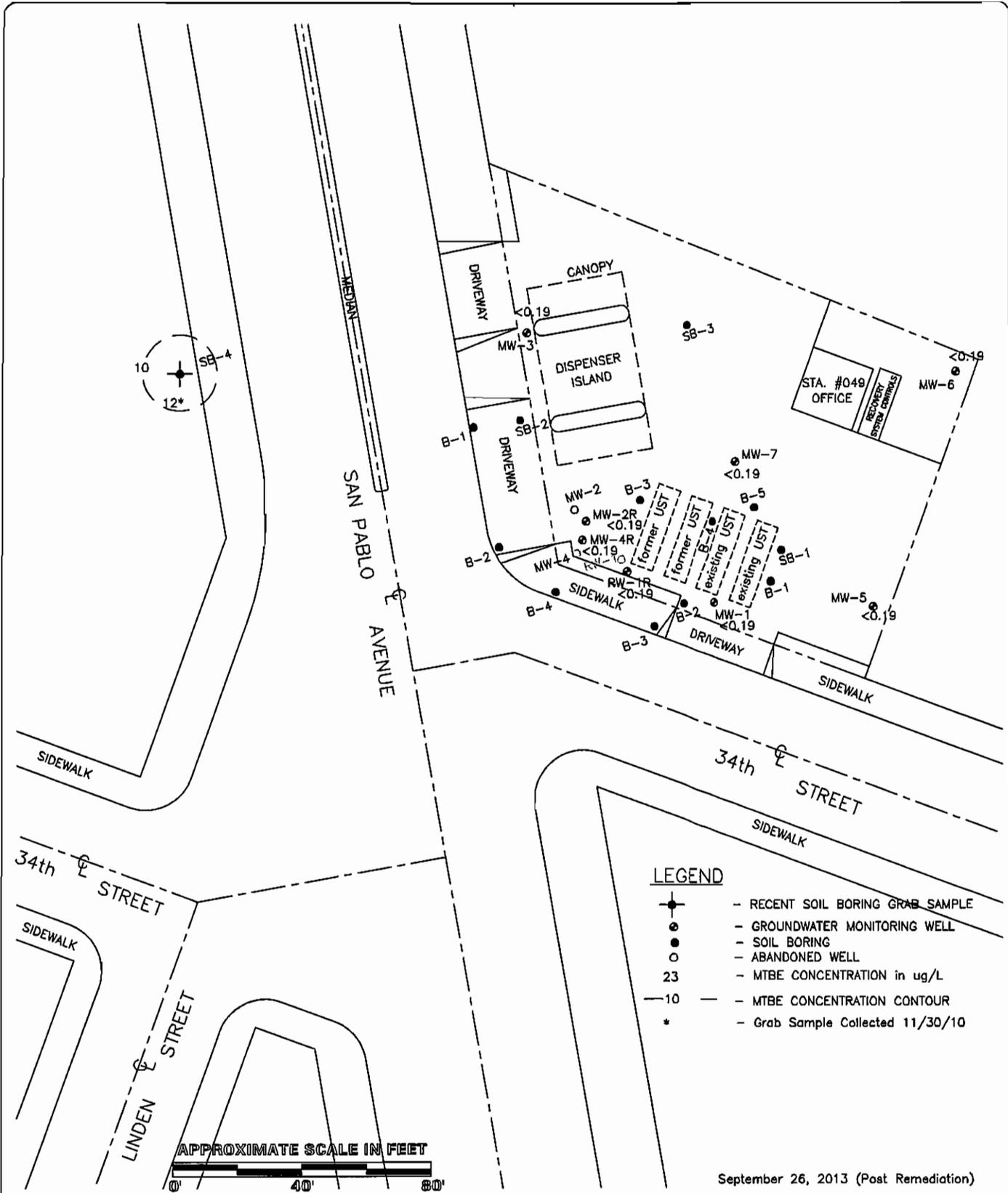


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DATE: 10/16/13

FIGURE 6B
DISTRIBUTION OF BENZENE IN GROUNDWATER
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA



Waterstone Environmental, Inc.

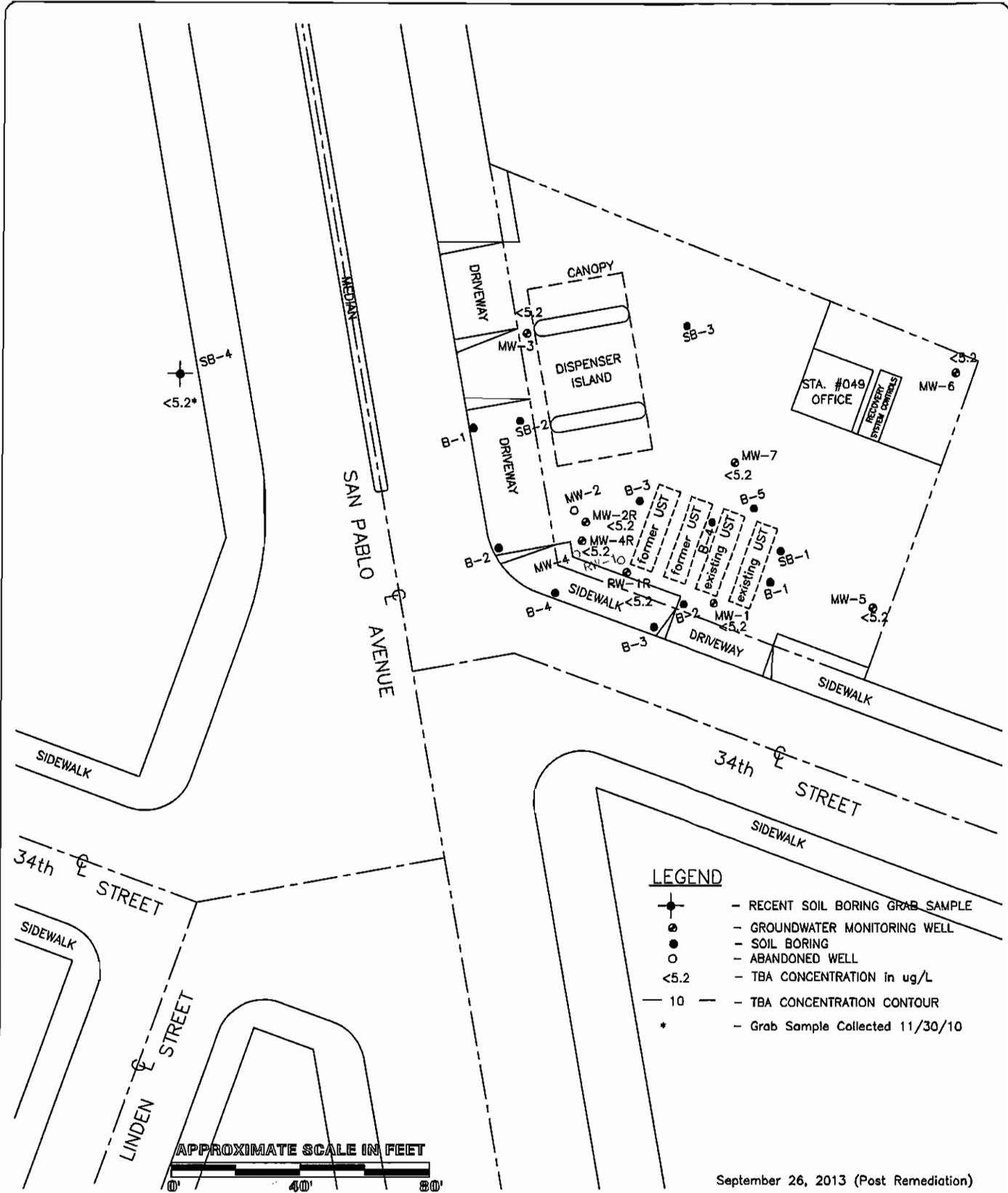
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 Anaheim, California 92806
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NORTH



DATE: 10/16/13

FIGURE 6C
DISTRIBUTION OF MTBE IN GROUNDWATER
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA



Waterstone Environmental, Inc.

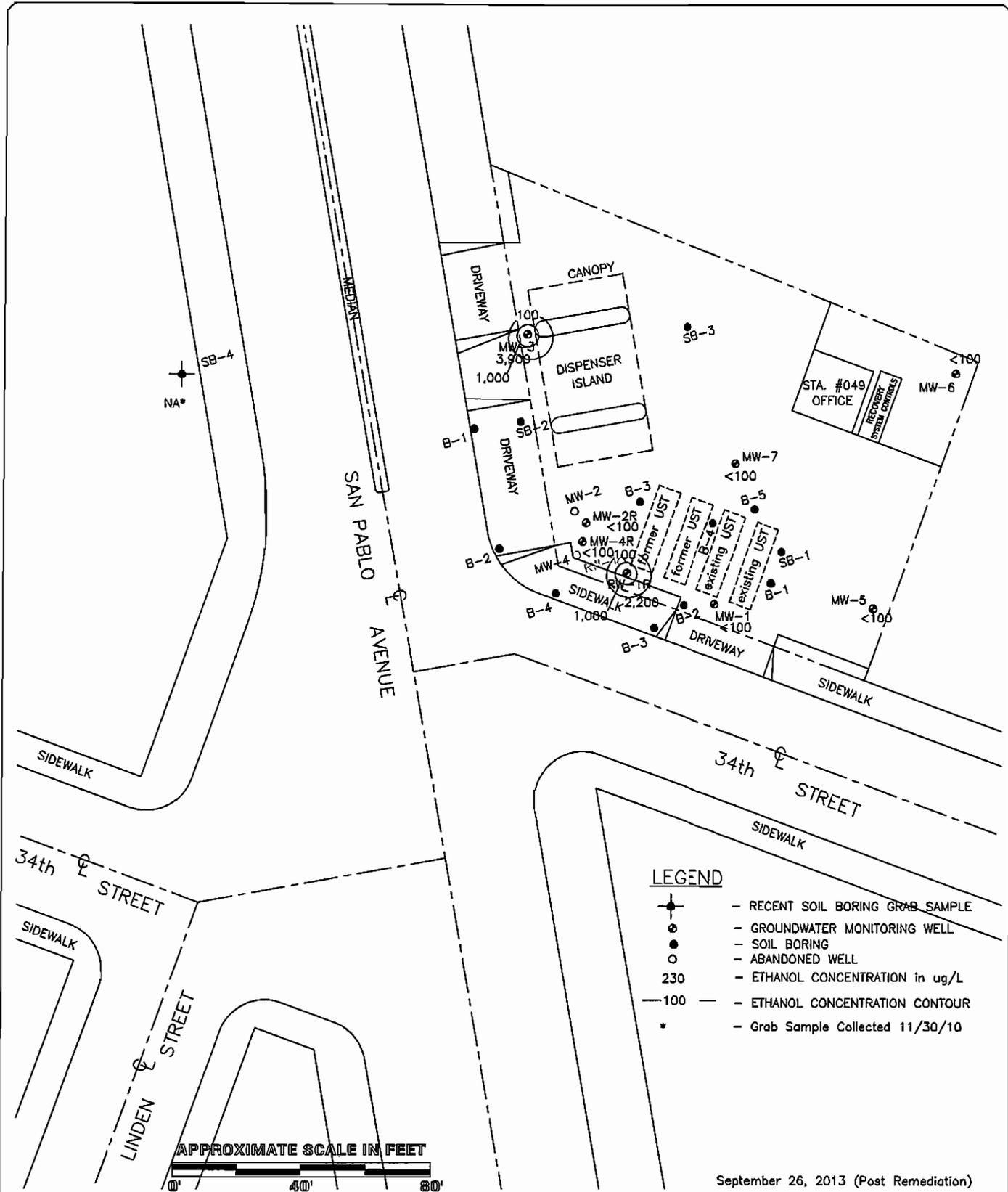
2936 East Cororando Street
 Anaheim, California 92806
 (714) 414-1122; Fax (714) 414-1166

