Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, California 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by:

Paul Supple
Environmental Business Manager

SECOR

SECOR
INTERNATIONAL
INCORPORATED

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March 30, 2007

Mr. Steven Plunkett
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RE: **Response to ACEH Correspondence Dated February 1, 2007**
76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California
SECOR Project Nos. 77BP.11126.00/77CP.01730.01

Dear Mr. Plunkett:

On behalf of BP (An Atlantic Richfield Company) and ConocoPhillips, SECOR International Incorporated (SECOR) submits this letter to address the comments presented by Alameda County Environmental Health Services (ACEH) in a letter dated February 1, 2007 (Attached). SECOR's response to the ACEH comments is included below.

Contaminant Plume Delineation

ACEH requested contaminant plume delineation to the west of the site based on concentrations of MtBE in monitoring well MW-4. As is shown in the *Quarterly Groundwater Monitoring Progress Report Fourth Quarter 2006* dated January 9, 2007, the groundwater gradient at the site since April 2005 has been to the southwest, and monitoring well MW-7 located approximately 50 feet southwest of MW-4 contained MtBE at a concentration of 6.7 µg/L during the fourth quarter 2006 samplign event. Monitoring well MW-11, also located to the southwest, has not contained detectable concentrations of any analytes above detection limits since its installation in April 2005. Two offsite wells to the south of the site (MW-5 and MW-10) have contained low to non-detect levels of MtBE since 2003, with MtBE only being detected above the California Primary MCL three times; the highest detection being 18 µg/L in MW-5 in August 2003. Based on this data, SECOR feels the site is adequately delineated to the west.

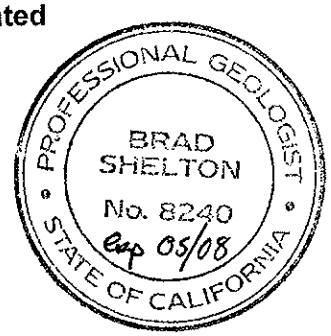
Source Area Remediation

As requested, a Remedial Action Plan is being submitted along with this letter to address source area contamination.

Should you have any questions or concerns, please feel free to contact the undersigned at (916) 861-0400.

Sincerely,
SECOR International Incorporated

Brad Shelton, P.G.
Project Manager



Attachments: Attachment A – Agency Correspondence

cc: Ms. Shelby Lathrop, ConocoPhillips
Mr. Paul Supple, BP

ATTACHMENT A

REGULATORY CORRESPONDENCE

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California
SECOR Project Nos. 77BP.11126.00 /77CP.01730.01

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
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(510) 567-6700
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February 1, 2007

Mr. Paul Supple
Atlantic Richfield Company
PO Box 6459
Moraga, CA 94570

Ms. Shelby Lathrop
Conoco Phillips
76 Broadway
Sacramento, CA 95818

Subject: Fuel Leak Case No. RO0000066, Former BP Service Station #11126, 1700 Powell Street, Emeryville, CA – Work Plan and Remedial Action Plan

Dear Mr. Supple and Ms. Lathrop:

Alameda County Environmental Health Department (ACEH) staff has reviewed the reports entitled, "Quarterly Groundwater Monitoring Report, 4th Quarter 2006," dated January 9, 2007 prepared by Secor International and "Offsite Soil and Groundwater Investigation Report" dated June 15, 2005 and prepared by URS Corp. Water quality analytical data collected in December 2006 indicate that high levels of TPHg, Benzene, MtBE and TBA were detected at concentrations of up to 61,000 µg/L, 15,000 µg/L, 10,000 µg/L and 31,000 µg/L, respectively. In addition, review of historical groundwater analytical data show that as recently as December 2005 up to 210,000 µg/L TPHg and 22,000 µg/L MtBE were detected in monitoring well MW-2, indicating that residual contamination in the source area may be continuing to add mass to the dissolved petroleum hydrocarbon plume. Consequently, ACEH is concerned that remaining petroleum hydrocarbon contamination in the source area is migrating off site. Furthermore, documented hydraulic gradient, which is toward the west/southwest, confirms that dissolved hydrocarbon contamination is moving downgradient of the site.

Our review of the case file indicates that additional offsite characterization activities associated with the MtBE plume, followed by onsite interim remediation in the source area are required. Therefore, ACEH requests you provide a remedial action plan that details your proposal to rectify groundwater contamination onsite and characterize groundwater contamination associated with the MtBE plume downgradient of your site.

Based on ACEH staff review of the case file, we request that you address the following technical comments and prepare a work plan detailing work to be performed, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Contamination Plume Delineation.**

   The purpose of contaminant plume delineation is to determine the lateral extent of MtBE/TBA contamination in soil and groundwater from the unauthorized release at your site. The extent of MtBE contamination in soil and groundwater downgradient toward the west of your site is

undefined. The results of recent groundwater monitoring indicate the presence of high levels of dissolved phase MtBE and other petroleum products at your site. Water quality data from downgradient monitoring well MW-4 detected up to 10,000 µg/L MtBE and 31,000 µg/L TBA, demonstrating that offsite migration is an ongoing issue.

MTBE is highly soluble, very mobile in groundwater and is not readily biodegradable. Conventional monitoring well networks currently installed at fuel leak sites are generally insufficient to properly locate and define the extent of MTBE plumes. MTBE plumes can be long, narrow, and erratic (meandering). In addition, the plumes can appear as discontinuous slugs particularly for those releases that occurred during the use of MTBE as a wintertime oxygenate (the period 1991 to 1995 in northern California). Thus, the positioning of current monitoring well networks can miss the MTBE plume core, and the monitoring well's design can incorrectly reflect the severity of the release. Please discuss your proposal to perform MtBE plume characterization work in the work plan requested below.

2. **Source Area Remediation.** The purpose of source are remediation is to immediately remove any source(s) that may be continuing to add mass to the dissolved plume and immediately begin removal of dissolved contaminant mass in the source area. Source area cleanup is necessary to prevent dissolved phase petroleum hydrocarbon pollution from impacting or continuing to impact drinking water supply aquifers, reduce the ultimate impact of the unauthorized release on the resource, limit continued migration and growth of the petroleum hydrocarbon plume, and reduce overall cleanup costs.

   ACEH is concerned that delays in the submission of a remedial action plan for the site are allowing for the continued migration of pollution downgradient of the site. On December 15, 2005 ACEH requested Secor to proceed with the submission of a Remedial Action Plan (RAP). To date, ACEH has yet to received the requested RAP; therefore, we request that you evaluate several remedial alternatives that could be used to mitigate offsite migration of groundwater contamination. Please prepare a Remedial Action Plan that details your proposal to mitigate contamination in the source area in the report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Steven Plunkett), according to the following schedule:

- **March 1, 2006** – Work Plan for Soil and Groundwater Investigation and Remedial Action Plan

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.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) 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. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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." An officer or legally authorized representative of your company must sign this letter. 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, 6835, and 7835.1) require 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, later 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.

Should you have any questions, do not hesitate to call me at (510) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: Brad Shelton
Secor International
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95607

Donna Drogos, ACEH
Steven Plunkett, ACEH
File

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REMEDIAL ACTION PLAN

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

March 30, 2007

Prepared by:

for

Cohn O'Donnell,
Project Geologist

Reviewed by:

Brad Shelton, P.G.
Project Manager

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Attachment B	Boring Logs and Well Construction Details
Attachment C	SECOR's Historical Water Well Survey Table
Attachment D	Historic Cross-Sections
Attachment E	Figures from the First Quarter 2007 Monitoring Report
Attachment F	Dissolved Hydrocarbon Concentration Trend Graphs

1.0 INTRODUCTION

On behalf of Atlantic Richfield Company, a BP Affiliated Company, and ConocoPhillips, SECOR International Incorporated (SECOR) has prepared this *Remedial Action Plan* (RAP) for 76 (Former BP) Service Station No. 11126 located at 1700 Powell Street in the City of Emeryville, California (Figure 1).

As requested in correspondence from Alameda County Environmental Health Department (ACEH) in a letter dated February 1, 2007 (Attachment A), SECOR is submitting this RAP to address source area remediation at the Site. This RAP contains the following:

- a summary of previous site assessment activities
- a summary of existing site conditions with respect to petroleum hydrocarbon-impacted soil and groundwater
- a feasibility analysis of remedial technologies

2.0 SITE HISTORY

2.1 SITE LOCATION

The site is located on the northwest corner of Powell Street and Christie Avenue in Emeryville, California (Figure 2), and is currently utilized as a retail gasoline service station. Three single-walled, fiberglass, gasoline underground storage tanks (USTs), associated product lines, two dispenser islands, a station building, and a convenience store are present at the site. The three unleaded gasoline USTs, consisting of one 12,000-gallon UST, one 10,000-gallon UST, and one 6,000-gallon UST, were installed in 1986 (EMCON, 1994).

The properties in the vicinity of the site are a mixture of industrial and commercial developments (Alisto Engineering Group [Alisto], 1994). South of the site and across Powell Street is Powell Street Plaza, a retail commercial development with a number of groundwater monitoring wells on-site and around it's perimeter (Alisto, 1993). Immediately east of Powell Street Plaza and approximately 1,000 feet southeast of the site are monitoring wells installed in the immediate vicinity of Harcros Pigments, located at 4650 Shell Mound Street. The area surrounding the site was historically used for industrial purposes before being developed into a shopping center.

2.2 PREVIOUS INVESTIGATIONS

Various phases of environmental assessment are summarized below. Soil, soil gas, and groundwater analytical data are discussed in Section 4.0. Locations of sample points, borings, and wells are shown on Figure 3. Historical soil analytical data are presented in Tables 1a through 1e. A table summarizing the well construction details is included as Table 2. Boring logs and well construction details are presented as Attachment B. Historical groundwater analytical data are presented as Table 3.

- A soil gas survey was conducted on April 10, 1989, by Target Environmental Services, Inc. on behalf of Mobil Oil Corporation prior to the transfer of ownership of the property to BP Oil (BP). Soil gas samples were collected from 19 sampling points at an approximate depth of four feet below ground surface (bgs) across the site. Results indicated that gasoline may have entered the site subsurface at the pump islands, UST complex, or along the product supply lines. Total volatile hydrocarbons were detected in soil vapor using a flame-ionization detector (FID) at concentrations up to 932,000 micrograms per liter (µg/L), with the highest detections detected in the vicinity of the pump islands and east of the USTs (TES, 1989).

- On April 24, 1989, one 550-gallon, waste oil UST was removed from the site, and was replaced with a suspected 1,000-gallon waste oil UST in a separate excavation. Soil samples collected from beneath the UST and sidewalls of the initial waste oil UST excavation contained detectable concentrations of total oil and grease (TOG), total petroleum hydrocarbons as diesel (TPHd), and total petroleum hydrocarbons as gasoline (TPHg). An additional soil sample collected from the sidewall of the new waste oil UST excavation, located approximately 20 feet south of the former waste oil

UST location, also contained detectable concentrations of TOG and TPHd (Alisto, 1994). An *Underground Storage Tank Unauthorized Release (Leak) / Contamination Site Report* dated May 2, 1989 documenting the past occurrence of a release of unknown quantity was subsequently submitted to Alameda County Environmental Health Department, Hazardous Materials Division (EMCON, 1994).

- In October 1992, Alisto performed a preliminary site assessment to investigate the extent of petroleum hydrocarbon impacts beneath the site. Eight soil borings (B-1 through B-3, B-4A, B-4B, B-4, B-5A, and B-5) were advanced to depths ranging from four feet to 20 feet bgs. Auger refusal was encountered during the drilling of borings B-1, B-4A, B-4B, and B-5A, and borings B-2 through B-5 were converted to monitoring wells MW-1 through MW-4, respectively. Soil samples collected up to a depth of 5.5 feet bgs from the borings advanced in the immediate vicinity of the USTs and dispenser islands contained detectable concentrations of TPHg and benzene. Groundwater samples collected from the wells in November 1992 also contained detectable concentrations of TPHd, TPHg and benzene.

- In September 1993, Alisto installed five additional groundwater monitoring wells (MW-5 through MW-9) off-site. Soil samples collected from approximately 4.5 feet bgs from borings MW-5 and MW-9 contained detectable concentrations of TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX). Well MW-9, which is located in the area of the product dispensers contained liquid phase hydrocarbons at an initial thickness of 0.08 feet. A product recovery canister was subsequently installed to assist in the removal of LPH from beneath the site.

- In October 1994, EMCON conducted a supplementary site assessment to establish baseline subsurface conditions prior to the purchase of the site by Tosco Corporation (Tosco, now ConocoPhillips [CP]) from BP. Three soil borings (THP-1, TB-2 and THP-3, and also respectively referred to as TB-1, TB-2 and TB-3) were advanced on-site using cone penetrometer testing (CPT) equipment. Refusal was encountered in TB-2 and TPH-3 at 10 feet and 4.5 feet bgs, respectively. Soil samples collected during this investigation contained detectable concentrations of TPHd, TPHg, TOG and benzene. Hydropunch groundwater samples collected during this investigation contained detectable concentrations of TPHg. TOG, 1,2-dichloroethane (1,2-DCA,), and 1,2-dichlorethene (1,2-DCE) (EMCON, 1994). EMCON personnel returned to the site on December 5, 1994 to inspect the fuel dispensers for the presence of spill containment boxes, and for indications of leakage (EMCON, 1994). Grab soil samples collected from beneath the fuel dispensers (TD-1, TD-2, TD-3 and TD-4) also contained detectable concentrations of TPHg and TPHd.