NORTH

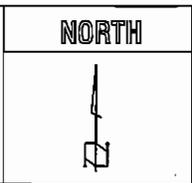


DATE: 10/16/13

FIGURE 6D
DISTRIBUTION OF TBA IN GROUNDWATER
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA



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DATE: 10/16/13

FIGURE 6E
DISTRIBUTION OF ETHANOL IN GROUNDWATER
THRIFTY SERVICE STATION #049
3400 San Pablo Avenue
Oakland, CA

Appendix A
Alameda County Environmental Health Letter to
Thrifty Dated April 22, 2013

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director



1-13 2130
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ENVIRONMENTAL FILE
SS#049

April 22, 2013

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

Mr. Chris Panaitescu
(Sent via E-mail to:
panaitescu@ThriftyOil.com)
Thrifty Oil Company
13116 Imperial Highway
Santa Fe Springs, CA 90670-00138

Mr. John Skance
(Sent via E-mail to: john.skance@bp.com)
BP West Coast Products, LLC
P.O. Box 1257
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000004 and GeoTracker Global ID T0600101365, Thrifty Oil #49, 3400 San Pablo Avenue, Oakland, CA 94608

Dear Mr. Panaitescu and Mr. Skance:

Thank you for the recently submitted document entitled *Fourth Quarter 2012, Status Report and Request for Low-Threat Underground Storage Tank Case Closure* (RFC), dated January 7, 2013 and prepared by Thrifty Oil Co. (Thrifty Oil) for the subject site. Thrifty Oil requests case closure citing that current site conditions and remediation activities warrant case closure in accordance with the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP).

Alameda County Environmental Health (ACEH) staff has reviewed the RFC in conjunction with the case files and the LTCP criteria. Based on this review and discussions with Thrifty Oil's Project Manager Mr. Simon Tregurtha, in March and April 2013, ACEH has determined that the site fails to meet LTCP General Criteria c, e, f, and h, and Media Specific Criteria for Groundwater. ACEH's determination is based on evidence of a new release in 2012 as indicated by significantly elevated levels of total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX), and ethanol detected in several of the site monitoring wells during quarterly monitoring events conducted in 2012, observations of sheen in four of the eight monitoring wells during 2012, lack of off-site plume delineation downgradient and cross gradient of the UST tank holds and dispenser islands, and shallow groundwater conditions and potential migration of contaminants in utility trenches located in streets bordering the site.

In the RFC, Thrifty Oil acknowledges that groundwater monitoring data suggests that a new release(s) has occurred. However, Thrifty Oil states that they terminated their operation of the station and underground storage tanks (USTs) and associated piping in May 1997 and this first generation of USTs and associated piping were removed from the site in March 1998 at which time ethanol was not used as a gasoline additive. Therefore, Thrifty contends that the current presence of ethanol in several site wells strongly suggests that release(s) have occurred from a source other than Thrifty, and surmises that the ethanol has likely originated from Atlantic Richfield Company (ARCO) who operated the station from May 1997 to May 2012, from Tesoro (who operated the station from May 2012 to present), or from the adjacent and cross gradient Shell Station located at 3420 San Pablo Avenue.

Subsequent to the detection of ethanol in upgradient wells MW-5 and MW-6 in June 2012, ARCO provided comment to Thrifty Oil on the Second Quarter 2012 Status Report prepared for the site by Stratus Environmental in a letter dated August 10, 2012 from Mr. John Skance to Mr. Panaitescu. In the 2nd Quarter 2012 Status Report, Stratus suggests first time detections in upgradient wells MW-5 and MW-6 are a result of a new release either by ARCO, Shell, or an upgradient source. ARCO's response stated that based on the upgradient location of wells MW-5 and MW-6 relative to the fueling system components and UST system testing results performed in March 2012 and June 2012, it does not appear a new release has occurred on site, and given the location of the wells and groundwater data, conjectured that an offsite source may exist.

ACEH's review of the data indicates that adequate justification has not been provided by ARCO or Thrifty to support their conclusions regarding an off-site source, or Thrifty's assertion that the plume is defined, stable, essentially restricted to the site property, and will continue to diminish through natural attenuation, and poses very little to no threat to human health or the environment. Therefore, ACEH cannot consider case closure for the subject site at this time. A summary of our comments is presented in the Technical Comments section below.

ACEH requests that you prepare an updated Site Conceptual Model and Data Gap Investigation Work Plan to address the Technical Comments provided below, and evaluate the source of the new release and potential preferential pathways and contaminant transport via utility corridors, and further delineate the contaminant plume.

This decision to deny closure is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39.2(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact the SWRCB Underground Storage Tank Program at (916) 341-5851 for information regarding the appeals process.

TECHNICAL COMMENTS

1) **Updated Site Conceptual Model and Data Gap Investigation Work Plan** – Please address the technical comments described below in an Updated Site Conceptual Model (SCM) and Data Gap Investigation Work Plan:

- i. During the 2nd Quarter 2012 monitoring event, significantly elevated levels of total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX), and ethanol were detected in two of the eight monitoring wells (MW-5 and MW-6). Maximum concentrations of each of the chemicals of concern were detected in well MW-6 at 131,000 micrograms per liter (µg/L) TPH-g, 5,700 µg/L benzene, 26,000 µg/L toluene, 3,600 µg/L ethylbenzene, 19,000 µg/L xylenes and 51,000 µg/L ethanol.
- ii. Concentrations of TPH-g and BTEX in monitoring well MW-1, located adjacent to the current UST tank hold, have shown increasing trends during the four quarterly sampling events conducted in 2012. Sheen was observed in this well during the 2nd quarter monitoring event.
- iii. During the 4th Quarter 2012 monitoring event, ethanol was detected in five of the eight monitoring wells at concentrations of 2,600 µg/L in MW-1, 4,600 µg/L in MW-2, 13,000 µg/L in MW-3, 5,400 µg/L in MW-4R, and 5,300 µg/L in MW-7. However,

ethanol was not detected above the analytical laboratory reporting limits in the two wells (MW-5 and MW-6) where ethanol was detected during the 2nd quarter monitoring event. Elevated levels of TPH-g and BTEX were observed in well MW-3, located downgradient of the dispenser islands.

- iv. The TPH-g iso-concentration contour map presented in the RFC indicates the contaminant plume has migrated into and potentially across 34th Street and San Pablo Avenue.
- v. Historic depths to groundwater in wells located along San Pablo Avenue have ranged from 4.20 to 17.9 feet below ground surface (bgs) in MW-3, 3.09 to 8.10 feet bgs in MW-2R, and 2.78 to 7.02 feet bgs in MW-4R. These wells are located downgradient of the dispenser islands and tank holds (current and former) and upgradient and adjacent to the several underground utilities located in San Pablo Avenue that may potentially act as preferential pathways for contaminant transport.
- vi. Historic depths to groundwater in wells located along 34th Street have ranged from 3.54 to 9.39 feet bgs in MW-1, and 3.09 to 7.23 feet bgs in RW-1R. These wells are located downgradient (southwest) of tank holds (current and former) and adjacent to the several underground utilities located in 34th Street that may potentially act as preferential pathways for contaminant transport.

Please utilize a tabular format to highlight the major SCM elements and their associated data gaps, which need to be addressed to progress the site to case closure. Additionally, we encourage you to utilize ACEH's Data Gap Identification Tool (DGIT) in developing a strategy that focuses data collection efforts on the LTCP criteria and an efficient path to site closure. Please sequence activities in the proposed scope of work to enable efficient data collection in the fewest mobilizations possible. ACEH will provide an example of a tabular SCM and an electronic DGIT upon request.

Please include site map(s) utilizing an aerial photographic base map with sufficient resolution to show the facility, delineation of streets and property boundaries within the adjacent neighborhood.

- 2) **Groundwater Contaminant Plume Monitoring** – Please resume quarterly groundwater sampling for a minimum of one hydrologic cycle to assist in evaluating the source of new release(s) and determining groundwater contaminant plume stability and submit reports by the dates listed below.
- 3) **Landowners Notification Form** – Pursuant to Section 25297.15 (a), ACEH, the local agency, shall not consider cleanup or site closure proposals from the primary or active responsible party, issue a closure letter, or make a determination that no further action is required with respect to a site upon which there was an unauthorized release of hazardous substances from an underground storage tank subject to this chapter unless all current record owners of fee title to the site of the proposed action have been notified of the proposed action by the primary or active responsible party. ACEH is required to notify the primary or active responsible party of their requirement to certify in writing to the local agency that the notification requirement in the above-mentioned regulation has been satisfied and to provide the local agency with a complete mailing list of all record fee title owners.

Mr. Panaitescu and Mr. Skance
RO0000004
April 22, 2013, Page 4

To satisfy this requirement, please complete the enclosed "List of Landowners Form," and mail it back to ACEH as soon as possible so that we can update our records. Please include the contact information for Tesoro, the current station operator.

TECHNICAL REPORT REQUEST

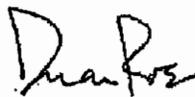
Please submit technical reports to ACEH (Attention: Dilan Roe), according to the following schedule:

- **May 22, 2013** – Landowners Notification Form
File to be named: LNDOWNR_F_yyyy-mm-dd_RO0004
- **June 28, 2013** – Quarterly Monitoring Report (2nd Quarter 2013)
File to be named: GWM_R_yyyy-mm-dd_RO0004
- **June 28, 2013** – Updated Site Conceptual Model and Data Gap Investigation Workplan
File to be named: SCM_WP_R_yyyy-mm-dd_RO0004
- **October 31, 2013** – Quarterly Monitoring Report (3rd Quarter 2013)
File to be named: GWM_R_yyyy-mm-dd_RO0004
- **January 31, 2014** – Quarterly Monitoring Report (4th Quarter 2013)
File to be named: GWM_R_yyyy-mm-dd_RO0004
- **April 30, 2014** – Quarterly Monitoring Report (1st Quarter 2014)
File to be named: GWM_R_yyyy-mm-dd_RO0004

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 567-6767 or send me an electronic mail message at dilan.roe@acgov.org.