- In 1999, SECOR observed the removal of one 550-gallon, fiberglass, waste oil UST, along with a clarifier and two hoists (Hoist No. 1 and Hoist No. 2) from the former service bays as part of site remodeling activities on April 28, 1999 (SECOR, 1999). The waste oil UST and Hoist No. 2, were removed from two separate excavations, and the clarifier and Hoist No. 1 were removed from one excavation. One soil sample collected from the waste oil UST excavation contained detectable concentrations of TPHd, TPHg, benzene, and total petroleum hydrocarbons as motor oil (TPHo). A grab groundwater sample collected from 7.5 feet bgs from the waste oil UST

excavation contained detectable concentrations of TPHd, TPHo, benzene, and methyl tertiary butyl ether (MtBE). Soil samples collected from beneath the former clarifier (4 feet bgs), former Hoist No. 1 (8 feet bgs), and the former Hoist No. 2 (8 feet bgs) also contained detectable concentrations of TPHg, TPHd, TPHo, benzene, and lead. MtBE was not detected in soil samples collected from the excavations.

- Based on the previous detections of petroleum hydrocarbons in soil in the clarifier and hoist areas, over-excavation was conducted on May 7, 1999 (SECOR, 1999). Soil samples collected from the clarifier excavation at 5 feet bgs, and the hoist excavations at 5 feet bgs contained detectable concentrations of TPHg, TPHd, TPHo, and lead. Over-excavation confirmation soil samples were not analyzed for the presence of BTEX and other metals. A composite sample collected from the pea gravel was also analyzed for the presence of petroleum hydrocarbons; based on the relatively minor levels of TPHd and TPHo and relatively low to non-detectable levels of BTEX, and non-detectable concentrations of MtBE, the excavated pea gravel was used as backfill for the waste oil UST excavation. Approximately 17.41 tons of soil were removed from the site as a result of the initial excavation and over-excavation activities.

- On March 28 and 30, 2001, Gettler-Ryan Incorporated (GRI) oversaw the removal and replacement of product lines, dispensers, and the station canopy (SECOR, 2001). During the removal of the product lines, petroleum hydrocarbon-stained soil and odors were observed within the excavated trench. The entire length of the former product line trench was subsequently over-excavated an additional 1.5 feet to 3.5 feet bgs prior to sampling, resulting in the removal of approximately 150 cubic yards of soil from beneath the site. The former trenches were backfilled with clean, imported backfill as it was discovered that the former trenches were not suitable for re-use due to insufficient grading. An additional 100 cubic yards of soil were excavated to accommodate the new product lines. A total of 13 confirmation soil samples were collected from product line, dispenser and trench excavations by SECOR from the initial excavation and following over-excavation of soil. TPHg and TPHd were detected in the 13 samples at concentrations up to 5,300 milligrams per kilogram (mg/kg) and 630 mg/kg in the initial excavation soil samples, respectively. The highest concentrations of petroleum hydrocarbons were detected in a 3.5-foot soil sample from a former product line location near well MW-9. MtBE was detected in 12 of the 13 samples up to 8.4 mg/kg. A total of 400 cubic yards of soil were removed from the site, and approximately 15,000 gallons of groundwater were removed from beneath the site during the dewatering of the UST excavation.

- In June 2005, URS supervised the installation of two off-site, down-gradient groundwater monitoring wells (MW-10 and MW-11) at the Powell Street Plaza property, located south of the site (URS, 2005). Soil samples from both of the borings at depths of 7 feet bgs (MW-10), and 18 and 23.5 feet bgs did not contain petroleum hydrocarbons or fuel oxygenates at or above laboratory method reporting limits (MRLs). With the exception of a concentration of MtBE in well MW-10 (1.5 µg/L), petroleum hydrocarbons and fuel oxygenates were not detected in groundwater from the wells. The direction of groundwater flow was toward the southwest at a calculated hydraulic gradient of 0.02 foot per foot (ft/ft). URS

concluded that the off-site, lateral extent of dissolved impacts had been delineated during this investigation. URS also recommended the submittal of a corrective action plan (CAP) that will include an outline of possible remedial alternatives, and a proposal for implementing a selected remedial strategy based on the evaluation of historical and current subsurface site conditions, and the past performance of remedial feasibility testing and interim remedial action at the site.

2.3 SENSITIVE RECEPTOR SURVEY

A sensitive receptor survey was initially performed by Alisto during site assessment activities in October 1992. The results of the survey indicated the presence of a surface water body within 1,000 feet of the site. Alisto further indicated that the aquifer beneath the site was not a potential source of drinking water (EMCON, 1994).

In August 2002, SECOR preformed a search of the Geotracker database and it indicated one well located approximately 2,640 feet from the site. The well status and use is unknown and SECOR did not confirm the well location (Attachment D, SECOR, 2002).

2.4 NEARBY POTENTIAL OFF-SITE SOURCES

Off-site sources identified during the September 1993 assessment performed by Alisto indicated the presence of several potential off-site sources in the vicinity of the site (Alisto, 1994). Pabco Products, a paint, roofing, and floor covering manufacturing facility, formerly occupied a portion of and the area northeast of the site, and stored oil in above-ground storage tanks (ASTs). The Auto Freight Depot was formerly located on the southeast corner of Shellmound and Powell Streets (approximately 450 feet east of the site). A Truck Repair Shop was formerly situated approximately 480 feet east-southeast of the site, and once stored diesel and gasoline in ASTs. The property formerly occupied by Pacific Intermountain Express Truck Terminal (440 feet southeast of the site) contained ASTs and petroleum USTs.

3.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

REGIONAL GEOLOGY

As described by Alisto (1993), the site is situated in the Coastal Range geomorphic province, characterized by northwesterly-trending mountains and valleys. San Francisco Bay occupies a Pliocene structural depression that has been flooded several times by Pleistocene glacial cycles. The San Francisco Bay Area is underlain by Late Pliocene-Early Pleistocene alluvial sediment. The upper 500 feet of this coarse, poorly-sorted sediment is derived mainly from the Sacramento-San Joaquin drainage system. The recent sediment load in this system has been greatly increased by hydraulic mining and farming. Bay mud, the youngest deposit in San Francisco Bay, is a soft, unconsolidated sediment generally consisting of 90 percent clay and silt-size detritus and is prevalent in the area (Alisto, 1993).

LOCAL GEOLOGY AND HYDROGEOLOGY

As described by URS Corporation (July, 2003), the site is on a reclaimed portion of the upper subaqueous silty clay zone of San Francisco Bay. Soil types encountered in the borings generally consisted of imported fill materials of sand, silt, clay and manmade debris to approximately 13 feet below grade underlain by silty clay to the total depth of each boring. The site is approximately 8 feet above mean sea level (amsl). The topography of the surrounding area slopes gently to the west, toward San Francisco Bay (URS Corporation, 2003). Groundwater flow direction in the vicinity of the site since 2003 has typically been to the southwest. Historic cross-sections are included as Attachment C.

3.1 MONITORING WELL NETWORK

Eleven groundwater monitoring wells (MW-1 through MW-11) have been installed across the water table in the uppermost water-bearing zone beneath the site and surrounding area (Figure 2). The wells are approximately 12 to 24 feet deep. Monitoring wells are generally screened from 3.5 to 17.5 feet bgs. Well construction details are shown in Table 2.

3.2 LATERAL HYDRAULIC GRADIENT

Groundwater monitoring was initiated in November 1992. Since that time, 50 quarterly groundwater monitoring events have occurred. A summary of historical groundwater elevation data is included on Table 3. Measured static groundwater levels have ranged from as shallow as 8.05 feet amsl (2.5 feet below TOC [MW-9; 3/23/06]) to as deep -3.49 feet amsl (11.74 feet below top of casing [TOC] [MW-3; 12/11/00]).

A compilation of historical groundwater flow directions and hydraulic gradients (from first quarter 2001 through first quarter 2007) indicates a generally southwesterly flow direction of groundwater beneath the site (50% of 25 events). Minor variations of flow direction to the south – southeast were also noted. An average hydraulic gradient of about 0.027 ft/f) was estimated. A table summarizing historical flow direction and gradient is included as Table 4, and a rose diagram illustrating this data is included as Figure 4.

During the first quarter 2007 groundwater monitoring event, depth to groundwater measurements in the eleven wells gauged ranged from 2.79 to 9.62 feet bgs. Groundwater elevations ranged from 2.98 feet amsl to 7.25 feet amsl. Based on data collected on March 1, 2007, groundwater flow direction beneath the site was toward the southwest at a hydraulic gradient of approximately 0.010 ft/ft. A groundwater elevation contour map from the First Quarter, 2007 sampling event is included in Attachment E.

4.0 ASSESSMENT OF IMPACTS

4.1 EXTENT OF PETROLEUM HYDROCARBONS AND FUEL OXYGENATES IN SOIL

Petroleum hydrocarbons have been detected in soil samples collected from in and around the area of the UST locations, the hoists, clarifier, and on-site soil borings MW-1 through MW-9. Petroleum hydrocarbon concentrations were reported below laboratory detection limits for soil samples collected from (describe areas). The lateral extent of petroleum hydrocarbon impact to soil appears to be adequately characterized.

Soil samples collected during the removal of the 550-gallon waste oil UST in 1989 contained detections of petroleum hydrocarbons above laboratory reporting limits (KEI 1989). The maximum concentrations of TPHd (370 parts per million [ppm]) and TOG (10,000 ppm) encountered during this investigation were in soil samples collected from beneath the waste oil UST at 9 feet bgs. The majority of the detected concentrations of petroleum hydrocarbons during this investigation were from seven to nine feet bgs within the waste oil UST excavation (Table 1a).

Nine soil samples were collected during preliminary site assessment and installation of monitoring wells conducted during 1992 and 1993. TPHg, benzene, toluene, ethylbenzene, and xylenes were reported at maximum concentrations of 4600 ppm, 76 ppm, 330 ppm, 430 ppm, and 420 ppm, respectively in the soil samples collected between 4 and 5.5 feet bgs from around the area of the waste oil UST, dispenser islands, and gasoline UST (Alisto 1993, 1994).

CPT sampling during additional site assessment work in 1994 revealed the presence of petroleum hydrocarbons in soil samples from 0.5 ft bgs to 5.5 ft bgs from each of the dispenser islands, the former waste oil UST, and in front of the station building (EMCON 1994). TPHg, TPHd, TPHo, benzene, toluene, ethylbenzene, and xylenes were reported at maximum concentrations of 1,600 ppm, 4,600 ppm, 1,800 ppm, 1.6 ppm, 6.6 ppm, 5.2 ppm, and 23 ppm, respectively in these soil samples (Table 1a).

Soil samples collected during the removal of one 550-gallon waste oil UST, two hoists, and a clarifier in 1999 contained detections of petroleum hydrocarbons above laboratory detection limits (SECOR 1999). Maximum concentrations of TPHg, TPHd, TPHo, benzene and lead were detected at respective concentrations of 1,200 ppm, 1,200 ppm, 7,000 ppm, 0.19 ppm, and 22,000 ppm. These detections were observed between the depths of 4 and 8 ft bgs in the excavation of the waste oil UST (Table 1b).

During excavation, removal, and replacement of product lines, dispensers, and the station canopy by Gettler-Ryan in March 2001, petroleum hydrocarbon staining and odors were observed in the soil excavations (SECOR 2001). Thirteen grab soil samples were collected by SECOR to assess the extent of petroleum hydrocarbons in the excavated soil. TPHg, TPHd, and MtBE were detected at maximum concentrations of 5,300 ppm, 630 ppm, and 8.4 ppm, respectively, with the highest concentrations of petroleum hydrocarbons being

detected in the soil sample from 3.5 ft bgs from a former product line location near MW-9 (Table 1c).

Based on our understanding of the site geology and available analytical data, the majority of the residual petroleum hydrocarbon impact to soil appears to be present within the fine grained soils comprising the upper vadose zone to a depth of 9 feet, approximately six inches above the capillary fringe (Appendix C).

4.1.1 Distribution of Vapor Phase Contaminants in Vadose Zone Soil

Target Environmental Services collected shallow soil gas samples from 19 sampling points (1-19) in April 1989 (Figure 3). Eight of the soil gas sampling locations (3-6, 10, and 19-21) were situated near the ARCO property boundary. Petroleum hydrocarbons were detected in all 19 samples. BTEX vapors were reported in 18 of the samples at maximum concentrations of 12,330 ppmv, 10,080 parts per million by volume (ppmv), 927 ppmv, and 2,713 ppmv, respectively (Table 1d).

Environmental Resolutions Inc. (ERI) performed a five-day soil vapor extraction test in April, 1999. Results of the vapor samples from well TP-1 and TP-2 indicated the presence of petroleum hydrocarbon vapors. BTEX, TPHg, and MtBE vapors were detected at maximum concentrations of 105 ppmv, 131 ppmv, 0.223 ppmv, 50.6 ppmv, 12,800 ppmv, and 4,820 ppmv, respectively (Table 1e).