Sincerely,



Digitally signed by Dilan Roe
DN: cn=Dilan Roe, o=Environmental
Health, ou=LOP,
email=dilan.roe@acgov.org, c=US
Date: 2013.04.23 08:56:24 -07'00'

Dilan Roe
Supervising Hazardous Materials Specialist

Enclosure: Landowners Notification Form
Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: Simon Tregurtha, Thrifty Oil Company, 13116 Imperial Hwy, Santa Fe Springs, CA
90670-0138 (Sent via E-mail to: Tregurtha@thriftyoil.com)
Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland,
CA 94612-2032 (Sent via E-mail to: lgriffin@oaklandnet.com)
Donna Drogos, ACEH (Sent via E-mail to: donna.drogos@acgov.org)

Mr. Panaitescu and Mr. Skance
RO0000004
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Dilan Roe, ACEH (*Sent via E-mail to: dilan.roe@acgov.org*)
GeoTracker
File

LIST OF LANDOWNERS FORM

County of Alameda
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

CERTIFIED LIST OF RECORD FEE TITLE OWNERS FOR:

Site Name: _____

Address: _____

City, State, Zip: _____

Record ID #: RO _____

Please fill out item 1 if there are multiple site landowners (attach an extra sheet if necessary). If you are the sole site landowner, skip item 1 and fill out item 2.

1. In accordance with Section 25297.15(a) of Chapter 6.7 of the California Health & Safety Code, I, _____ (name of primary responsible party), certify that the following is a complete list of current record fee title owners and their mailing addresses for the above site:

Name: _____

Address: _____

City, State, Zip: _____

E-mail Address: _____

Name: _____

Address: _____

City, State, Zip: _____

E-mail Address: _____

Name: _____

Address: _____

City, State, Zip: _____

E-mail Address: _____

2. In accordance with Section 25297.15(a) of Chapter 6.7 of the California Health & Safety Code, I, _____, certify that I am the sole landowner for the above site.

Sincerely,

Signature of Primary Responsible Party

Printed Name

Date

E-mail Address

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Please **do not** submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a **single Portable Document Format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to .loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to [://alcoftp1.acgov.org](http://alcoftp1.acgov.org)
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to .loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload.** (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Appendix B
Groundwater Sampling Field Data Sheets



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-1**

GAUGING DATA

Date: **09-26-2013** Time: **7:30 AM** by: **S.P.**

Well Dia	1"	2"	3"	6"	12"
Casing Vol	0.12	0.49	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.51	2.57	7.71

Total Well Depth (ft): **17.77** Depth To Product (ft) **N/A**
 Depth To Water (ft): **5.49** Product Thickness (ft) **N/A**
 Water Column (ft): **12.28**

Multipliers for purge volume estimation:
 Note for borehole volume: add 1/2 BH vol for each subsequent passes

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Estimated Purge Volume (gal): **12.28 x 0.49 = 6**

PURGING DATA

Purge Start Time: **9:00 AM** Purge Method: **BAILEY** pH/Temp/Cond: **ULTRAMETER II** by: **MY RON**

Time (hh:mm)	Time (min)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
9:02	2	2	70.1	6.01	1340	CLEAR	
9:04	2	2	70.3	5.97	1320	CLEAR	
9:06	2	2	69.9	5.86	1310	CLEAR	
9:08	2	2	70.1	5.83	1310	CLEAR	
9:10	2	2	70.0	5.81	1310	CLEAR	

DTW Immed. after purge (ft): **5.53** Actual purged volume (gal): **10** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: 80% Recovery = $\left[\frac{12.28}{\text{Water Column}} \right] \times 0.20 + \left[\frac{5.49}{\text{DTW initial}} \right] = \underline{7.94}$ ft
 Max Drawdown (SD): 80% Recovery = $\left(\left[\frac{\quad}{\text{DTW after purge}} \right] - \left[\frac{\quad}{\text{DTW initial}} \right] \right) \times 0.20 + \left[\frac{\quad}{\text{DTW initial}} \right] = \underline{\quad}$ ft

SAMPLING DATA

DTW (ft) before sampling: **8.10** Date: **09.26.2013** Time: **13:00 PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Beiler _____ Notes: _____

Well Inspection:

Well Box: Round (_____) Square (_____) # of Bolts _____ (7/16" : 1/2" : 9/16" : 5/8" : 3/4" : 5/16" : _____)

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, ORAZLATA** Well ID# **MW-2R**

GAUGING DATA

Date: **09-26-2013** Time: **7:40AM** by: **SD**

Total Well Depth (ft): **16.79** Depth To Product (ft) **N/A**

Depth To Water (ft): **4.56** Product Thickness (ft) **N/A**

Water Column (ft): **12.23**

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Well Dia	1"	2"	4"	6"	12"
Casing Vol	0.12	0.49	1.95	4.40	17.62
Borehole Vol	0.40	0.77	1.61	2.57	7.71

Multipliers for purge volume estimation:
Note for borehole volume: add 1/2 BH vol for each subsequent passage

Estimated Purge Volume (gal): **12.23 x 1.96 = 23**

water column multiplier est. volume

PURGING DATA

Purge Start Time: **9:00AM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER II** by: **MYRON**

Time		Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
(hh:mm)	(min)						
9:15	5	5	70.1	5.90	1230	NOHFE	
9:20	5	5	70.3	5.70	1240	NOHFE	
9:25	5	5	69.9	5.83	1220	NOHFE	
9:30	5	5	69.7	5.80	1230	NOHFE	
9:35	5	5	69.7	5.80	1240	NOHFE	

DTW immed. after purge (ft): **4.64** Actual purged volume (gal): **25** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: $80\% \text{ Recovery} = \left[\frac{\text{Water Column}}{\text{DTW Initial}} \right] \times 0.20 + \left[\frac{\text{DTW Initial}}{\text{DTW Initial}} \right] = \frac{12.23}{16.79} \times 0.20 + 1 = 7.00 \text{ ft}$

Max Drawdown (SD): $80\% \text{ Recovery} = \left(\left[\frac{\text{DTW after purge}}{\text{DTW Initial}} \right] - \left[\frac{\text{DTW Initial}}{\text{DTW Initial}} \right] \right) \times 0.20 + \left[\frac{\text{DTW Initial}}{\text{DTW Initial}} \right] = \text{ft}$

SAMPLING DATA

DTW (ft) before sampling: **7.62** Date: **09.26.2013** Time: **13:10 PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Bailer _____ Notes: _____

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16": 1/2": 9/16": 5/8": 3/4": 9/16": _____)

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-3**

GAUGING DATA

Date: **09-26-2013** Time: **7:50 AM** by: **SP**

Total Well Depth (ft): **24.13** Depth To Product (ft): _____
 Depth To Water (ft): **5.74** Product Thickness (ft): _____
 Water Column (ft): **18.39**

Purge Vol Calculation: Casing Vol. Borehole Vol. (80)

Well Dia	1"	2"	3"	6"	12"
Casing Vol	0.12	0.49	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.61	2.67	7.71

Estimated Purge Volume (gal): **18.39 x 0.49 = 9**

PURGING DATA

Purge Start Time: **9:50 AM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER FT by PA**

Time		Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
(hh:mm)	(min)						
9:53	3	3	70.3	5.91	1320	NONE	
9:56	3	3	69.8	5.40	1310	NONE	
9:59	3	3	67.7	5.83	1320	NONE	
10:02	3	3	68.1	5.81	1310	NONE	
10:05	3	3	68.3	5.80	1320	NONE	

DTW immed. after purge (ft): **5.77** Actual purged volume (gal): **15** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: $80\% \text{ Recovery} = [18.39] \times 0.20 + [5.74] = 9.41$ ft
Water Column DTW Initial

Max Drawdown (SD): $80\% \text{ Recovery} = ([] - []) \times 0.20 + [] =$ ft
DTW after purge DTW Initial DTW Initial

SAMPLING DATA

DTW (ft) before sampling: **10.06** Date: **09.26.2013** Time: **13:20 PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Bailer _____ Notes: _____

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16", 1/2", 9/16", 5/8", 3/4", 5/16", _____")

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-4R**

GAUGING DATA

Date: **09-26-2013** Time: **8:00AM** by: **SP.**

Total Well Depth (ft): **19.65** Depth To Product (ft) **N/A**

Depth To Water (ft): **4.38** Product Thickness (ft) **N/A**

Water Column (ft): **15.27**

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Well Dia	1"	2"	4"	6"	12"
Casing Vol	0.12	0.39	1.58	4.40	17.92
Borehole Vol	0.40	0.77	1.51	2.57	7.71

Estimated Purge Volume (gal): **15.27 x 1.96 = 30**

Note for borehole volume, add 1/2 BH vol for each subsequent passage

PURGING DATA

Purge Start Time: **10:05 AM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER 21** by **MYRON**

Time (hh:mm)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
10:10	5	71.3	6.01	1420	NONE	
10:15	5	71.1	6.04	1420	NONE	
10:20	5	70.8	6.02	1420	NONE	
10:25	5	70.7	6.02	1420	NONE	
10:30	5	70.7	6.01	1420	NONE	

DTW Immed. after purge (ft): **4.46** Actual purged volume (gal): **30** Avg Purge Rate (gpm):

RECOVERY CALCULATION

Method: Total Well Depth: 80% Recovery = $[15.27] \times 0.20 + [4.38] = 7.43$ ft

Water Column DTW Initial

Max Drawdown (SD): 80% Recovery = $([] - []) \times 0.20 + [] =$ ft

DTW after purge DTW Initial DTW Initial

SAMPLING DATA

DTW (ft) before sampling: **7.60** Date: **09.26.2013** Time: **13:30 PM** Temp pH D.O. ORP by

Sampling Method: Disposable Bailer Notes:

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16"; 1/2"; 9/16"; 5/8"; 3/4"; 5/16"; _____")

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-5**

GAUGING DATA

Date: **09-26-2013** Time: **8:15 AM** by: **SP**

Total Well Depth (ft): **13.75** Depth To Product (ft) **N/A**
 Depth To Water (ft): **4.55** Product Thickness (ft) **N/A**
 Water Column (ft): **9.20**

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Well Dia	1"	2"	4"	6"	12"
Casing Vol	0.12	0.38	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.51	2.57	7.71

Estimated Purge Volume (gal): **9.20 x 0.44 = 4**

Note for borehole volume, add 1/2 BH vol for each subsequent passage

PURGING DATA

Purge Start Time: **10:45 AM** Purge Method: **BAILED** pH/Temp/Cond: **ULTRAMETER II** by: **MYRON**

Time (hh:mm)	Time (min)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
10:47	2	2	70.1	6.93	1310	CLEAR	
10:49	2	2	70.3	5.91	1320	CLEAR	
10:51	2	2	70.2	5.40	1310	CLEAR	
10:53	2	2	70.1	5.87	1320	CLEAR	
10:55	2	2	70.0	5.89	1320	CLEAR	

DTW immed. after purge (ft): **4.58** Actual purged volume (gal): **10** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: $80\% \text{ Recovery} = [\text{Water Column}] \times 0.20 + [\text{DTW initial}] = \underline{6.39} \text{ ft}$
 Max Drawdown (SD): $80\% \text{ Recovery} = ([\text{DTW after purge}] - [\text{DTW initial}]) \times 0.20 + [\text{DTW initial}] = \underline{\hspace{2cm}} \text{ ft}$

SAMPLING DATA

DTW (ft) before sampling: **7.06** Date: **09.26.2013** Time: **13:40 PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Bailor _____ Notes: _____

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16": 1/2": 9/16": 3/8": 3/4": 5/16": _____)

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-6**

GAUGING DATA

Date: **09-26-2013** Time: **8:30 AM** by: **SP**

Total Well Depth (ft): **13.02** Depth To Product (ft): _____
 Depth To Water (ft): **5.37** Product Thickness (ft): _____
 Water Column (ft): **7.65**

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Well Dia	1"	2"	3"	6"	12"
Casing Vol	0.12	0.30	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.61	2.57	7.71

Estimated Purge Volume (gal): **7.65 x 0.49 = 4**

Multipliers for purge volume estimation: Note for borehole volume, add 1/2 BH vol for each subsequent passes

PURGING DATA

Purge Start Time: **11:10 AM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER II** by: **MURON**

Time (hh:mm)	Time (min)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
11:12	2	2	71.3	6.01	1230	NONE	
11:14	2	2	71.1	5.91	1210	NONE	
11:16	2	2	70.8	5.83	1240	NONE	
11:18	2	2	70.6	5.81	1230	NONE	
11:20	2	2	70.6	5.84	1220	NONE	

DTW Immed. after purge (ft): **5.40** Actual purged volume (gal): **10** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: 80% Recovery = $[7.65] \times 0.20 + [5.37] = 6.40$ ft
Water Column DTW initial

Max Drawdown (SD): 80% Recovery = $([] - []) \times 0.20 + [] =$ ft
DTW after purge DTW initial DTW initial

SAMPLING DATA

DTW (ft) before sampling: **7.03** Date: **09.26.2013** Time: **13:50 PM** Temp _____ pH _____ D.O. _____ ORP _____ by _____

Sampling Method: Disposable Bailer _____ Notes: _____

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16", 1/2", 3/16", 5/8", 3/4", 3/16", _____)

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **MW-7**

GAUGING DATA

Date: **09-26-2023** Time: **8:40AM** by: **SP**

Total Well Depth (ft): **13.55** Depth To Product (ft) **N/A**
 Depth To Water (ft): **4.75** Product Thickness (ft) **N/A**
 Water Column (ft): **8.80**

Multippliers for purge volume estimation:
 Note for borehole volume: add 1/2 BH vol for each subsequent passos

Well Dia	1"	2"	3"	6"	12"
Casing Vol	0.12	0.49	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.51	2.67	7.71

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Estimated Purge Volume (gal): **8.80 x 1.96 = 17**
water column multiplier est. volume

PURGING DATA

Purge Start Time: **11:35AM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER II** by: **MYRON**

Time (hh:mm)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
11:39	4	70.2	5.93	1320	NONE	
11:43	4	70.1	5.91	1290	NONE	
11:47	4	69.7	5.97	1290	NONE	
11:55	4	69.8	5.91	1270	NONE	
11:59	4	69.8	5.90	1270	NONE	

DTW Immed. after purge (ft): **4.82** Actual purged volume (gal): **20** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: 80% Recovery = $[\frac{8.80}{\text{Water Column}}] \times 0.20 + [\frac{4.75}{\text{DTW Initial}}] = 6.51$ ft

Max Drawdown (SD): 80% Recovery = $([\frac{\quad}{\text{DTW after purge}}] - [\frac{\quad}{\text{DTW Initial}}]) \times 0.20 + [\frac{\quad}{\text{DTW Initial}}] = \quad$ ft

SAMPLING DATA

DTW (ft) before sampling: **7.06** Date: **09.26.2023** Time: **14:10PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Bailer _____ Notes: _____

Well Inspection:

Well Box: Round (_____) Square (_____) # of Bolts _____ (7/16" : 1/2" : 3/16" : 5/8" : 3/4" : 5/16" : _____)

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____



FIELD DATA - GROUNDWATER PURGING & SAMPLING

Site: **TOC# 049** Location: **3400 SAN PABLO AVE, OAKLAND** Well ID#: **RW-1R**

GAUGING DATA

Date: **09-26-2013** Time: **8:50 AM** by: **SP**

Total Well Depth (ft): **19.08** Depth To Product (ft) **N/A**

Depth To Water (ft): **4.51** Product Thickness (ft) **N/A**

Water Column (ft): **14.57**

Purge Vol Calculation: Casing Vol. Borehole Vol. (SD)

Well Dia	1"	2"	4"	6"	12"
Casing Vol	0.12	0.30	1.96	4.40	17.62
Borehole Vol	0.40	0.77	1.51	2.67	7.71

Note for borehole volume, add 1/2 BH vol for each subsequent pass

Estimated Purge Volume (gal): **14.57 x 1.96 = 28**

water column multiplier est. volume

PURGING DATA

Purge Start Time: **12:10 PM** Purge Method: **BAILER** pH/Temp/Cond: **ULTRAMETER II** by: **MYROH**

Time (hh:mm)	Time (min)	Volume removed (gallons)	Temp °F or °C	pH	Cond µS	Turbidity	Observations
12:16	6	6	71.4	5.91	1430	NONE	SMALL ROAD FOG??
12:22	6	6	71.2	5.94	1410	NONE	
12:28	6	6	69.9	5.84	1340	NONE	
12:34	6	6	70.0	5.84	1370	NONE	
12:40	6	6	70.2	5.90	1370	NONE	

DTW Immed. after purge (ft): **4.58** Actual purged volume (gal): **30** Avg Purge Rate (gpm): **1**

RECOVERY CALCULATION

Method: Total Well Depth: $80\% \text{ Recovery} = \left[\frac{14.57}{\text{Water Column}} \right] \times 0.20 + \left[\frac{4.51}{\text{DTW Initial}} \right] = \underline{7.42} \text{ ft}$

Max Drawdown (SD): $80\% \text{ Recovery} = \left(\left[\frac{\quad}{\text{DTW after purge}} \right] - \left[\frac{\quad}{\text{DTW Initial}} \right] \right) \times 0.20 + \left[\frac{\quad}{\text{DTW Initial}} \right] = \underline{\quad} \text{ ft}$

SAMPLING DATA

DTW (ft) before sampling: **8.06** Date: **09.26.2013** Time: **14:30 PM** Temp: _____ pH: _____ D.O.: _____ ORP: _____ by: _____

Sampling Method: Disposable Bailer _____ Notes: _____

Well Inspection:

Well Box: Round (____") Square (____") # of Bolts _____ (7/16", 1/2", 9/16", 5/8", 3/4", 9/16", _____")

Well Plug Secured _____ Well Plug Locked _____ Well Cover Secured _____

Well Box Cleaned and Free of Water _____ Well Box Concrete Support Condition _____

Repair/Replacement Performed: _____

Repair/Replacement needed: _____

Comments: _____

Chain of Custody Record

ASSOCIATED LABORATORIES

806 North Batarvia • Orange, CA 92868

Phone: (714) 771-6900 • Fax: (714) 538-1209



Company _____ Phone _____							A.L. Job No. _____							Page _____ of _____	
Project Manager _____ Fax _____							Analysis Requested							Test Instructions & Comments	
Project Name _____ Project # _____															
Site Name and Address _____															
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.									
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
Sample Receipt - To Be Filled By Laboratory							Relinquished by Sampler: <u>PNC</u> 1.			Relinquished by _____ 2.			Relinquished by _____ 3.		
Total Number of Containers _____		Properly Cooled Y / N / NA _____		Signature: _____			Signature: _____			Signature: _____					
Custody Seals Y / N / NA _____		Samples Intact Y / N / NA _____		Printed Name: _____			Printed Name: _____			Printed Name: _____					
Received in Good Condition Y / N _____		Samples Accepted Y / N _____		Date: _____ Time: _____			Date: _____ Time: _____			Date: _____ Time: _____					
Turn Around Time							Received By: _____ 1.			Received By: _____ 2.			Received By: _____ 3.		
<input type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Same Day <input type="checkbox"/> 48 hrs. <input type="checkbox"/> 24 hrs. <input checked="" type="checkbox"/> 72 hrs.							Signature: _____			Signature: _____			Signature: _____		
							Printed Name: _____			Printed Name: _____			Printed Name: _____		
							Date: _____ Time: _____			Date: _____ Time: _____			Date: _____ Time: _____		

Appendix C
Groundwater Sample Laboratory Reports and Chain-
of-Custody Documents



Associated Laboratories

806 N. Batavia - Orange, CA 92868
 Tel (714)771-8900 Fax (714)536-1209
 www.associatedlabs.com
 Info@associatedlabs.com



Client: Thrifty Oil Company
 Address: 13116 E. Imperial Hwy.
 P.O. Box 2128
 Santa Fe Springs, CA 90670
 Attn: Jeff Suryakusuma
 Project: Station #049
 Comments: 3400 San Pablo Ave., Oakland, CA 94612
 Global ID: T0600101365

Lab Request: 329710
 Report Date: 10/02/2013
 Date Received: 09/27/2013

Client ID: 8871

1-134853
RECEIVED

OCT 03 2013 JS
 ST

ENVIRONMENTAL
 SST 049

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
329710-001	TOC #049 RW-1R
329710-002	TOC #049 MW-7
329710-003	TOC #049 MW-6
329710-004	TOC #049 MW-5
329710-005	TOC #049 MW-4R
329710-006	TOC #049 MW-3
329710-007	TOC #049 MW-2R
329710-008	TOC #049 MW-1
329710-009	TOC #049 T.B.