4.2 EXTENT OF PETROLEUM HYDROCARBONS AND FUEL OXYGENATES IN GROUNDWATER

Separate phase hydrocarbons (SPH) have historically been observed in well MW-9, which is located in the area of the product dispensers. The initial thickness of SPH in MW-9 at the time of installation in September 1993 was 0.08 feet. A product recovery canister was subsequently installed to assist in the removal of SPH from beneath the site. Separate phase hydrocarbons were reported in MW-9 ranging in thickness from 0.01 feet to 0.14 feet until May 1997 and once again during June 2001 (0.13 feet). Separate phase hydrocarbons have not been reported in MW-9 since June 2001.

Dissolved petroleum hydrocarbons have consistently been reported in groundwater samples collected from the majority of the on-site wells, MW-1, MW-2, MW-4, MW-8 and MW-9 and in off-site well MW-5. Evaluation of recent and historical groundwater analytical data indicates that the highest concentrations of GRO, BTEX, MtBE, tert-amyl methyl ether (TAME), and tert-butyl alcohol (TBA) have been detected in wells located in the immediate vicinity (MW-1 and MW-9) and northwest of the USTs (MW-2). At the time of the most recent groundwater sampling event, first quarter 2007, maximum concentrations of GRO (80,000 µg/L), BTEX (9,300 µg/L, 5,500 µg/L, 4,100 µg/L, and 15,000 µg/L, respectively), and MtBE (8,300 µg/L) were detected in groundwater samples collected from well MW-2. Well MW-4 located down gradient of the USTs near the southwest corner of the site contained maximum concentrations of TBA (31,000 µg/L) during the first quarter 2007 (Table 3 and Attachment E).

Graphs depicting GRO, benzene, MtBE, and TBA concentration trends over time for wells MW-1 through MW-9 are presented in Attachment F. The hydrocarbon concentration trend graphs illustrate that GRO, benzene, and MtBE concentrations have decreased in MW-9 by more than 95% from historical maximum concentrations. Gasoline range organics and benzene concentrations have decreased to near or below laboratory MRLs in wells MW-3, MW-4, and MW-6. Additionally, MtBE concentrations have declined to near or below laboratory MRLs in wells MW-3, through MW-7. Tert-butyl alcohol concentrations have generally remained constant to fluctuating in the majority of the wells, with the exception of increasing concentrations in MW-4. Increasing TBA concentrations in MW-4 along with decreasing MtBE concentrations and generally decreasing petroleum hydrocarbon concentrations in other site wells suggests that attenuation of petroleum hydrocarbons is occurring in the subsurface.

With the exception of minor concentrations of MtBE in MW-10, petroleum hydrocarbon and fuel additive concentrations have consistently been reported below laboratory detection limits for samples collected from off-site wells MW-10 and MW-11.

5.0 FEASIBILITY TESTING

Below is a summary of feasibility testing performed at the site between 1995 and 2004.

5.1 BAIL DOWN TESTING – FEBRUARY 1995

In February 1995, Alisto performed baildown testing at the site. Using the Aqtesolv groundwater modeling program, the average hydraulic conductivity (K) and transmissivity (T) were estimated at 5.97E-05 centimeters per second (cm/sec), and 1.16E-06 square meters per second, respectively. The calculated K value is consistent with the expected K values for the soil type encountered beneath the site (1 x 10-1 to 10-6 cm/sec), which consisted predominantly of silty clay containing interbedded layers of sand (Alisto, 1994).

5.2 SVE TEST – APRIL 1999

In April 1999, Environmental Resolutions Inc. (ERI) performed a five-day soil vapor extraction (SVE) test at the site (ERI, 1999). Underground storage tank backfill wells (TP-1 and TP-2) were used for SVE, and wells MW-1, MW-2 and MW-4 were utilized as observation wells. Results of vapor samples from well TP-1 indicated a decrease in MtBE concentrations from an initial concentration of 4,820 µg/L to 300 ug/L during the test. Total petroleum hydrocarbons as gasoline concentrations also decreased from an initial concentration of 12,800 µg/L to 464 ug/L during the test. ERI estimated that approximately 21.5 pounds of TPHg and 16.7 pounds of MtBE were removed by SVE. Soil Vapor Extraction flow rates ranged from 88 to 98 standard cubic feet per minute (scfm) at an applied vacuum of 12 inches of mercury. No effective radius of influence was measured in native soil outside the UST backfill.

5.4 GROUNDWATER BATCH EXTRACTION – 2004

Between June and October 2004, in accordance with their July 11, 2003 *Interim Remedial Action and Off-Site Assessment Workplan* and the April 20, 2004 *Modifications to Interim Remedial Action and Offsite Assessment Work Plan*, URS implemented biweekly groundwater batch extraction at the site utilizing a vacuum truck (URS, 2005). Over this time period, groundwater was periodically extracted from wells MW-1, MW-2, MW-4, MW-8, and MW-9, which resulted in the removal of approximately 125 gallons of groundwater. Due to the limited groundwater recovery and the slow recharge of groundwater levels in the wells, URS discontinued groundwater batch extraction upon approval of Alameda County Health Care Services Agency (ACHCSA).

6.0 EVALUATION OF REMEDIAL ALTERNATIVES

The following remedial alternatives for the site are discussed below. The discussion incorporates information regarding previous remediation treatability testing, known extent of contaminates, previous remedial activities, and site geology and hydrogeology.

- No Action/Monitored Natural Attenuation
- Additional Excavation and Disposal
- Dual Phase Extraction
- Soil Vapor Extraction Combined with Ozone Sparging
- Groundwater Extraction and Treatment
- Oxygen Injection

6.1.1 No Action/Monitored Natural Attenuation

Under this alternative, no remedial action, other than monitoring of groundwater, is undertaken. Groundwater monitoring at the site has been ongoing for approximately 14 years. Given that the dissolved petroleum hydrocarbon concentrations beneath the site are higher than maximum contaminant levels (MCLs) following previous remedial action and groundwater monitoring activities, this alternative may not be viable. However, petroleum hydrocarbon concentrations have decreased with time at the site, and the presence of decreasing concentrations of MtBE along with increasing concentrations of TBA in MW-4 appear to suggest that aerobic degradation of petroleum hydrocarbons is occurring beneath the site. The no action alternative is implementable and cost effective, but may not be viable to meet current remedial objectives.

6.1.2 Excavation and Disposal

Excavation of petroleum hydrocarbon impacted soil in areas accessible during the 1999 and 2001 site renovation activities has already been implemented. Additional soil excavation activities as a remedial alternative would require a partial demolition of the facility, removal of all underground improvements, and closure of the service station and convenience store during work activities. Based on our understanding of the extent of impact, a relatively large quantity of unimpacted soil (overburden) would need to be removed in order to access impacted soil situated within the "smear zone" across the site, where the highest concentrations of petroleum hydrocarbons in soil appear to remain. Further excavation is not practical given the physical constraints of the site and the known extent of impact. Excavation and disposal is not viable, implementable, or cost effective.

6.1.3 Dual Phase Extraction

Dual phase extraction (DPE) involves concurrent extraction of groundwater and soil vapors from a common extraction well under vacuum conditions. A DPE system will address removal of the adsorbed phase hydrocarbons in the soil above and below the water table, as well as the hydrocarbons dissolved in groundwater.

A high-vacuum blower (liquid ring blower) is connected to a pipe (stinger) installed within a well that has openings only in the lower portion of the well. Once the soil vapor and groundwater are removed from the subsurface, they are partitioned aboveground by an air/water separator. The hydrocarbon-laden vapors and groundwater are then channeled to separate treatment systems. The soil vapors are typically treated with thermal or catalytic oxidizers, and groundwater is treated using granular activated carbon (GAC) vessels.

DPE feasibility/treatability testing has not been completed. DPE may be a viable remedial alternative, however costs associated with completing remediation in this manner would be relatively high.

6.1.4 Soil Vapor Extraction Combined with Ozone Sparging

SVE has proven to be an effective and economical alternative for remediation of petroleum hydrocarbon impacted soil. SVE involves applying a vacuum in the subsurface through vapor extraction wells to induce subsurface airflow. Contaminants volatilize from the soil matrix and are drawn towards the extraction wells, and routed to remediation equipment through subsurface piping. The extracted air stream is subsequently treated in abatement equipment and discharged to the atmosphere. In addition, the movement of air in the capillary fringe has a small secondary effect of reducing the concentrations of petroleum hydrocarbons in groundwater. The most common types of abatement devices used to treat extracted soil vapors are thermal oxidizers, catalytic oxidizers, internal combustion engines, and GAC units.

Ozone sparging (OS) can be an effective remedial strategy for the cleanup of petroleum hydrocarbons and fuel-oxygenates in soil and groundwater. OS will chemically destroy dissolved petroleum hydrocarbons and MtBE impacts within the water-bearing zone, and increase the DO concentration in the groundwater, further stimulating in-situ destruction of remaining petroleum hydrocarbons and MtBE by aerobic bacterial activity. OS is a process where ozone in air is introduced into the groundwater through specially designed sparge points to create “microbubbles”. Intermittent, low flow rates (2-6 scfm) are used. The introduction of ozone beneath the water table allows the microbubbles to rise through the water table, and enables the direct destruction (oxidization) of dissolved-phase petroleum hydrocarbons and related constituents in groundwater. Ozone not consumed in the direct reaction with hydrocarbons rapidly decomposes to oxygen. This has an added benefit of stimulating the in-situ aerobic biodegradation in the saturated zone by increasing subsurface oxygen concentrations.

Previous SVE test data at this site did not measure an effective radius of influence in the native soil at the site. A combined SVE/OS system may be a viable remedial alternative, however costs associated with completing remediation in this manner would be relatively high. These factors make this alternative implementable, but only moderately viable.

6.1.5 Groundwater Extraction and Treatment System

Remediation using a groundwater extraction and treatment system (GETS) is a well documented procedure. Submersible (electric or solar) or centrifugal pumps are placed in one or more groundwater monitoring or extraction wells. Extracted groundwater is routed to an on-site treatment system via subsurface piping, and discharged under permit to the sanitary sewer or the storm drain. Common and cost-effective technologies used in treating extracted groundwater are air stripping and vapor abatement, liquid-phase GAC adsorption, and advanced oxidation process (using UV radiation).

The results of the 2004 batch extraction activities indicate poor recovery rates indicating that groundwater extraction from the site is not implementable. Additionally, low petroleum hydrocarbon mass extraction rates are also typically observed during the treatment of groundwater. Therefore, groundwater extraction and treatment is not implementable, viable or a cost effective remedial alternative.

6.1.6 In Situ Oxygen Injection

Bioremediation is engineered degradation of petroleum hydrocarbons in soil and groundwater. Several methodologies are often used to accelerate the natural degradation of petroleum hydrocarbons in the subsurface. The most common limiting factor for natural biodegradation is oxygen. Methods of in-situ treatment include: injection of nutrients and cultured bacteria to stimulate biologic activity or injection of chemical oxidizers such as peroxide or ozone to directly destroy petroleum hydrocarbons and to stimulate biologic activity by increasing the dissolved oxygen (DO) concentrations. DO is not readily available for biodegradation in the subsurface. The lack of adequate DO limits the growth of microorganisms necessary for biodegradation. Most engineered systems are designed to aid the natural process by supplying supplemental oxygen to the subsurface.

In-situ bioremediation technologies, such as oxygen injection, have been documented to be effective in remediating petroleum hydrocarbon impacted groundwater. Additionally, the presence of decreasing concentrations of methyl MtBE along with increasing concentrations of TBA in MW-4 suggest that aerobic degradation of petroleum hydrocarbons is occurring beneath the site. Therefore, the use of oxygen injection is a viable and cost effective remedial alternative.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The objective of this Remedial Action Plan is to provide a guide for future assessment and remediation. The following conclusions result from the previous remedial activities summarized in the preceding sections:

- Historical operations utilizing gasoline USTs and associated piping and dispensers at 76 (Former BP) Service Station No. 11126 have resulted in the detections of petroleum hydrocarbons in soil and groundwater summarized above. The majority of hydrocarbons in soil have been found in the area of the underground storage tanks and dispensers. A summary of the soil and groundwater analytical data, soil boring details, and groundwater gradient information are presented in Tables 1 through 4.
- Monitoring and sampling performed since 1992 indicated the presence of GRO, benzene, and MtBE dissolved in groundwater beneath the site.
- Previous remedial alternatives at the site have proven ineffective due to lithology at the site.

Based on the above information SECOR recommends the following:

- The site should continue to be monitored and sampled on a quarterly basis to confirm groundwater concentrations and to evaluate plume stability.
- SECOR recommends that oxygen injection be implemented at the site.

8.0 LIMITATIONS

This report was prepared in accordance with the scope of work outlined in SECOR's contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Atlantic Richfield Company (a BP affiliated company) and ConocoPhillips, for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to SECOR. To the extent that this report is based on information provided to SECOR by third parties, SECOR may have made efforts to verify this third party information, but SECOR cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by SECOR.

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All information, conclusions, and recommendations provided by SECOR in this document regarding the site been prepared under the supervision of and reviewed by the Licensed professional whose signature appears below.