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
 President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING
 Chemical
 Microbiological
 Environmental

Matrix: Water	Client: Thrifty Oil Company	Collector: Client
Sampled: 09/28/2013 14:30	Site:	
Sample #: 329710-001	Client Sample #: TOC #049 RW-1R	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes	
Method: EPA 8015 NELAC		Prep Method: EPA 5030B		QC Batch ID: QC1140261					
TPH Gasoline	2860	1	6.6	50	ug/L	09/28/13	ryanp		
<u>Analyte</u>	<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>				
4-Bromofluorobenzene (SUR)	185		80-140	S	surrogate recovery high bias due to co-elution				
Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QC Batch ID: QC1140282					
Benzene	24	1	0.18	1	ug/L	09/29/13	ryanp		
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp		
Ethanol	2200	1	100	100	ug/L	09/29/13	ryanp		
Ethylbenzene	79	1	0.21	6	ug/L	09/29/13	ryanp		
Ethyl-terbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp		
Methyl- <i>t</i> -butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp		
<i>t</i> -Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp		
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp		
Toluene	330	5	1.2	25	ug/L	10/01/13	ryanp		
Xylenes (Total)	520	1	0.45	5	ug/L	09/29/13	ryanp		
<u>Analyte</u>	<u>% Recovery</u>		<u>Limits</u>		<u>Notes</u>				
1,2-Dichloroethane-d4 (SUR)	103		70-145						
4-Bromofluorobenzene (SUR)	103		70-145						
Dibromodifluoromethane (SUR)	93		70-145						
Toluene-d8 (SUR)	103		70-145						

ND = Not Detected or < MDL

MDL = Method Detection Limit

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water Client: Thrifty Oil Company Collector: Client
 Sampled: 09/28/2013 14:10 Site:
 Sample #: 329710-002 Client Sample #: TOC #049 MW-7 Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 NELAC	Prep Method: EPA 5030B		QC Batch ID: QC1140261					
TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	ryanp	

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	119	60-140	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 NELAC	Prep Method: EPA 5030B		QC Batch ID: QC1140282					
Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-tertbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichlorobenzene-d4 (SUR)	106	70-145	
4-Bromofluorobenzene (SUR)	101	70-145	
Dibromodifluoromethane (SUR)	90	70-145	
Toluene-d8 (SUR)	104	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water Client: Thrifty Oil Company Collector: Client
 Sampled: 09/26/2013 13:50 Site:
 Sample #: 329710-003 Client Sample #: TOC #049 MW-6 Sample Type:

Method: EPA 8015 *NELAC* Prep Method: EPA 5030B QCBatchID: QC1140261

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	rparrish	

Method: EPA 8260 *NELAC* Prep Method: EPA 5030B QCBatchID: QC1140282

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-tertbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	107	70-145	
4-Bromofluorobenzene (SUR)	103	70-145	
Dibromodifluoromethane (SUR)	93	70-145	
Toluene-d8 (SUR)	104	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water	Client: Thrifty Oil Company	Collector: Client
Sampled: 09/28/2013 13:40	Site:	
Sample #: 320710-004	Client Sample #: TOC #049 MW-5	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes	
Method: EPA 8015 NELAC		Prep Method: EPA 5030B		QC Batch ID: QC1140261					
TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	rparish		

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	92	60-140	

Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QC Batch ID: QC1140282					
------------------------	--	------------------------	--	------------------------	--	--	--	--	--

Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-tertbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	114	70-145	
4-Bromofluorobenzene (SUR)	100	70-145	
Dibromodifluoromethane (SUR)	93	70-145	
Toluene-d8 (SUR)	104	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water	Client: Thrifty Oil Company	Collector: Client
Sampled: 09/26/2013 13:30	Site:	
Sample #: 329710-005	Client Sample #: TOC #049 MW-4R	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes	
Method: EPA 8015 <small>NELAC</small>		Prep Method: EPA 5030B		QC Batch ID: QC1140261					

TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	ryanp	
--------------	----	---	-----	----	------	----------	-------	--

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	98	60-140	

Method: EPA 8260 <small>NELAC</small>		Prep Method: EPA 5030B		QC Batch ID: QC1140262					
---------------------------------------	--	------------------------	--	------------------------	--	--	--	--	--

Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-terbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	106	70-145	
4-Bromofluorobenzene (SUR)	103	70-145	
Dibromodifluoromethane (SUR)	91	70-145	
Toluene-d8 (SUR)	104	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water	Client: Thrifty Oil Company	Collector: Client
Sampled: 09/26/2013 13:20	Site:	
Sample #: 329710-006	Client Sample #: TOC #049 MW-3	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 <i>NELAC</i>	Prep Method: EPA 5030B		QC Batch ID: QC1140261					
TPH Gasoline	1430	1	6.6	50	ug/L	09/28/13	rparish	

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	139	60-140	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 <i>NELAC</i>	Prep Method: EPA 5030B		QC Batch ID: QC1140262					
Benzene	30	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	3900	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	84	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-terbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	380	5	1.2	25	ug/L	10/01/13	ryanp	
Xylenes (Total)	500	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	100	70-145	
4-Bromofluorobenzene (SUR)	103	70-145	
Dibromodifluoromethane (SUR)	91	70-145	
Toluene-d8 (SUR)	105	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water Client: Thrifty Oil Company Collector: Client
 Sampled: 09/26/2013 13:10 Site:
 Sample #: 329710-007 Client Sample #: TOC #049 MW-2R Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 <small>NELAC</small>		Prep Method: EPA 5030B		QC Batch ID: QC1140261				
TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	ryanp	

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	98	60-140	

Method: EPA 8260 NELAC Prep Method: EPA 5030B QC Batch ID: QC1140285

Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-tertbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	106	70-145	
4-Bromofluorobenzene (SUR)	104	70-145	
Dibromodifluoromethane (SUR)	87	70-145	
Toluene-d8 (SUR)	106	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water		Client: Thrifty Oil Company		Collector: Client				
Sampled: 09/26/2013 13:00		Site:						
Sample #: 329710-008		Client Sample #: TOC #049 MW-1		Sample Type:				
Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 NELAC		Prep Method: EPA 8030B		QCBatchID: QC1140261				
TPH Gasoline	ND	1	6.6	50	ug/L	09/26/13	ryanp	
Analyte	% Recovery	Limits		Notes				
4-Bromofluorobenzene (SUR)	103	60-140						
Method: EPA 8260 NELAC		Prep Method: EPA 5030B		QCBatchID: QC1140285				
Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Di-isopropyl ether (DIPE)	ND	1	0.2	1	ug/L	09/29/13	ryanp	
Ethanol	ND	1	100	100	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Ethyl-terbutylether (ETBE)	ND	1	0.23	1	ug/L	09/29/13	ryanp	
Methyl-t-butyl Ether (MTBE)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
t-Butyl alcohol (TBA)	ND	1	5.2	10	ug/L	09/29/13	ryanp	
Tert-amylmethylether (TAME)	ND	1	0.19	1	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	
Analyte	% Recovery	Limits		Notes				
1,2-Dichloroethane-d4 (SUR)	104	70-145						
4-Bromofluorobenzene (SUR)	101	70-145						
Dibromodifluoromethane (SUR)	88	70-145						
Toluene-d8 (SUR)	106	70-145						

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Water	Client: Thrifty Oil Company	Collector: Client
Sampled: 09/26/2013 00:00	Site:	
Sample #: 329710-009	Client Sample #: TOC #049 T.B.	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 <i>NELAC</i>		Prep Method: EPA 5030B		QC Batch ID: QC1140261				
TPH Gasoline	ND	1	6.6	50	ug/L	09/28/13	rpaiish	

Analyte	% Recovery	Limits	Notes
4-Bromofluorobenzene (SUR)	95	50-140	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 <i>NELAC</i>		Prep Method: EPA 5030B		QC Batch ID: QC1140262				
Benzene	ND	1	0.18	1	ug/L	09/29/13	ryanp	
Ethylbenzene	ND	1	0.21	5	ug/L	09/29/13	ryanp	
Toluene	ND	1	0.24	5	ug/L	09/29/13	ryanp	
Xylenes (Total)	ND	1	0.45	5	ug/L	09/29/13	ryanp	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	106	70-145	
4-Bromofluorobenzene (SUR)	103	70-145	
Dibromodifluoromethane (SUR)	91	70-145	
Toluene-d8 (SUR)	107	70-145	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #329710

QCBatchID: QC1140261	Analyst: rparish	Method: EPA 8015B
Matrix: Water	Analyzed: 09/28/2013	Instrument: VOA-GC (group)

Blank Summary					
Analyte	Blank Result	Units	MDL	RDL	Notes
QC1140261MB1					
TPH Gasoline	ND	ug/L	6.6	50	

Lab Control Spike/Lab Control Spike Duplicate Summary										
Analyte	Spike Amount		Spike Result		Units	Recoveries		Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	
QC1140261LCS1, QC1140261LCSD1										
TPH Gasoline	500	500	562	571	ug/L	112	114	2	70-130	30

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #329710

QCBatchID: QC1140282	Analyst: ryanp	Method: EPA 8260B
Matrix: Water	Analyzed: 09/30/2013	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1140282MB1					
1,1,1-Trichloroethane	ND	ug/L	0.33	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	NO	ug/L	0.25	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	5	
Benzene	ND	ug/L	0.18	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
Ethylbenzene	ND	ug/L	0.21	5	
Methylene chloride	ND	ug/L	0.16	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
Trichloroethane	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	

Lab Control Spike / Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec RPD	
QC1140282LCS1										
1,1-Dichloroethane	50		50.6		ug/L	101				59-172
Benzene	50		53.0		ug/L	106				62-137
Chlorobenzene	50		55.6		ug/L	111				60-133
Toluene	50		54.2		ug/L	108				59-139
Trichloroethane	50		51.3		ug/L	103				66-142

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #329710

QCBatchID: QC1140282	Analyst: ryanp	Method: EPA 8260B
Matrix: Water	Analyzed: 09/30/2013	Instrument: VOA-MS (group)

Matrix Spike/Main Spike Duplicate Summary												
Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1140282MS1, QC1140282MSD1											Source: 329548-002	
1,1-Dichloroethene	ND	50	50	45.8	51.3	ug/L	92	103	11.3	59-172	22	
Benzene	ND	50	50	51.0	54.0	ug/L	102	108	5.7	62-137	24	
Chlorobenzene	ND	50	50	51.9	53.9	ug/L	104	108	3.8	60-133	21	
Toluene	ND	50	50	60.0	53.6	ug/L	100	107	6.9	59-139	21	
Trichloroethene	ND	50	50	47.9	51.3	ug/L	96	103	6.9	66-142	21	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #329710

QCBatchID: QC1140285	Analyst: ryanp	Method: EPA 8260B
Matrix: Water	Analyzed: 09/30/2013	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1140285MB1					
1,1-Dichloroethene	ND	ug/L	5	5	
Benzene	ND	ug/L	0.18	1	
Chlorobenzene	ND	ug/L	5	5	
Ethylbenzene	ND	ug/L	0.21	5	
m and p-Xylene	ND	ug/L	0.45	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
o-Xylene	ND	ug/L	0.29	5	
Toluene	ND	ug/L	0.24	5	
Trichloroethene	ND	ug/L	5	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike, Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1140285LCS1											
1,1-Dichloroethene	50		48		ug/L	96			59-172		
Benzene	50		49		ug/L	98			62-137		
Chlorobenzene	50		53		ug/L	106			60-133		
Methyl-t-butyl Ether (MTBE)	50		46		ug/L	92			62-137		
Toluene	50		32		ug/L	104			59-139		
Trichloroethene	50		48		ug/L	96			65-142		