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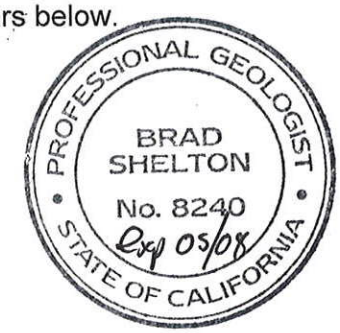
March 30, 2007



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TABLES

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

Table 1a
Historical Soil Analytical Data
USTs, Product Lines, and Dispensers
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Sample Name	Sample Depth (feet bgs)	Date Sampled	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	TPHd (ppm)	TPHg (ppm)	TPHo (ppm)	TOG (ppm)
WO-1	7	4/24/1998	ND	ND	ND	ND	27	9.6	ND	340
WO-2	9	4/24/1998	ND	**ND**	ND	ND	ND	ND	ND	64
NWO-1	9	4/24/1998	ND	ND	ND	ND	ND	ND	ND	ND
NWO-2	9	4/24/1998	ND	ND	ND	ND	ND	ND	ND	ND
NWO-3	9	4/24/1998	ND	ND	ND	ND	ND	ND	ND	ND
NWO-4	9	4/24/1998	ND	ND	ND	ND	370	ND	ND	10000
B-2 (MW-1)	4	10/20/1992	0.94	1.8	2.2	0.53	ND	32	ND	ND
B-3 (MW-2)	5	10/20/1992	0.019	0.13	0.3	0.06	ND	2.6	ND	ND
B-4 (MW-3)	7	10/20/1992	ND	ND	ND	ND	ND	ND	ND	ND
B-5 (MW-4)	5.5	10/20/1992	0.42	0.58	1.6	3.8	ND	280	ND	ND
MW-5	4.5	9/3/1993	0.087	0.0059	0.028	0.0067	ND	3	ND	ND
MW-6	4.5	9/3/1993	ND	ND	ND	ND	ND	ND	ND	ND
MW-7	4.5	9/3/1993	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	5	9/3/1993	ND	ND	ND	ND	ND	ND	ND	ND
MW-9	4.5	9/3/1993	76	330	420	430	ND	4600	ND	ND
TB1-S-5-5.5	5-5.5	10/19/1994	1.6	6.6	23	5.2	33	290	ND	ND
TB2-S-3-3.5	3-3.5	10/19/1994	ND	ND	ND	ND	ND	ND	ND	ND
TB3-S-3-3.5	3-3.5	10/19/1994	0.16	ND	0.029	0.068	ND	2.2	ND	ND
TB3-S-4-4.5	4-4.5	10/19/1994	0.5	ND	2.2	0.6	ND	260	1800	ND
TD-1-0.5	0.5	12/5/1994	ND	ND	0.5	ND	170	34	86	ND
TD-2-0.5	0.5	12/5/1994	ND	ND	19	2.5	4600	1600	ND	ND
TD-3-0.5	0.5	12/5/1994	ND	ND	0.14	ND	1500	35	ND	ND
TD-4-0.5	0.5	12/5/1994	ND	0.008	0.14	ND	980	2	ND	ND

Explanations:

TPHd = Total Petroleum Hydrocarbons from Diesel
TPHg = Total Petroleum Hydrocarbons from Gasoline
TPH0 = Total Petroleum Hydrocarbons from Oil and Grease
TOG =

ND = Not detected above the method reporting limit
ppm = Parts per million
bgs = Below ground surface

Table 1b
Historical Soil and Water Analytical Data
Waste Oil UST, Hoist, and Clarifier Excavations
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, California

Sample Name	Sample Depth (feet bgs)	Date Sampled	TPHg (mg/kg)	TEPH (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
Soil Analytical Results															
OILT-1	5	4/28/1999	18	370	7,000	0.19	0.40	0.11	0.12	ND	0.75	89	230	45	250
OILT-2	6	4/28/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	47	47	55	56
CLRF-1	4	4/28/1999	3.0	ND	ND	0.013	0.0068	ND	0.028	ND	2.4	44	22,000	34	2,700
CLRF-2	5	5/7/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	410	NA	NA
HST-1	8	4/28/1999	1.4	870	4,200	0.011	0.0051	ND	0.027	ND	ND	48	650	64	340
HST-1	5	5/7/1999	1,200	1,200	5,000	NA	NA	NA	NA	NA	NA	NA	11	NA	NA
HST-2	8	4/28/1999	1.4	200	900	0.012	ND	ND	0.012	ND	ND	45	110	42	170
HST-2	5	5/7/1999	880	880	2,300	NA	NA	NA	NA	NA	NA	NA	25	NA	NA

Sample Name	Sample Depth (feet bgs)	Date Sampled	TPHg (mg/kg)	TEPH (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
Water Analytical Results															
OILTWS-1	--	4/28/1999	ND	560	710	10	ND	ND	ND	2,400	ND	0.24	ND	0.30	0.34

Explanations:

TPHg = Total petroleum hydrocarbons as gasoline
TEPH = Total extractable petroleum hydrocarbons
TPHmo = Total petroleum hydrocarbons as motor oil
MTBE = Methyl tert-butyl ether
mg/kg = Milligrams per kilogram
ug/L = Micrograms per liter
ND = Not detected above the method reporting limit
NA = Not Analyzed

Table 1c
Historical Soil Analytical Data
Over Excavation, Product Lines, and Dispensers
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Sample Name	Sample Depth (feet bgs)	Date Sampled	TPH as Gasoline (mg/kg)	TPH as Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Total Lead (mg/kg)
Product Dispenser Samples														
PD-NW,3.5'	3.5'	03/28/01	130	43	0.65	<0.1	3.7	1.9	0.87	<0.25	<0.1	<0.1	<0.1	83
PD-NE,3.5'	3.5'	03/28/01	96	15	0.38	0.11	0.55	1.3	8.4	<0.25	<0.1	<0.1	1.5	46
PD-SW,3.5'	3.5'	03/28/01	260	6.6	1.1	0.4	3.8	12	1.1	<0.25	<0.1	<0.1	0.13	6.7
PD-SE,3.5'	3.5'	03/28/01	12	8.1	0.15	0.95	0.28	1.8	1	<0.25	<0.1	<0.1	<0.1	6.8
Product Line Samples														
PL-1,4'	4'	03/28/01	1,000	38	1.8	0.2	9.7	25	5.8	<0.25	<0.1	<0.1	0.28	NA
PL-2,3'	3'	03/28/01	180	24	0.14	0.17	2.8	13	0.28	<0.25	<0.1	<0.1	<0.1	NA
PL-3,3'	3'	03/28/01	4,700	630	3.6	57	68	340	3.8	<0.25	<0.1	<0.1	<0.1	NA
PL-4,3'	3'	03/28/01	5,300	570	4.9	96	48	280	7.4	<0.25	<0.1	<0.1	<0.1	NA
Overexcavation Samples														
OE-1	NA	03/30/01	8.6	3.3	0.059	0.065	0.047	0.065	<0.1	<0.25	<0.1	<0.1	<0.1	19
OE-2	NA	03/30/01	63	16	1.7	0.84	5	1.7	2.1	<0.25	<0.1	<0.1	0.15	870
OE-3	NA	03/30/01	22	3.4	0.42	1.5	0.6	3	2.1	<0.25	<0.1	<0.1	<0.1	54
OE-4	NA	03/30/01	14	9.9	0.09	0.1	0.18	0.18	0.15	<0.25	<0.1	<0.1	<0.1	87
OE-5	NA	03/30/01	2.9	1	0.071	0.047	0.061	0.043	0.95	<0.25	<0.1	<0.1	<0.1	27

Explanations:

TPH = Total petroleum hydrocarbons
MTBE = Methyl tertiary butyl ether
TBA= Tertiary butyl alcohol
DIPE= Di-isopropyl ether
ETBE= Ethyl tertiary butyl ether
TAME= Tertiary amyl methyl ether
NA = Not analyzed
mg/kg = Milligrams per kilogram

Table 1d
Historical Soil Analytical Data
TES Soil Gas Survey Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Sample Name	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	Total Volatiles (µg/L)
3	4/10/1989	469	440	21	27	4	52,410	182,700
4	4/10/1989	567	808	111	155	37	41,970	171,700
5	4/10/1989	1,688	2,899	626	656	371	86,160	408,600
6	4/10/1989	1,407	2,626	794	758	457	57,170	308,900
7	4/10/1989	9,740	2,459	2,032	365	91	224,200	925,100
8	4/10/1989	10,520	1,935	1,171	253	55	171,600	687,200
9	4/10/1989	626	414	32	36	7	60,630	216,300
10	4/10/1989	<1.0	<1.0	<1.0	<1.0	<1.0	61	249
11	4/10/1989	30	91	146	28	46	16,350	109,100
12	4/10/1989	34	33	9	20	7	298	1,653
13	4/10/1989	1,929	2,575	285	825	261	24,640	129,300
14	4/10/1989	12,330	10,080	927	2,713	792	164,400	932,000
15	4/10/1989	245	82	35	27	<1.0	9,625	41,230
16	4/10/1989	15	991	39	15	48	886	8,009
17	4/10/1989	290	265	102	72	83	5,434	28,260
18	4/10/1989	3	11	3	4	4	136	618
19	4/10/1989	2	3	7	3	3	43	338
20	4/10/1989	33	40	31	16	8	2,475	20,750
21	4/10/1989	29	9	3	3	2	52	365

Explanations:

MtBE = Methyl-tert-butyl-ether analyzed using EPA Methods 8020/8260

µg/L = Micrograms per liter

< = Below given laboratory detection limit

NA = Not Analyzed

Table 1e
Historical Soil Analytical Data
ERI Soil Vapor Extraction Test Results
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Extraction Well	Date Sampled	Time	Sample ID	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MtBE (µg/L)	TPPHg (µg/L)	TPPHg** lbs.	MTBE** lbs.
TP1	4/19/1999	12:20	A-Inf-PT1	105	131	ND	50.6	4,820	12,800		
		16:30	A-Inf-PT1	23.4	37.9	ND	31.2	2,990	3,000	13.7	6.9
TP1	4/20/1999	8:00	A-INF-TP1	10.70	6.54	ND	17.8	2,590	1,950		
		13:38	A-INF-TP1	ND	12.8	ND	10	1,460	1,030		
		13:50	A-INF-TP1	6.32	12.2	ND	9.20	682	971	2.9	3.5
TP2	4/20/1999	15:30	A-INF-TP2	ND	ND	ND	ND	422	515		
		18:00	A-INF-TP2	4.63	0.211	0.223	0.813	1,050	558	0.7	0.9
TP1	4/21/1999	8:00	A-INF-TP1	ND	9.51	ND	ND	1,420	704		
		17:00	A-INF-TP1	ND	ND	ND	5.94	778	547		
		17:30	A-INF-TP1	ND	9.60	ND	ND	903	627		
		18:00	A-INF-TP1	ND	9.58	ND	ND	725	703	2.3	3.4
TP1	4/22/1999	8:00	A-INF-TP1	3.97	11.9	ND	1.92	827	607		
		18:00	A-INF-TP1	ND	7.95	ND	ND	300	464	1.9	2.0

Explanations:

Time = Time is presented using a 24-hour clock

A-Inf-MW3 = Influent air sample collected while extracting from MW-3

TPPHg = Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 8015

MtBE = Methyl-tert-butyl-ether analyzed using EPA Methods 8260A

µg/L = Micrograms per liter

* = Methyl tertiary butyl ether analyzed using EPA method 8260A

** = Pounds removed calculated using ERI's standard operating procedure (SOP) 25 "Hydrocarbon Removal From a Vadose Well"

lbs. = Pounds

ND = Not detected at or above the stated laboratory detection limit

TABLE 2
Well Construction Details
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, California

Well I.D.	Construction Date	Elevation (TOC feet above MSL)	Boring Depth (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Casing Material	Slot Size (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Bentonite Seal Interval (feet bgs)	Cement Seal Interval (feet bgs)	Comments
Groundwater Monitoring Wells												
MW-1	10/20/92	7.78	12	8	2	PVC	0.01	4-12	3.5-12	3-3.5	1-3	
MW-2	10/20/92	8.58	12	8	2	PVC	0.01	5-12	4-12	3-4	1-3	
MW-3	10/20/92	8.25	12	8	2	PVC	0.01	5-12	4-12	3-4	1-3	
MW-4	10/20/92	8.12	12	8	2	PVC	0.01	5-12	4-12	3-4	0.5-3	
MW-5	09/02/93	7.69	13.5	8	2	PVC	0.01	3.5-13.5	3-13.5	2.5-3	0.5-2.5	
MW-6	09/03/93	8.52	14	8	2	PVC	0.01	4-14	3-14	2.5-3	0.5-2.5	
MW-7	09/03/93	7.61	14	8	2	PVC	0.01	4-14	3-14	2.5-3	0.5-2.5	
MW-8	09/03/93	8.8	14	8	2	PVC	0.01	4-14	3-14	2.5-3	0.5-2.5	
MW-9	09/03/93	8.08	14	10	4	PVC	0.01	4-14	3-14	2.5-3	0.5-2.5	
MW-10	04/15/05	12.53	20	8	2	PVC	0.01	7-17	6-17.5	5-6	0.5-5	Backfilled with bentonite at 17-20'
MW-11	04/15/05	14.55	24	8	2	PVC	0.01	7-17	6-17	5-6	0.5-5	Backfilled with bentonite at 17-24'

Notes:

TOC = top of casing

MSL = mean sea level

bgs = below ground surface

Elevations are in US survey feet, Vertical Datum is NGVD29

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-1	11/04/92	-	7.76	4.96	0.00	2.80	5,300	-	-	1,100	480	<0.50	1,500	-	-	-	-	-	-	-	-	-	-	e
	10/12/93	-		5.26	0.00	2.50	3,600	-	-	970	71	100	550	6,100	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		4.98	0.00	2.78	17,000	-	-	4,200	510	360	1,600	5,500	-	-	-	-	-	-	-	-	3.9	e
	05/11/94	-		4.55	0.00	3.21	5,500	-	-	2,900	37	56	64	700	-	-	-	-	-	-	-	-	8.0	e
	08/01/94	-	-	-	-	-	16,000	-	-	3,600	750	510	2,800	9,800	-	-	-	-	-	-	-	-	-	c
	08/01/94	-	7.76	5.51	0.00	2.25	15,000	-	-	3,600	740	510	2,800	9,700	-	-	-	-	-	-	-	-	2.9	e
	10/18/94	-	-	-	-	-	16,000	-	-	1,900	64	170	950	-	-	-	-	-	-	-	-	-	-	c
	10/18/94	-	7.76	5.11	0.00	2.65	16,000	-	-	1,800	61	160	890	16,000	-	-	-	-	-	-	-	-	2.9	e
	01/13/95	-	-	-	-	-	590	-	-	88	0.70	<0.50	55	-	-	-	-	-	-	-	-	-	-	c
	01/13/95	-	7.76	3.05	0.00	4.71	220	-	-	7.0	<0.50	1.0	23	-	-	-	-	-	-	-	-	-	6.6	-
	04/13/95	-		3.84	0.00	3.92	9,300	-	-	4,000	300	200	950	-	-	-	-	-	-	-	-	-	7.7	-
	07/11/95	-		3.60	0.00	4.16	15,000	-	-	2,200	84	<25	2,500	-	-	-	-	-	-	-	-	-	8.8	-
	11/02/95	-		4.58	0.00	3.18	19,000	-	-	920	<100	<100	430	52,000	-	-	-	-	-	-	-	-	7.3	-
	02/05/96	-		4.43	0.00	3.33	4,600	-	-	1,400	330	54	250	8,700	-	-	-	-	-	-	-	-	3.2	-
	04/24/96	-		4.00	0.00	3.76	2,000	-	-	510	33	61	230	4,500	-	-	-	-	-	-	-	-	7.5	-
	07/15/96	-		4.30	0.00	3.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/96	-	-	-	-	-	12,000	-	-	2,800	160	390	1,600	63,000	-	-	-	-	-	-	-	-	-	c
	07/16/96	-	7.76	-	-	-	12,000	-	-	2,800	170	390	1,600	64,000	-	-	-	-	-	-	-	-	7.9	-
	07/30/96	-		4.64	0.00	3.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/12/96	-		-	-	-	11,000	-	-	2,500	160	<10	1,700	440,000	-	-	-	-	-	-	-	-	7.0	-
	11/04/96	-		5.98	0.00	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	53,000	-	-	1,300	43	100	350	42,000/19,0000	-	-	-	-	-	-	-	-	6.6	
	05/17/97	-		4.65	0.00	3.11	52,000	-	-	2,000	55	300	1,200	140,000	-	-	-	-	-	-	-	-	5.7	-
	08/11/97	-		4.90	0.00	2.86	25,000	-	-	540	6.7	<5.0	57	360,000	-	-	-	-	-	-	-	-	7.9	-
	11/17/97	-		6.12	0.00	1.64	93,000	-	-	1,200	31	180	40	400,000	-	-	-	-	-	-	-	-	7.6	-
	01/29/98	-		4.90	0.00	2.86	4,800	-	-	320	24	52	20	<50	-	-	-	-	-	-	-	-	6.6	-
	06/22/98	-		4.62	0.00	3.14	63,000	-	-	180	<5.0	15	69	57,000	-	-	-	-	-	-	-	-	6.0	-
	12/30/98	-		5.41	0.00	2.35	22,000	-	-	2,500	24	120	400	15,000/13,000	-	-	-	-	-	-	-	-	-	
	03/09/99	-		3.40	0.00	4.36	16,000	-	-	2,000	84	290	510	13,000	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		4.60	0.00	3.16	9,600	-	-	4,500	21	160	260	24,000	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		4.21	0.00	3.55	3,800	-	-	1,600	32	150	240	7,100	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		4.10	0.00	3.66	3,400	-	-	<2,200	17	53	130	5,500	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		5.51	0.00	2.25	6,400	-	-	1,100	45	190	330	4,900	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		4.79	0.00	2.97	110,000	-	-	700	44	140	250	320,000	-	-	-	-	-	-	-	-	-	-
	09/06/00	-		5.19	0.00	2.57	5,600	-	-	1,000	13	57	90	19,000	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		5.73	0.00	2.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		5.82	0.00	1.94	5,500	-	-	1,200	47	160	290	3,900	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/27/01	-		5.49	0.00	2.27	6,100	-	-	1,200	13	17	78	1,800	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		6.19	0.00	1.57	1,800	-	-	100	<12.5	<12.5	<37.5	1,100	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		5.27	0.00	2.49	4,000	-	-	540	12	20	65	1,100	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		5.68	0.00	2.08	3,700	-	-	490	8.4	12	27	1,000	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		5.54	0.00	2.22	1,900	-	-	260	<12.5	<12.5	<25	6,500	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		5.56	0.00	2.20	1,100	-	-	170	5.1	2.2	20	550	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		5.45	0.00	2.31	2,700	-	-	610	10	18	67	470	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		3.00	0.00	4.76	1,500	-	-	180	<5.0	<5.0	15	610	-	-	-	-	-	-	-	-	-	i