Matrix Spike, Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1140285MS1, QC1140285MSD1												
Source: 329710-007												
1,1-Dichloroethene	ND	50	50	51	49	ug/L	102	98	4.0	59-172	22	
Benzene	ND	50	50	52	51	ug/L	104	102	1.9	62-137	24	
Chlorobenzene	ND	50	50	56	55	ug/L	112	110	1.8	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	46	48	ug/L	92	96	4.3	62-137	21	
Toluene	ND	50	50	55	56	ug/L	110	112	1.8	59-139	21	
Trichloroethene	ND	50	50	54	54	ug/L	108	108	0.0	65-142	21	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
Q1	Analyte Calibration Verification exceeds criteria and the result was reported with qualifier.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Chain of Custody Record

ASSOCIATED LABORATORIES

806 North Batavia • Orange, CA 92868

Phone: (714) 771-6900 • Fax: (714) 538-1209



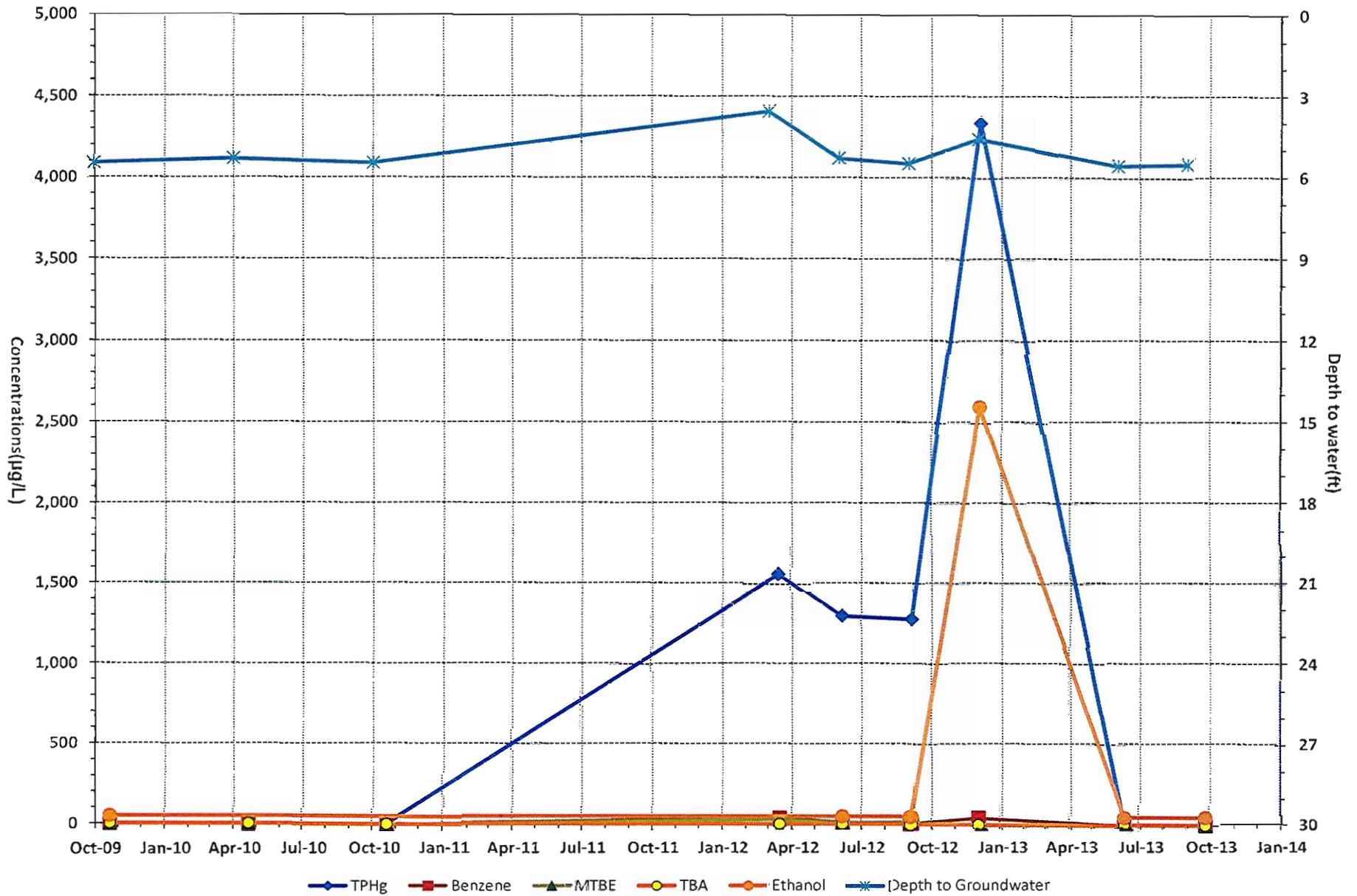
Company: THIRTY OIL CO.		Phone: 562		A.L. Job No. 329710		Page 1 of 1			
Project Manager: JEFF FURYAKUSUMA		Fax: 562		Analysis Requested				Test Instructions & Comments	
Project Name: WALS WATER SAMPLING		Project #: TOC 049		TPN48015 BPT21820 OXYGENATED ETHANOL				GLOBAL I.D. TO600101365	
Site Name and Address: 3400 SAN PABLO AVE OAKLAND CA 94612									
Sample ID	Lab ID	Date	Time	Matrix	Container Number/Size	Pres.			
1 RW-1R		09.26.13	14:30	H ₂ O	4-VOA	NONE	X	X	X
2 MW-7			14:40				X	X	X
3 MW-6			13:50				X	X	X
4 MW-5			13:40				X	X	X
5 MW-4R			13:30				X	X	X
6 MW-3			13:20				X	X	X
7 MW-2R			13:10				X	X	X
8 MW-1			13:00		4-VOA		X	X	X
9 T. B.		09.26.13	00:00	H ₂ O	2-VOA	NONE	X	X	
10									
11									
12									
13									
14									
15									

Sample Receipt - To Be Filled By Laboratory				Relinquished by Sampler: EMC		Relinquished by 2.		Relinquished by 3.	
Total Number of Containers	Property Cooled Y/N/NA	Signature: <i>[Signature]</i>		Signature:		Signature:		Signature:	
Custody Seals Y/N/NA	Samples Intact Y/N/NA	Printed Name: SERBAN P.		Printed Name:		Printed Name:		Printed Name:	
Received in Good Condition Y/N	Samples Accepted Y/N	Date: 09.26.13 Time:		Date: Time:		Date: Time:		Date: Time:	
Turn Around Time				Received By: G.S.OA		Received By: 2.		Received By: 3.	
<input type="checkbox"/> Normal <input type="checkbox"/> Rush <input type="checkbox"/> Same Day <input type="checkbox"/> 48 hrs. <input checked="" type="checkbox"/> 72 hrs.				Signature: <i>[Signature]</i>		Signature:		Signature:	
				Printed Name: [Signature]		Printed Name:		Printed Name:	
				Date: 09.27.13 Time: 10:23		Date: Time:		Date: Time:	

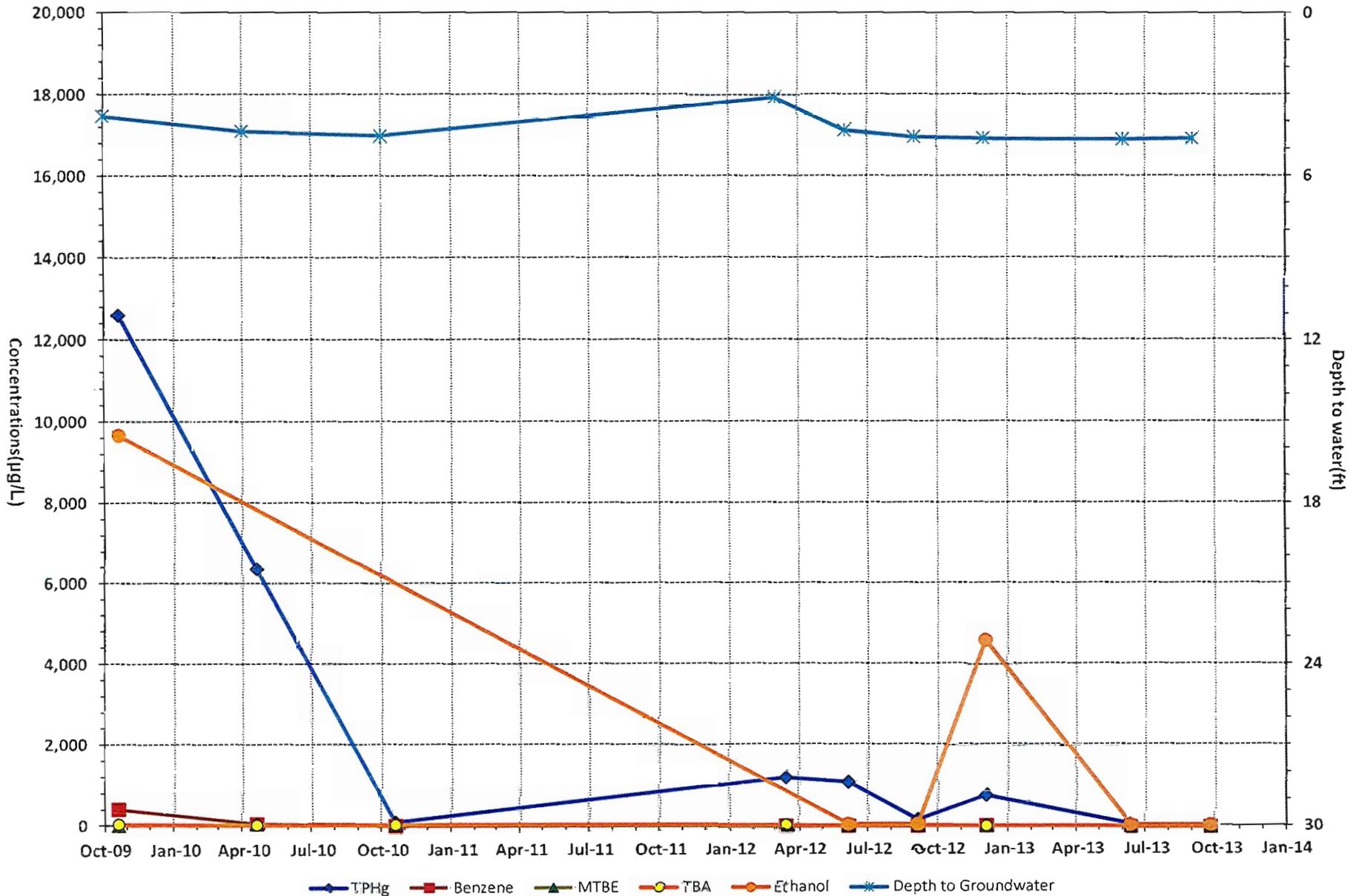
Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldstrod - Sampler/Originator