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-1	06/06/03	-	7.76	5.52	0.00	2.24	4,600	-	-	620	<25	<25	55	1,400	<1,000	<25	<25	<25	<5,000	-	-	-	-	-
	08/07/03	-		5.55	0.00	2.21	2,000	-	-	290	<5.0	<5.0	15	920	560	<5.0	<5.0	12	<1,000	<5.0	<5.0	-	-	-
	11/20/03	P		5.41	0.00	2.35	2,800	-	-	420	11	11	53	250	<200	<5.0	<5.0	<5.0	1,800	-	-	-	-	s(Ethanol)
	04/28/04	P		5.33	0.00	2.43	1,600	-	-	100	5.3	<5.0	8.8	200	950	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	08/26/04	P		4.03	0.00	3.73	1,700	-	-	220	7.2	15	35	180	320	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	q
	12/01/04	P		3.93	0.00	3.83	2,100	-	-	380	8.0	34	76	170	300	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	02/02/05	P		3.61	0.00	4.15	1,100	-	-	150	3.0	12	14	160	6,700	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	q(Ethanol)
	04/25/05	P	10.16	3.75	0.00	6.41	930	-	-	140	3.6	5.3	11	200	5,000	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	09/30/05	P		3.54	0.00	6.62	4,600	-	-	1,000	15	78	150	250	1,200	13	<5.0	<5.0	<500	<5.0	<5.0	-	-	m
	12/28/05	P		3.26	0.00	6.90	1,500	-	-	200	5.7	32	58	140	1,800	<10	<5.0	<5.0	<1,000	<5.0	-	-	-	-
	03/23/06	P		3.40	0.00	6.76	580	-	-	42	<5.0	10	20	40	2,800	<10	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	06/05/06	P		2.97	0.00	7.19	900	-	-	230	2.5	28	71	160	1,900	<5.0	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	09/19/06	P		3.67	0.00	6.49	1,600	-	-	240	3.4	11	23	180	1,000	<5.0	<2.5	<2.5	<1,300	<2.5	<2.5	-	-	p
	12/01/06	P		3.64	0.00	6.52	1,400	-	-	86	4.3	7.0	19	150	930	<5.0	<2.5	<2.5	<1,300	<2.5	<2.5	-	-	-
	03/01/07	**P**		**3.55**	**0.00**	**6.61**	**4,200**	**-**	**-**	**340**	**7.0**	**34**	**46**	**160**	**510**	**<4.0**	**<2.0**	**2.0**	**<1,000**	**<2.0**	**<2.0**	**-**	**-**	**-**
MW-2	11/04/92	-	-	-	-	-	12,000	-	-	3,200	980	<0.50	1,900	-	-	-	-	-	-	-	-	-	-	c
	11/04/92	-	8.56	5.88	0.00	2.68	12,000	-	-	3,900	1,300	<0.50	2,300	-	-	-	-	-	-	-	-	-	-	e
	10/12/93	-		6.29	0.00	2.27	4,500	-	-	3,400	180	230	940	440	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		5.56	0.00	3.00	2,000	-	-	430	270	28	390	130	-	-	-	-	-	-	-	-	4.0	c
	02/15/94	-	-	-	-	-	1,800	-	-	290	160	14	250	-	-	-	-	-	-	-	-	-	-	e
	05/11/94	-		-	-	-	15,000	-	-	5,600	1,500	470	2,000	740	-	-	-	-	-	-	-	-	-	c
	05/11/94	-	8.56	5.17	0.00	3.39	14,000	-	-	3,900	1,200	440	1,900	950	-	-	-	-	-	-	-	-	8.9	e
	08/01/94	-		5.43	0.00	3.13	8,200	-	-	3,000	420	230	680	1,700	-	-	-	-	-	-	-	-	2.6	e
	10/18/94	-		5.71	0.00	2.85	9,000	-	-	2,000	140	150	420	2,400	-	-	-	-	-	-	-	-	7.2	e
	01/13/95	-		4.67	0.00	3.89	7,900	-	-	2,200	42	<5.0	770	-	-	-	-	-	-	-	-	-	6.8	
	04/13/95	-	-	-	-	-	25,000	-	-	6,500	1,500	110	5,300	-	-	-	-	-	-	-	-	-	-	c
	04/13/95	-	8.56	4.37	0.00	4.19	33,000	-	-	8,000	2,500	1,100	6,600	-	-	-	-	-	-	-	-	-	7.5	
	07/11/95	-	-	-	-	-	28,000	-	-	6,800	1,000	900	4,900	-	-	-	-	-	-	-	-	-	-	c
	07/11/95	-	8.56	4.51	0.00	4.05	19,000	-	-	3,300	99	7.5	4,600	-	-	-	-	-	-	-	-	-	7.8	
	11/02/95	-	-	-	-	-	22,000	-	-	4,000	1,200	600	2,700	19,000	-	-	-	-	-	-	-	-	-	c
	11/02/95	-	8.56	5.55	0.00	3.01	20,000	-	-	3,800	1,200	570	2,700	15,000	-	-	-	-	-	-	-	-	7.3	
	02/05/96	-	-	-	-	-	910	-	-	290	180	19	140	93	-	-	-	-	-	-	-	-	-	c
	02/05/96	-	8.56	5.10	0.00	3.46	1,200	-	-	320	220	26	190	99	-	-	-	-	-	-	-	-	2.2	
	04/24/96	-		4.95	0.00	3.61	<500	-	-	70	22	<10	61	<50	-	-	-	-	-	-	-	-	7.0	c
	04/24/96	-	-	-	-	-	<500	-	-	100	30	<10	71	<100	-	-	-	-	-	-	-	-	-	-
	07/15/96	-	8.56	5.40	0.00	3.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/96	-		-	-	-	12,000	-	-	3,300	1,400	250	2,600	1,400	-	-	-	-	-	-	-	-	7.8	-
	07/30/96	-		5.44	0.00	3.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		7.06	0.00	1.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-	-	-	-	-	9,200	-	-	1,300	170	<25	2,200	1,100	-	-	-	-	-	-	-	-	-	c
	11/05/96	-	8.56	-	-	-	7,200	-	-	1,400	230	38	2,100	1,100	-	-	-	-	-	-	-	-	7.4	-
	05/17/97	-		5.77	0.00	2.79	570	-	-	42	<5.0	5.0	60	210	-	-	-	-	-	-	-	-	6.9	-
	08/11/97	-		5.71	0.00	2.85	6,300	-	-	1,800	130	86	400	2,400	-	-	-	-	-	-	-	-	8.5	-
	11/17/97	-		6.91	0.00	1.65	2,400	-	-	220	30	33	260	130	-	-	-	-	-	-	-	-	7.9	-
	01/29/98	-		4.61	0.00	3.95	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	6.2	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
	06/22/98	-		4.80	0.00	3.76	4,200	-	-	640	150	120	650	560	-	-	-	-	-	-	-	-	5.4	-
MW-2	12/30/98	-	8.56	5.21	0.00	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		5.30	0.00	3.26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		4.75	0.00	3.81	3,800	-	-	760	19	210	960	910	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		4.51	0.00	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		4.21	0.00	4.35	2,500	-	-	780	17	44	270	2,800	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		4.66	0.00	3.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/06/00	-		4.71	0.00	3.85	3,700	-	-	1,200	5.5	12	170	12,000	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		4.74	0.00	3.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		4.79	0.00	3.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/27/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	09/19/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	12/28/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	03/12/02	-		4.25	0.00	4.31	26,000	-	-	1,200	4.4	61	170	37,000	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		4.94	0.00	3.62	18,000	-	-	580	<50	<50	<100	85,000	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		5.23	0.00	3.33	26,000	-	-	440	<50	<50	<50	45,000	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		4.94	0.00	3.62	69,000	-	-	1,200	<500	<500	<500	98,000	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		4.14	0.00	4.42	78,000	-	-	1,100	<500	<500	<500	81,000	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		4.66	0.00	3.90	120,000	-	-	1,100	<1,000	<1,000	<1,000	72,000	<40,000	<1,000	<1,000	1,300	<200,000	-	-	-	-	
	08/07/03	-		4.90	0.00	3.66	71,000	-	-	590	<500	<500	<500	83,000	45,000	<500	<500	1,300	<100,000	<500	<500	-	-	SHEEN
	11/20/03	P		4.59	0.00	3.97	22,000	-	-	720	<100	<100	<100	18,000	48,000	<100	<100	200	<20,000	-	-	-	-	-
	04/28/04	P		4.37	0.00	4.19	<25,000	-	-	690	<250	<250	<250	31,000	59,000	<250	<250	<250	<50,000	<250	<250	-	-	-
	08/26/04	P		4.59	0.00	3.97	140,000	-	-	8,200	18,000	4,200	19,000	11,000	<10,000	<250	<250	320	<50,000	<250	<250	-	-	q
	12/01/04	P		4.79	0.00	3.77	98,000	-	-	8,400	13,000	4,600	21,000	10,000	<4,000	<100	<100	230	<20,000	<100	<100	-	-	
	02/02/05	P		4.27	0.00	4.29	92,000	-	-	6,600	9,900	4,400	18,000	10,000	4,000	<100	<100	260	<20,000	<100	<100	-	-	SHEEN, q(Ethanol)
	04/25/05	P	11.39	4.00	0.00	7.39	80,000	-	-	6,700	4,900	4,400	17,000	8,200	3,700	<50	<50	220	<10,000	<50	<50	-	-	-
	09/30/05	P		4.86	0.00	6.53	98,000	-	-	7,700	7,400	4,700	20,000	16,000	4,700	<50	<50	270	<5,000	<50	<50	-	-	m
	12/28/05	P		4.28	0.00	7.11	210,000	-	-	15,000	21,000	7,300	31,000	22,000	6,300	<200	<100	410	<20,000	<100	-	-	-	-
	03/23/06	P		3.60	0.00	7.79	79,000	-	-	9,100	12,000	4,300	17,000	13,000	5,800	<200	<100	290	<20,000	<100	<100	-	-	-
	06/05/06	P		4.28	0.00	7.11	79,000	-	-	9,700	8,700	4,900	20,000	8,000	3,300	<100	<50	280	<10,000	<50	<50	-	-	SHEEN
	09/19/06	P		4.61	0.00	6.78	68,000	-	-	12,000	9,300	4,100	14,000	16,000	4,800	<100	<50	370	<25,000	<50	<50	-	-	-
	12/01/06	P		4.55	0.00	6.84	61,000	-	-	15,000	6,900	4,400	17,000	10,000	3,900	<100	<50	270	<25,000	<50	<50	-	-	-
	03/01/07	**P**		**4.14**	**0.00**	**7.25**	**80,000**	**-**	**-**	**9,300**	**5,500**	**4,100**	**15,000**	**8,300**	**2,700**	**<100**	**<50**	**210**	**<25,000**	**<50**	**<50**	**-**	**-**	**-**
MW-3	11/04/92	-	8.25	6.38	0.00	1.87	200	690	<5,000	1.6	<0.50	<0.50	1.1	-	-	-	-	-	-	-	-	ND	-	e
	10/12/93	-		5.84	0.00	2.41	270	2,100	<5,000	5.0	0.70	<0.50	2.6	96	-	-	-	-	-	-	-	ND	-	c
	10/12/93	-	-	-	-	-	150	-	-	5.6	0.60	<0.50	1.6	-	-	-	-	-	-	-	-	-	-	e
	02/15/94	-	8.25	6.60	0.00	1.65	140	2.3	90	5.7	<0.50	<0.50	<0.50	30	-	-	-	-	-	-	-	ND	3.9	e
	05/11/94	-		5.86	0.00	2.39	190	2,500	<5,000	2.7	1.9	<0.50	1.9	51	-	-	-	-	-	-	-	ND	9.2	e
	08/01/94	-		6.13	0.00	2.12	120	1,300	<5,000	1.3	<0.50	0.50	1.1	18	-	-	-	-	-	-	-	ND	2.9	e
	10/18/94	-		6.39	0.00	1.86	100	2,200	<5,000	2.3	<0.50	<0.50	<0.50	21	-	-	-	-	-	-	-	ND	3.6	e
	01/13/95	-		5.47	0.00	2.78	<50	970	-	0.80	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	ND	7.7	-
	04/13/95	-		5.17	0.00	3.08	530	<500	2,100	8.7	1.9	<0.50	3.9	-	-	-	-	-	-	-	-	ND	8.4	-
	07/11/95	-		5.37	0.00	2.88	78	2,100	1,900	0.57	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	ND	8.3	-
	11/02/95	-		6.29	0.00	1.96	250	2,000	1,400	0.73	<0.50	<0.50	1.8	270	-	-	-	-	-	-	-	ND	8.3	-
	02/05/96	-		5.80	0.00	2.45	<50	1,600	9,000	<0.50	<1.0	<1.0	2.7	11	-	-	-	-	-	-	-	ND	3.5	-
	04/24/96	-		5.69	0.00	2.56	<50	2,800	6,000	<5.0	<10	<10	<10	150	-	-	-	-	-	-	-	ND	8.6	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-3	07/15/96	-	8.25	6.18	0.00	2.07	<250	3,700	1,000	<2.5	<5.0	<5.0	<5.0	<50	-	-	-	-	-	-	-	ND	7.7	-
	07/30/96	-		6.04	0.00	2.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		7.84	0.00	0.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	90	890	2,000	<0.50	<1.0	<1.0	<1.0	30	-	-	-	-	-	-	-	ND	6.8	-
	05/17/97	-		6.49	0.00	1.76	<50	2,100	700	<0.50	<1.0	<1.0	<1.0	52	-	-	-	-	-	-	-	ND	6.3	-
	08/11/97	-		6.15	0.00	2.10	490	1,900	<5,000	<2.5	<5.0	<5.0	<5.0	170	-	-	-	-	-	-	-	ND	7.4	-
	11/17/97	-		7.15	0.00	1.10	120	2,500	<5,000	<0.50	<1.0	<1.0	<1.0	46	-	-	-	-	-	-	-	ND	7.0	-
	01/29/98	-		5.10	0.00	3.15	270	1,700	2,000	0.53	<1.0	<1.0	<1.0	330	-	-	-	-	-	-	-	ND	6.4	-
	06/22/98	-		5.50	0.00	2.75	200	2,200	<5.0	<0.50	<1.0	<1.0	<1.0	130	-	-	-	-	-	-	-	ND	5.5	-
	12/30/98	-		6.68	0.00	1.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		5.53	0.00	2.72	60	840	7,600	<1.0	<1.0	<1.0	<1.0	19	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		6.60	0.00	1.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		6.17	0.00	2.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		6.00	0.00	2.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		4.77	0.00	3.48	690	<58	13,000	4.2	3.1	0.81	2.7	2,900	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		5.28	0.00	2.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		5.58	0.00	2.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		11.74	0.00	-3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	d
	03/29/01	-		5.04	0.00	3.21	650	<50	6,500	<2.5	<2.5	<2.5	<7.5	680	-	-	-	-	-	-	-	-	-	-
	06/27/01	-		5.62	0.00	2.63	460	690	<5,000	<2.5	<2.5	<2.5	<7.5	560	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		5.80	0.00	2.45	<500	520	<5,000	<5.0	<5.0	<5.0	<15	460	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		4.85	0.00	3.40	180	550	<5,000	<0.50	<0.50	<0.50	<1.0	180	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		4.39	0.00	3.86	410	1,300	<5,000	<2.5	<2.5	<2.5	<5.0	440	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		5.38	0.00	2.87	<250	2,600	<5,000	<2.5	<2.5	<2.5	<5.0	400	-	-	-	-	-	-	-	-	-	
	09/06/02	-		5.68	0.00	2.57	<200	-	-	<2.0	<2.0	<2.0	<2.0	650	-	-	-	-	-	-	-	-	-	
	12/13/02	-		5.37	0.00	2.88	<50	980	7,000	<0.50	<0.50	<0.50	<0.50	60	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		4.80	0.00	3.45	<1,000	380	6,700	<10	<10	<10	<!0	120	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		5.13	0.00	3.12	<500	620	7.9	<5.0	<5.0	<5.0	<5.0	180	<200	<5.0	<5.0	16	<1,000	-	-	-	-	
	08/07/03	-		5.43	0.00	2.82	<500	820	5.4	5.7	<5.0	<5.0	<5.0	290	<200	<5.0	<5.0	20	<1,000	<5.0	<5.0	-	-	j
	11/20/03	P		4.72	0.00	3.53	<50	1,200	-	<0.50	<0.50	<0.50	<0.50	17	<20	<0.50	<0.50	1.4	<100	-	-	-	-	j
	04/28/04	P		4.87	0.00	3.38	<100	240	-	<1.0	<1.0	<1.0	<1.0	87	<40	<1.0	<1.0	3.9	<200	<1.0	<1.0	-	-	j
	08/26/04	P		5.42	0.00	2.83	56	250	-	<0.50	<0.50	<0.50	<0.50	34	260	<0.50	<0.50	2.0	<100	<0.50	<0.50	-	-	j, q
	12/01/04	P		5.69	0.00	2.56	<100	690	-	<1.0	<1.0	<1.0	<1.0	7.4	610	<1.0	<1.0	<1.0	<200	<1.0	<1.0	-	-	-
	02/02/05	P		4.72	0.00	3.53	<100	730	-	<1.0	<1.0	<1.0	<1.0	20	<40	<1.0	<1.0	1.1	<200	<1.0	<1.0	-	-	q(Ethanol)
	04/25/05	P	10.73	4.75	0.00	5.98	<250	520	-	<2.5	<2.5	<2.5	<2.5	220	160	<2.5	<2.5	10	<500	<2.5	<2.5	-	-	q(Ethanol)
	09/30/05	P		5.30	0.00	5.43	<50	300	-	<0.50	<0.50	<0.50	<1.0	8.2	270	<0.50	<0.50	0.68	<50	<0.50	<0.50	-	-	l
	12/28/05	P		4.41	0.00	6.32	<50	100	<2.0	<0.50	<0.50	<0.50	<1.0	0.66	<5.0	<1.0	<0.50	<0.50	<100	<0.50	-	-	-	-
	03/23/06	P		4.43	0.00	6.30	<50	260	<2.0	<0.50	<0.50	<0.50	<1.0	13	130	<1.0	<0.50	0.63	<100	<0.50	<0.50	-	-	-
	06/05/06	P		4.95	0.00	5.78	61	340	<2.0	0.69	1.4	0.85	3.6	29	510	<1.0	<0.50	1.6	<100	<0.50	<0.50	-	-	-
	09/19/06	P		5.19	0.00	5.54	<50	330	<2.0	<0.50	<0.50	<0.50	<1.0	4.1	420	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	-
	12/01/06	P		5.37	0.00	5.36	<50	130	<2.0	<0.50	<0.50	<0.50	<1.0	2.0	250	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	-
	03/01/07	**P**		**4.62**	**0.00**	**6.11**	**<50**	**120**	**<2.0**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**3.8**	**77**	**<1.0**	**<0.50**	**<0.50**	**<250**	**<0.50**	**<0.50**	**-**	**-**	**-**

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-4	11/04/92	-	8.12	6.66	0.00	1.46	340	-	-	4.5	<0.50	4.3	<0.50	-	-	-	-	-	-	-	-	-	-	e
	10/12/93	-		6.87	0.00	1.25	160	-	-	5.8	1.4	0.80	2.7	260	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		6.61	0.00	1.51	110	-	-	4.4	0.70	<0.50	2.5	120	-	-	-	-	-	-	-	-	4.3	e
	05/11/94	-		5.89	0.00	2.23	120	-	-	0.50	0.80	<0.50	<0.50	140	-	-	-	-	-	-	-	-	9.3	e
	08/01/94	-		6.87	0.00	1.25	140	-	-	0.70	2.0	5.2	15	140	-	-	-	-	-	-	-	-	3.3	e
	10/18/94	-		6.62	0.00	1.50	140	-	-	3.5	<0.50	0.50	<0.50	200	-	-	-	-	-	-	-	-	3.0	e
	01/13/95	-		7.27	0.00	0.85	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	7.9	-
	04/13/95	-		6.51	0.00	1.61	73	-	-	1.2	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	9.9	-
	07/11/95	-		6.21	0.00	1.91	82	-	-	0.57	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	7.2	-
	11/02/95	-		6.78	0.00	1.34	71	-	-	1.4	0.96	0.99	2.8	140	-	-	-	-	-	-	-	-	8.6	-
	02/05/96	-		6.41	0.00	1.71	<50	-	-	<5.0	<10	<10	<10	200	-	-	-	-	-	-	-	-	4.4	-
	04/24/96	-		6.18	0.00	1.94	<250	-	-	<2.5	<5.0	<5.0	<5.0	510	-	-	-	-	-	-	-	-	8.3	-
	07/15/96	-		6.63	0.00	1.49	<50	-	-	5.7	<1.0	<1.0	<1.0	550	-	-	-	-	-	-	-	-	7.4	-
	07/30/96	-		6.34	0.00	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		8.27	0.00	-0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	460	-	-	<2.5	11	<5.0	<5.0	620/610	-	-	-	-	-	-	-	-	7.3	-
	05/17/97	-		7.00	0.00	1.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/11/97	-		6.81	0.00	1.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/17/97	-		9.19	0.00	-1.07	840	-	-	<0.50	<1.0	<1.0	<1.0	880	-	-	-	-	-	-	-	-	7.3	-
	01/29/98	-		7.94	0.00	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/22/98	-		7.49	0.00	0.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/98	-		8.21	0.00	-0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		7.70	0.00	0.42	1,200	-	-	<1.0	<1.0	<1.0	<1.0	2,000	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		8.81	0.00	-0.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		8.32	0.00	-0.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		8.21	0.00	-0.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		6.74	0.00	1.38	910	-	-	<0.50	<0.50	0.54	1.7	3,800	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		5.13	0.00	2.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		8.20	0.00	-0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		8.31	0.00	-0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/27/01	-		7.57	0.00	0.55	2,800	-	-	19	<2.5	<2.5	<7.5	4,200	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		7.87	0.00	0.25	2,500	-	-	<5.0	<5.0	<5.0	<15	3,300	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		7.80	0.00	0.32	4,400	-	-	<5.0	<5.0	<5.0	<10	5,300	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		4.53	0.00	3.59	6,400	-	-	72	<5.0	<5.0	<10	8,400	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		6.21	0.00	1.91	1,800	-	-	7.5	<5.0	5.0	13	6,900	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		7.78	0.00	0.34	<2000	-	-	<20	<20	<20	<20	9,600	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		7.87	0.00	0.25	5,600	-	-	<50	<50	<50	<50	8,600	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		4.84	0.00	3.28	<10,000	-	-	<100	<100	<100	<100	8,000	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		7.98	0.00	0.14	13,000	-	-	<50	<50	<50	<50	6,800	2,500	<50	<50	190	<10,000	-	-	-	-	-
	08/07/03	-		7.24	0.00	0.88	6,200	-	-	<50	<50	<50	<50	6,600	2,400	<50	<50	160	<10,000	<50	<50	-	-	-
	11/20/03	P		7.02	0.00	1.10	10,000	-	-	<100	<100	<100	<100	11,000	<4,000	<100	<100	310	<20,000	-	-	-	-	-
	04/28/04	P		4.81	0.00	3.31	<25,000	-	-	<250	<250	<250	<250	3,600	15,000	<250	<250	<250	<50,000	<250	<250	-	-	-
	08/26/04	P		5.65	0.00	2.47	<2,500	-	-	<25	<25	<25	<25	1,800	16,000	<25	<25	60	-	<25	<25	-	-	k
	12/01/04	P		7.34	0.00	0.78	1,100	-	-	<10	<10	<10	<10	450	19,000	<10	<10	10	<2,000	<10	<10	-	-	-
	02/02/05	P		7.61	0.00	0.51	1,000	-	-	<5.0	<5.0	<5.0	<5.0	410	19,000	<5.0	<5.0	10	<1,000	<5.0	<5.0	-	-	q(Ethanol)