Appendix D
Groundwater Concentration and Elevation Graphs Per
Well

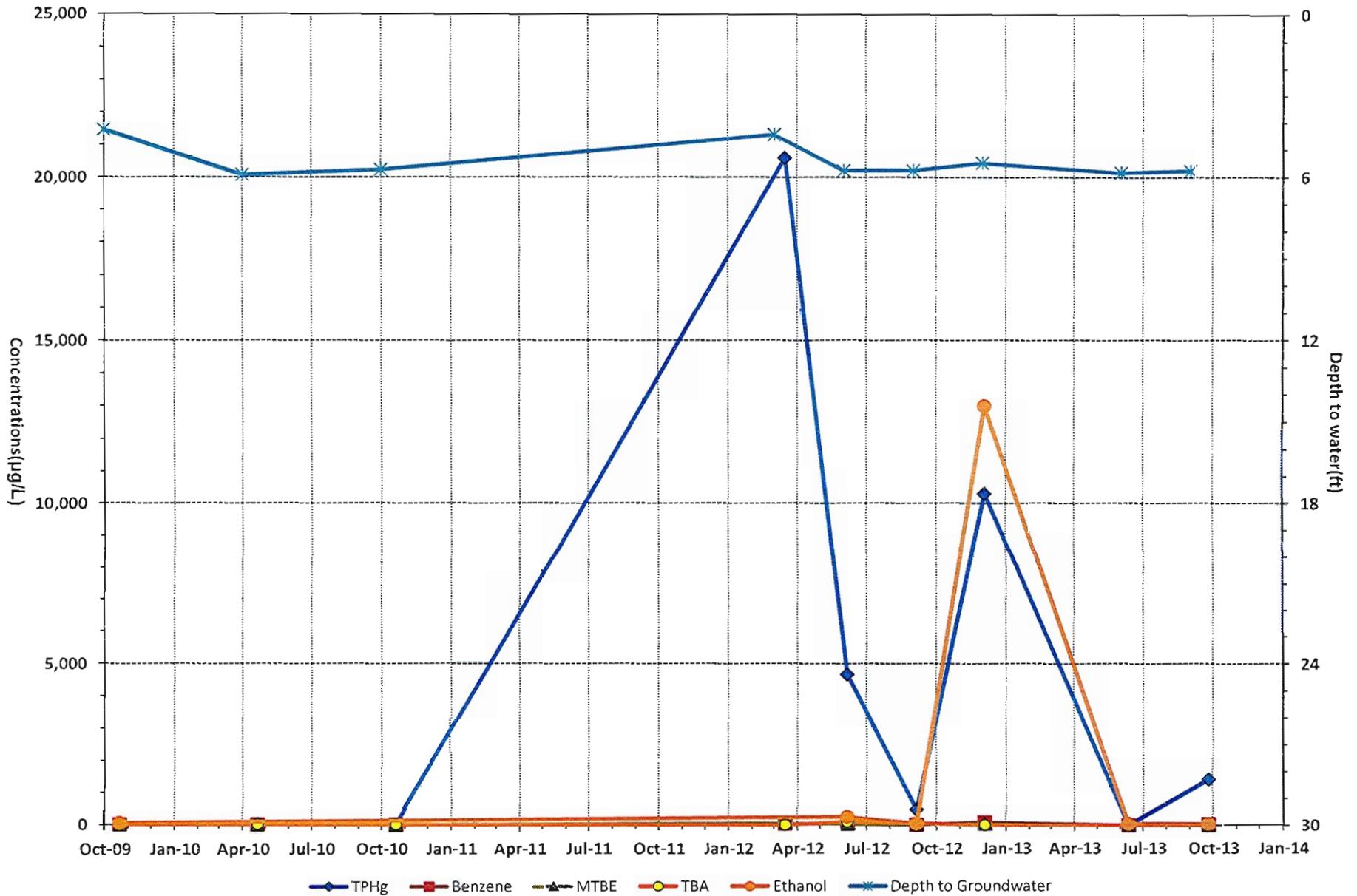
GRAPH 1
GROUNDWATER CONCENTRATIONS IN: MW-1
THRIFTY OIL STATION #049, OAKLAND, CA



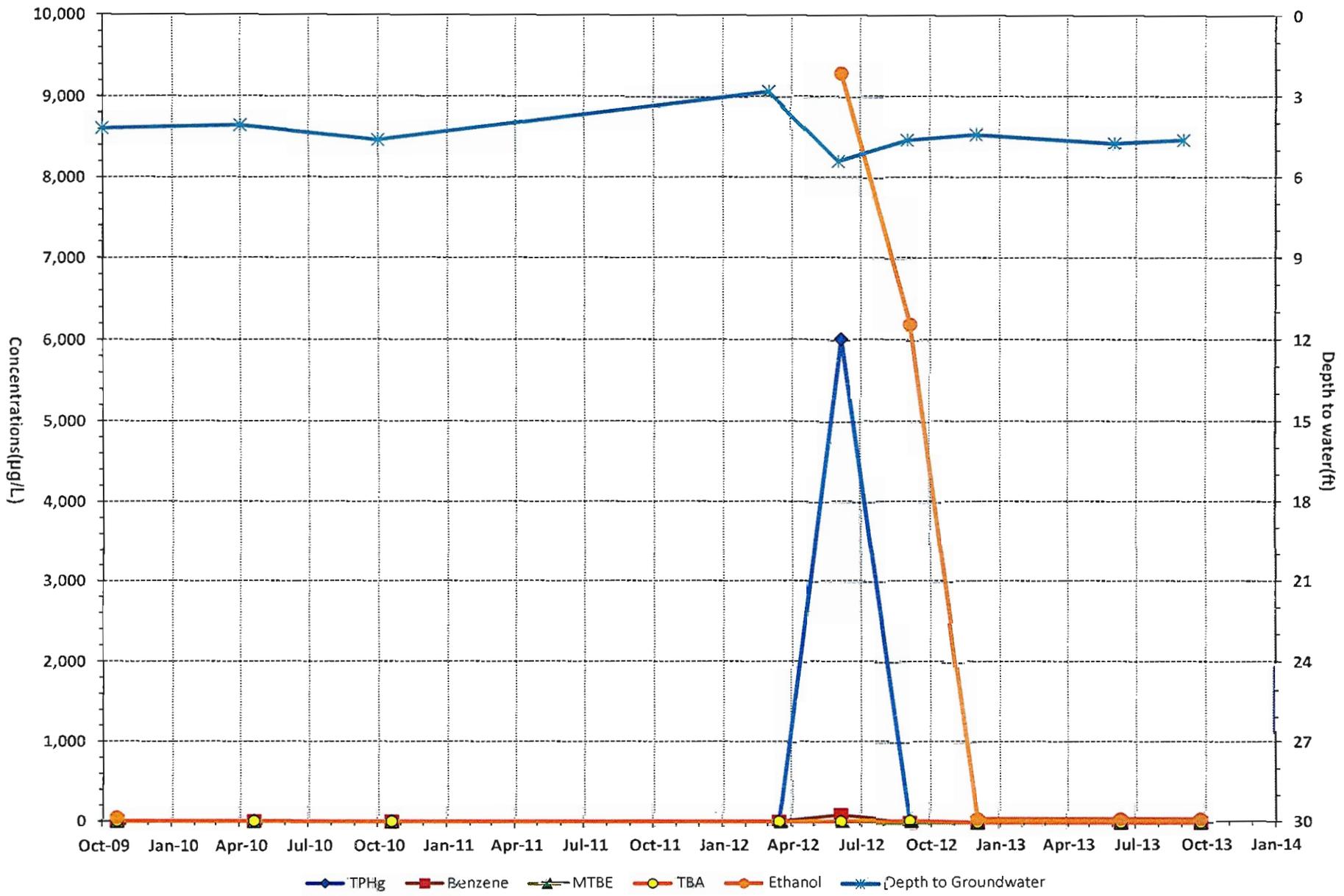
GRAPH 2
GROUNDWATER CONCENTRATIONS IN: MW-2R
THRIFTY OIL STATION #049, OAKLAND, CA



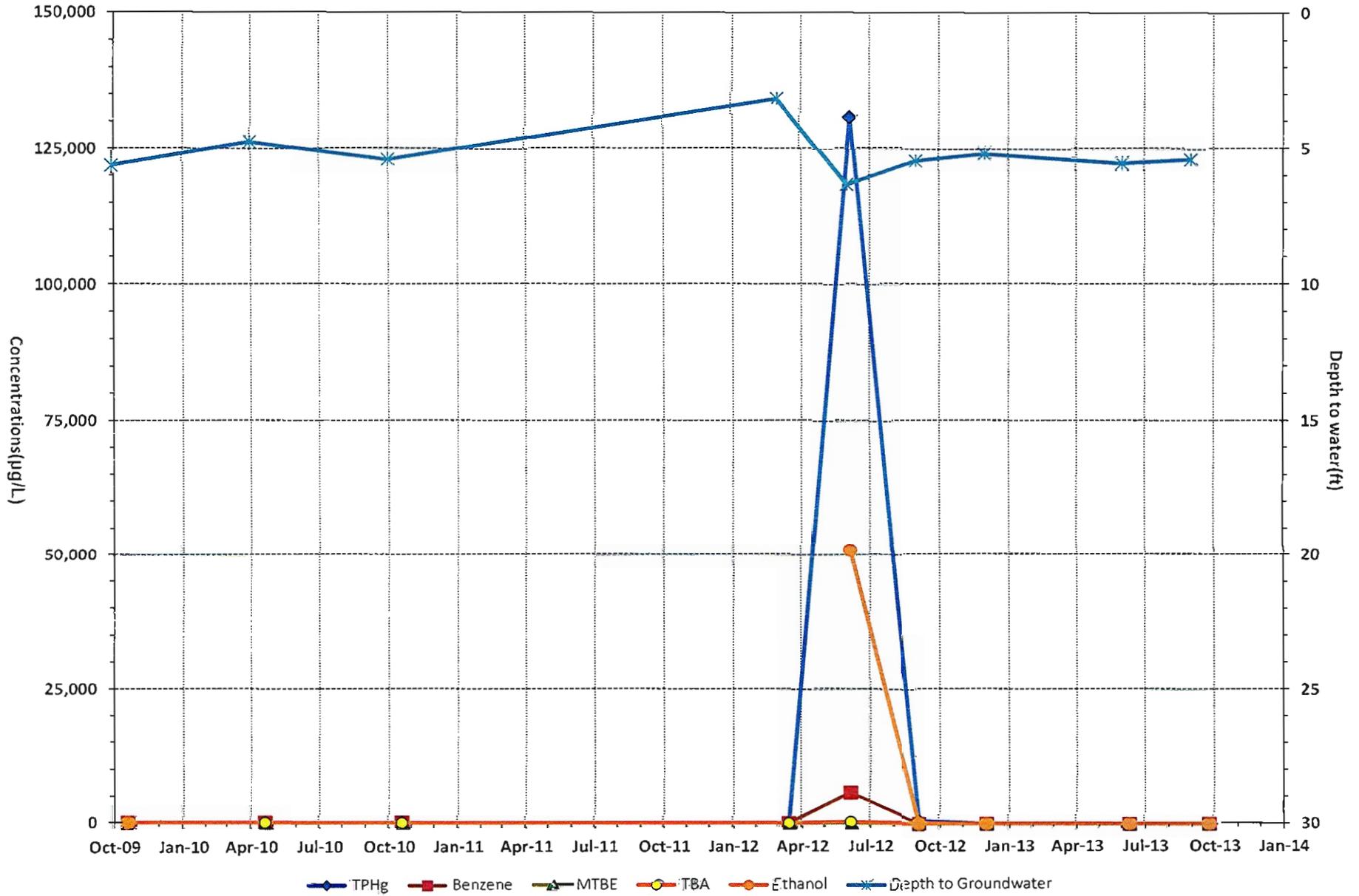
GRAPH 3
GROUNDWATER CONCENTRATIONS IN: MW-3
THRIFTY OIL STATION #049, OAKLAND, CA



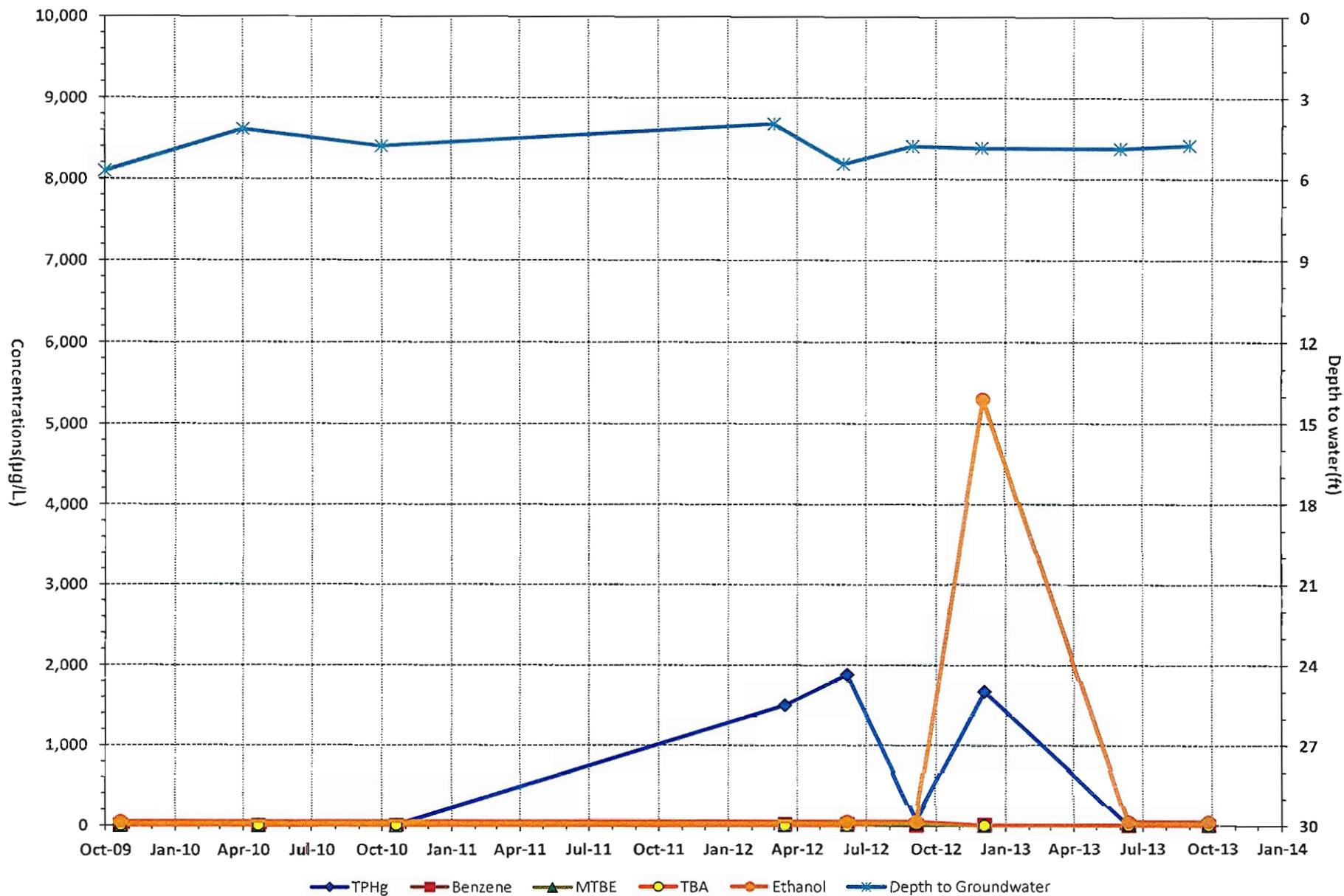
**GRAPH 5
GROUNDWATER CONCENTRATIONS IN: MW-5
THRIFTY OIL STATION #049, OAKLAND, CA**



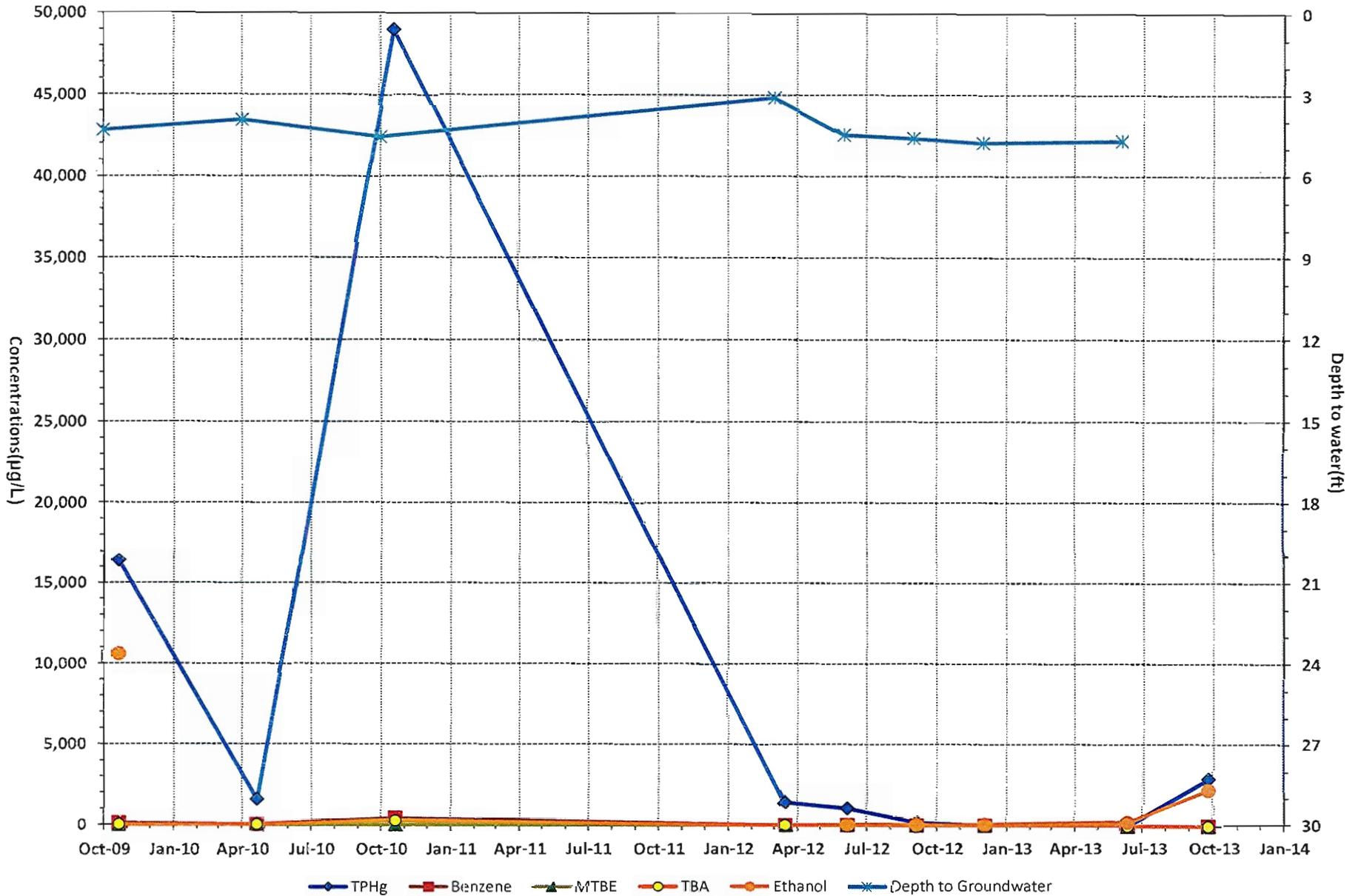
GRAPH 6
GROUNDWATER CONCENTRATIONS IN: MW-6
THRIFTY OIL STATION #049, OAKLAND, CA



GRAPH 7
GROUNDWATER CONCENTRATIONS IN: MW-7
THRIFTY OIL STATION #049, OAKLAND, CA



GRAPH 8
GROUNDWATER CONCENTRATIONS IN: RW-1R
THRIFTY OIL STATION #049, OAKLAND, CA



Appendix E
Low-Threat UST Case Closure Policy Check List

Site Name: **THRIFTY OIL CO STATION NO. 049**
 Site Address: **3400 SAN PABLO AVE., OAKLAND, CA**

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.¹

<p>General Criteria General criteria that must be satisfied by all candidate sites:</p> <p>Is the unauthorized release located within the service area of a public water system?</p> <p>Does the unauthorized release consist only of petroleum?</p> <p>Has the unauthorized ("primary") release from the UST system been stopped?</p> <p>Has free product been removed to the maximum extent practicable?</p> <p>Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?</p> <p>Has secondary source been removed to the extent practicable?</p> <p>Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25298.15?</p> <p>Does nuisance as defined by Water Code section 13050 exist at the site?</p> <p>Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria:</p> <p>1. Groundwater: To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:</p> <p>Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?</p> <p>Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites?</p> <p>If YES, check applicable class: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>

¹ Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

Site Name: **THRIFTY OIL CO. STATION NO. 049**
 Site Address: **3400 SAN PABLO AVE., OAKLAND, CA**

<p>For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p>2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies.</p> <p>Is the site an active commercial petroleum fueling facility? Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.</p> <p>a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through <u>3</u> or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</p> <p>b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p>3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c).</p> <p>a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?</p> <p>b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>