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-4	04/25/05	P	10.58	7.25	0.00	3.33	720	-	-	8.0	5.3	<5.0	16	170	18,000	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	09/30/05	P		7.72	0.00	2.86	<2,500	-	-	63	58	46	140	110	30,000	<25	<25	<25	<2,500	<25	<25	-	-	m
	12/28/05	P		7.48	0.00	3.10	<2,500	-	-	<25	<25	<25	<50	34	27,000	<50	<25	<25	<5,000	<25	-	-	-	-
	03/23/06	P		4.42	0.00	6.16	<2,500	-	-	<25	<25	<25	<50	120	34,000	<50	<25	<25	<5,000	<25	<25	-	-	-
	06/05/06	P		4.97	0.00	5.61	<5,000	-	-	<50	<50	<50	<100	<50	34,000	<100	<50	<50	<10,000	<50	<50	-	-	p
	09/19/06	P		5.45	0.00	5.13	<5,000	-	-	<50	<50	<50	<100	110	27,000	<100	<50	<50	<25,000	<50	<50	-	-	p
	12/01/06	P		5.14	0.00	5.44	<5,000	-	-	<50	<50	<50	<100	68	31,000	<100	<50	<50	<25,000	<50	<50	-	-	p
	03/01/07	**P**		**7.60**	**0.00**	**2.98**	**<5,000**	**-**	**-**	**<50**	**<50**	**<50**	**<100**	**<50**	**31,000**	**<100**	**<50**	**<50**	**<25,000**	**<50**	**<50**	**-**	**-**	**-**
MW-5	10/12/93	-	7.69	6.01	0.00	1.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	e
	10/13/93	-		-	-	-	2,300	-	-	160	10	<0.50	26	-	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		5.74	0.00	1.95	5,100	-	-	710	16	33	35	150	-	-	-	-	-	-	-	-	4.0	e
	05/11/94	-		5.28	0.00	2.41	11,000	-	-	1,100	39	110	57	160	-	-	-	-	-	-	-	-	8.0	e
	08/01/94	-		5.84	0.00	1.85	9,000	-	-	730	35	61	41	200	-	-	-	-	-	-	-	-	2.6	e
	10/18/94	-		6.01	0.00	1.68	7,800	-	-	330	30	27	27	560	-	-	-	-	-	-	-	-	5.6	e
	01/13/95	-		4.74	0.00	2.95	<500	-	-	290	6.0	<5.0	18	-	-	-	-	-	-	-	-	-	6.8	-
	04/13/95	-		5.50	0.00	2.19	9,100	-	-	400	15	52	27	-	-	-	-	-	-	-	-	-	7.4	-
	07/11/95	-		5.75	0.00	1.94	7,300	-	-	390	13	28	23	-	-	-	-	-	-	-	-	-	7.2	-
	11/03/95	-		6.65	0.00	1.04	7,200	-	-	270	15	38	23	200	-	-	-	-	-	-	-	-	8.4	-
	02/05/96	-		4.83	0.00	2.86	4,600	-	-	370	15	53	28	<50	-	-	-	-	-	-	-	-	1.9	-
	04/24/96	-		6.09	0.00	1.60	3,000	-	-	180	<10	32	14	<100	-	-	-	-	-	-	-	-	8.1	-
	07/15/96	-		6.57	0.00	1.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/16/96	-		-	-	-	<50	-	-	190	<10	31	16	<100	-	-	-	-	-	-	-	-	8.3	-
	07/30/96	-		5.61	0.00	2.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/12/96	-		-	-	-	2,000	-	-	150	12	25	18	<50	-	-	-	-	-	-	-	-	7.6	-
	11/04/96	-		8.25	0.00	-0.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	5,200	-	-	42	5.5	13	<5.0	1,700	-	-	-	-	-	-	-	-	7.4	-
	05/17/97	-		6.95	0.00	0.74	80	-	-	0.56	<1.0	<1.0	<1.0	46	-	-	-	-	-	-	-	-	6.7	-
	08/11/97	-		6.72	0.00	0.97	2,700	-	-	20	12	6.7	9.7	1,900	-	-	-	-	-	-	-	-	8.5	-
	11/17/97	-		9.49	0.00	-1.80	8,400	-	-	25	12	8.7	5.4	13,000	-	-	-	-	-	-	-	-	7.9	-
	01/29/98	-		7.88	0.00	-0.19	110,000	-	-	2,500	110	180	590	180,000	-	-	-	-	-	-	-	-	6.8	-
	06/22/98	-		7.40	0.00	0.29	4,400	-	-	47	10	29	20	47	-	-	-	-	-	-	-	-	6.6	-
	12/30/98	-		6.13	0.00	1.56	6,000	-	-	18	9.1	22	16	63/44	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		4.79	0.00	2.90	4,600	-	-	8.8	5.5	12	11	24	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		5.95	0.00	1.74	3,400	-	-	1,500	8.9	54	87	7,500	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		5.43	0.00	2.26	2,600	-	-	510	14	140	650	580	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		5.30	0.00	2.39	3,500	-	-	900	18	57	140	4,800	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	05/26/00	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	09/06/00	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	09/15/00	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	12/11/00	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/27/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	09/19/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	12/28/01	-		4.65	0.00	3.04	4,600	-	-	20	25	16	57	72	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		5.35	0.00	2.34	5,100	-	-	45	14	22	39	32	-	-	-	-	-	-	-	-	-	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-5	06/13/02	-	7.69	5.34	0.00	2.35	2,900	-	-	32	<12.5	<12.5	<25	620	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		5.46	0.00	2.23	3,400	-	-	23	5.5	<5.0	11	230	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		5.47	0.00	2.22	2,500	-	-	12	9.3	4.6	8.8	110	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		5.29	0.00	2.40	2,800	-	-	11	5.4	9.7	12	6.4	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		5.30	0.00	2.39	3,200	-	-	9.1	<5.0	7.6	9.3	<5.0	<200	<5.0	<5.0	<5.0	<1,000	-	-	-	-	-
	08/07/03	-		5.33	0.00	2.36	2,200	-	-	7.3	<5.0	<5.0	9.1	18	<200	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	11/20/03	P		5.39	0.00	2.30	3,500	-	-	12	5.4	6.4	12	12	<100	<2.5	<2.5	<2.5	<500	-	-	-	-	-
	04/28/04	P		5.53	0.00	2.16	5,700	-	-	7.8	4.2	5.2	11	11	<100	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	08/26/04	P		5.42	0.00	2.27	2,400	-	-	23	4.0	3.6	11	74	<100	<2.5	<2.5	<2.5	-	<2.5	<2.5	-	-	-
	12/01/04	P		5.38	0.00	2.31	4,300	-	-	11	<5.0	5.5	15	<5.0	<200	<5.0	<5.0	<5.0	<1,000	<5.0	<5.0	-	-	-
	02/02/05	P		5.48	0.00	2.21	4,000	-	-	8.4	4.8	4.0	10	11	<100	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	q(Ethanol)
	04/25/05	P	10.18	5.52	0.00	4.66	5,200	-	-	7.6	4.0	4.3	9.9	12	<100	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	09/30/05	P		5.04	0.00	5.14	4,100	-	-	5.3	2.7	2.1	8.0	16	27	<1.0	<1.0	<1.0	<100	<1.0	<1.0	-	-	m
	12/28/05	P		4.85	0.00	5.33	7,700	-	-	7.7	3.3	2.9	7.1	3.8	<20	14	<2.0	<2.0	<400	<2.0	-	-	-	-
	03/23/06	P		5.07	0.00	5.11	5,700	-	-	11	3.3	2.4	8.1	8.6	37	<4.0	<2.0	<2.0	<400	<2.0	<2.0	-	-	-
	06/05/06	P		5.39	0.00	4.79	5,900	-	-	36	5.0	3.7	15	11	90	<5.0	<2.5	<2.5	<500	<2.5	<2.5	-	-	SHEEN
	09/19/06	P		4.75	0.00	5.43	4,600	-	-	6.7	<2.5	<2.5	<5.0	12	53	<5.0	<2.5	<2.5	<1300	<2.5	<2.5	-	-	-
	12/01/06	P		5.29	0.00	4.89	4,400	-	-	5.0	<2.5	<2.5	5.8	14	<25	<5.0	<2.5	2.7	<1,300	<2.5	<2.5	-	-	-
	03/01/07	**P**		**5.01**	**0.00**	**5.17**	**6,400**	**-**	**-**	**6.2**	**3.0**	**<2.5**	**8.7**	**<2.5**	**<25**	**<5.0**	**<2.5**	**<2.5**	**<1,300**	**<2.5**	**<2.5**	**-**	**-**	**-**
MW-6	10/12/93	-	8.52	6.59	0.00	1.93	63	-	-	<0.50	<0.50	<0.50	<0.50	44	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		6.31	0.00	2.21	68	-	-	<0.50	<0.50	<0.50	<0.50	38	-	-	-	-	-	-	-	-	3.1	e
	05/11/94	-		6.15	0.00	2.37	68	-	-	<0.50	<0.50	<0.50	<0.50	48	-	-	-	-	-	-	-	-	8.7	e
	08/01/94	-		6.46	0.00	2.06	91	-	-	<0.50	<0.50	<0.50	0.60	60	-	-	-	-	-	-	-	-	2.4	e
	10/18/94	-		6.72	0.00	1.80	<50	-	-	<0.50	<0.50	<0.50	<0.50	85	-	-	-	-	-	-	-	-	6.0	e
	01/13/95	-		5.95	0.00	2.57	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	7.0	-
	04/13/95	-		5.44	0.00	3.08	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	8.5	-
	07/11/95	-		5.68	0.00	2.84	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	8.4	-
	11/02/95	-		6.57	0.00	1.95	<50	-	-	<0.50	<0.50	<0.50	<1.0	35	-	-	-	-	-	-	-	-	8.3	-
	02/05/96	-		6.27	0.00	2.25	<50	-	-	<5.0	<10	<10	<10	<100	-	-	-	-	-	-	-	-	2.2	-
	04/24/96	-		5.95	0.00	2.57	<250	-	-	<2.5	<5.0	<5.0	<5.0	62	-	-	-	-	-	-	-	-	8.0	-
	07/15/96	-		6.39	0.00	2.13	<250	-	-	<2.5	<5.0	<5.0	<5.0	<50	-	-	-	-	-	-	-	-	8.0	-
	07/30/96	-		6.44	0.00	2.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		8.05	0.00	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.3	-
	05/17/97	-		6.75	0.00	1.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/11/97	-		6.48	0.00	2.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/17/97	-		9.27	0.00	-0.75	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.7	-
	01/29/98	-		7.98	0.00	0.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/22/98	-		7.68	0.00	0.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/98	-		6.98	0.00	1.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		5.90	0.00	2.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		6.93	0.00	1.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		6.45	0.00	2.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		6.33	0.00	2.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		5.15	0.00	3.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		5.72	0.00	2.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-6	09/15/00	-	8.52	6.02	0.00	2.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		6.20	0.00	2.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		5.34	0.00	3.18	750	-	-	<2.5	2.9	<2.5	12	820	-	-	-	-	-	-	-	-	-	-
	06/27/01	-		6.00	0.00	2.52	760	-	-	33	<2.5	<2.5	<7.5	970	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		6.22	0.00	2.30	<500	-	-	<5.0	<5.0	<5.0	<15	880	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		4.71	0.00	3.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	g
	03/12/02	-		4.96	0.00	3.56	<500	-	-	<5.0	<5.0	<5.0	<10	240	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		5.78	0.00	2.74	<250	-	-	<2.5	<2.5	<2.5	<5.0	410	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		6.14	0.00	2.38	130	-	-	<0.50	<0.50	<0.50	<0.50	240	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		6.05	0.00	2.47	140	-	-	<1.0	<1.0	<1.0	<1.0	200	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		5.40	0.00	3.12	<500	-	-	<5.0	<5.0	<5.0	<5.0	150	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		5.54	0.00	2.98	1,100	-	-	<5.0	<5.0	<5.0	<5.0	140	<200	<5.0	<5.0	21	<1,000	-	-	-	-	-
	08/07/03	-		5.94	0.00	2.58	<500	-	-	<5.0	<5.0	<5.0	<5.0	160	<200	<5.0	<5.0	20	<1,000	<5.0	<5.0	-	-	-
	11/20/03	P		5.85	0.00	2.67	95	-	-	<0.50	<0.50	<0.50	<0.50	74	<20	<0.50	<0.50	12	<100	-	-	-	-	-
	04/28/04	P		5.45	0.00	3.07	<250	-	-	<2.5	<2.5	<2.5	<2.5	120	<100	<2.5	<2.5	12	<500	<2.5	<2.5	-	-	-
	08/26/04	P		6.06	0.00	2.46	<250	-	-	<2.5	<2.5	<2.5	<2.5	110	<100	<2.5	<2.5	12	<500	<2.5	<2.5	-	-	q
	12/01/04	P		6.19	0.00	2.33	<250	-	-	<2.5	<2.5	<2.5	<2.5	86	<100	<2.5	<2.5	11	<500	<2.5	<2.5	-	-	-
	02/02/05	P		5.20	0.00	3.32	55	-	-	<0.50	<0.50	<0.50	<0.50	41	32	<0.50	<0.50	6.2	<100	<0.50	<0.50	-	-	q(Ethanol)
	04/25/05	P	11.01	5.22	0.00	5.79	64	-	-	<0.50	<0.50	<0.50	<0.50	50	45	<0.50	<0.50	6.0	<100	<0.50	<0.50	-	-	q(Ethanol)
	09/30/05	P		5.93	0.00	5.08	200	-	-	<2.0	<2.0	<2.0	<4	51	280	<2.0	<2.0	4.4	<200	<2.0	<2.0	-	-	m,n
	12/28/05	P		5.49	0.00	5.52	<50	-	-	<0.50	<0.50	<0.50	<1.0	16	160	<1.0	<0.50	2.0	<100	<0.50	-	-	-	-
	03/23/06	P		4.59	0.00	6.42	<50	-	-	<0.50	<0.50	<0.50	<1.0	5.6	35	<1.0	<0.50	0.91	<100	<0.50	<0.50	-	-	-
	06/05/06	P		5.38	0.00	5.63	<50	-	-	<0.50	0.54	<0.50	<1.0	14	110	<1.0	<0.50	1.5	<100	<0.50	<0.50	-	-	-
	09/19/06	P		5.93	0.00	5.08	<50	-	-	<0.50	<0.50	<0.50	<1.0	8.8	190	<1.0	<0.50	1.4	<250	<0.50	<0.50	-	-	-
	12/01/06	P		6.28	0.00	4.73	<50	-	-	<0.50	<0.50	<0.50	<1.0	5.9	98	<1.0	<0.50	0.94	<250	<0.50	<0.50	-	-	-
	03/01/07	**P**		**5.72**	**0.00**	**5.29**	**<50**	**-**	**-**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**6.0**	**96**	**<1.0**	**<0.50**	**0.68**	**<250**	**<0.50**	**<0.50**	**-**	**-**	**-**
MW-7	10/12/93	-	7.61	6.14	0.00	1.47	<50	-	-	<0.50	<0.50	<0.50	0.70	<5.0	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		5.88	0.00	1.73	78	-	-	<0.50	<0.50	<0.50	0.60	<5.0	-	-	-	-	-	-	-	-	4.0	e
	05/11/94	-		5.76	0.00	1.85	70	-	-	<0.50	<0.50	<0.50	0.90	12	-	-	-	-	-	-	-	-	9.1	e
	08/01/94	-		5.97	0.00	1.64	77	-	-	<0.50	<0.50	<0.50	0.50	180	-	-	-	-	-	-	-	-	2.5	e
	10/18/94	-		6.24	0.00	1.37	<50	-	-	<0.50	<0.50	<0.50	<0.50	52	-	-	-	-	-	-	-	-	6.3	e
	01/13/95	-		5.39	0.00	2.22	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	8.2	-
	04/13/95	-		5.17	0.00	2.44	63	-	-	<0.50	<0.50	<0.50	1.4	-	-	-	-	-	-	-	-	-	8.4	-
	07/11/95	-		5.25	0.00	2.36	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	7.9	-
	11/02/95	-		6.19	0.00	1.42	<50	-	-	<0.50	<0.50	<0.50	<1.0	55	-	-	-	-	-	-	-	-	8.0	-
	02/05/96	-		5.69	0.00	1.92	<50	-	-	<0.50	<1.0	<1.0	<1.0	40	-	-	-	-	-	-	-	-	1.9	-
	04/24/96	-		5.59	0.00	2.02	<250	-	-	<2.5	<5.0	<5.0	<5.0	53	-	-	-	-	-	-	-	-	8.2	-
	07/15/96	-		6.07	0.00	1.54	<250	-	-	<2.5	<5.0	<5.0	<5.0	<50	-	-	-	-	-	-	-	-	7.8	-
	07/30/96	-		6.04	0.00	1.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		7.76	0.00	-0.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.8	-
	05/17/97	-		6.42	0.00	1.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/11/97	-		6.06	0.00	1.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/17/97	-		9.07	0.00	-1.46	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.1	-
	01/29/98	-		7.44	0.00	0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/22/98	-		7.39	0.00	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-7	12/30/98	-	7.61	5.51	0.00	2.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		5.57	0.00	2.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		6.69	0.00	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		6.23	0.00	1.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		6.08	0.00	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		4.88	0.00	2.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		5.42	0.00	2.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		5.79	0.00	1.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		5.93	0.00	1.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		5.24	0.00	2.37	600	-	-	<2.5	<2.5	<2.5	<7.5	640	-	-	-	-	-	-	-	-	-	-
	06/27/01	-		5.69	0.00	1.92	590	-	-	<2.5	<2.5	<2.5	<7.5	740	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		5.89	0.00	1.72	560	-	-	<5.0	<5.0	<5.0	<15	1,200	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		4.53	0.00	3.08	910	-	-	23	<2.5	<2.5	<5.0	860	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		4.71	0.00	2.90	620	-	-	<2.5	<2.5	<2.5	<5.0	680	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		5.21	0.00	2.40	860	-	-	<2.5	<2.5	<2.5	<5.0	1,500	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		5.77	0.00	1.84	350	-	-	<2.5	<2.5	<2.5	<2.5	690	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		5.65	0.00	1.96	1,300	-	-	<10	<10	<10	<10	1,800	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		5.07	0.00	2.54	1,700	-	-	<10	<10	<10	<10	1,600	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		5.27	0.00	2.34	1,000	-	-	<5.0	<5.0	<5.0	<5.0	510	<200	<5.0	<5.0	41	<1,000	-	-	-	-	-
	08/07/03	-		5.52	0.00	2.09	510	-	-	<5.0	<5.0	<5.0	<5.0	520	<200	<5.0	<5.0	43	<1,000	<5.0	<5.0	-	-	-
	11/20/03	P		5.79	0.00	1.82	330	-	-	<2.5	<2.5	<2.5	<2.5	270	1,300	<2.5	<2.5	8.9	<500	-	-	-	-	-
	04/28/04	P		5.20	0.00	2.41	<250	-	-	<2.5	<2.5	<2.5	<2.5	71	880	<2.5	<2.5	3.5	<500	<2.5	<2.5	-	-	-
	08/26/04	P		5.65	0.00	1.96	450	-	-	<2.5	<2.5	<2.5	2.8	150	4,800	<2.5	<2.5	7.8	<500	<0.50	<0.50	-	-	-
	12/01/04	P		5.79	0.00	1.82	100	-	-	<1.0	<1.0	<1.0	<1.0	25	1,400	<1.0	<1.0	1.1	<200	<1.0	<1.0	-	-	-
	02/02/05	P		4.92	0.00	2.69	81	-	-	<0.50	<0.50	<0.50	<0.50	31	830	<0.50	<0.50	1.8	<100	<0.50	<0.50	-	-	q(Ethanol)
	04/25/05	P	10.11	4.88	0.00	5.23	67	-	-	<0.50	<0.50	<0.50	0.64	41	520	<0.50	<0.50	2.1	<100	<0.50	<0.50	-	-	q(Ethanol)
	09/30/05	P		5.62	0.00	4.49	58	-	-	<0.50	<0.50	<0.50	<1.0	18	450	<0.50	<0.50	1.5	<50	<0.50	<0.50	-	-	n
	12/28/05	P		4.93	0.00	5.18	<500	-	-	<5.0	<5.0	<5.0	<10	7.4	1,600	<10	<5.0	<5.0	<1,000	<5.0	-	-	-	-
	03/23/06	P		4.63	0.00	5.48	71	-	-	<0.50	<0.50	<0.50	<1.0	25	340	<1.0	<0.50	1.7	<100	<0.50	<0.50	-	-	-
	06/05/06	P		5.08	0.00	5.03	57	-	-	<0.50	<0.50	<0.50	<1.0	14	200	<1.0	<0.50	1.2	<100	<0.50	<0.50	-	-	-
	09/19/06	P		5.60	0.00	4.51	<50	-	-	<0.50	<0.50	<0.50	<1.0	14	280	<1.0	<0.50	1.6	<250	<0.50	<0.50	-	-	-
	12/01/06	P		6.00	0.00	4.11	<250	-	-	<2.5	<2.5	<2.5	<5.0	6.7	1,400	<5.0	<2.5	<2.5	<1,300	<2.5	<2.5	-	-	-
	03/01/07	**P**		**5.69**	**0.00**	**4.42**	**<250**	**-**	**-**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**4.0**	**1,000**	**<5.0**	**<2.5**	**<2.5**	**<1,300**	**<2.5**	**<2.5**	**-**	**-**	**-**
MW-8	10/12/93	-	8.60	5.86	0.00	2.74	<50	-	-	<0.50	<0.50	<0.50	<0.50	11	-	-	-	-	-	-	-	-	-	e
	02/15/94	-		5.50	0.00	3.10	380	-	-	<0.50	<0.50	<0.50	<0.50	<5.0	-	-	-	-	-	-	-	-	3.3	e
	05/11/94	-		5.09	0.00	3.51	330	-	-	<0.50	1.2	<0.50	1.9	<5.0	-	-	-	-	-	-	-	-	8.5	e
	08/01/94	-		5.20	0.00	3.40	260	-	-	<0.50	1.2	2.9	5.8	<5.0	-	-	-	-	-	-	-	-	2.3	e
	10/18/94	-		5.70	0.00	2.90	82	-	-	<0.50	<0.50	<0.50	<0.50	<5.0	-	-	-	-	-	-	-	-	6.4	e
	01/13/95	-		4.96	0.00	3.64	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	6.9	-
	04/13/95	-		5.40	0.00	3.20	270	-	-	<0.50	<0.50	<0.50	4.4	-	-	-	-	-	-	-	-	-	8.4	-
	07/11/95	-		6.01	0.00	2.59	320	-	-	<0.50	<0.50	<0.50	3.5	-	-	-	-	-	-	-	-	-	8.0	-
	11/02/95	-		6.81	0.00	1.79	100	-	-	<0.50	<0.50	<0.50	<1.0	<5.0	-	-	-	-	-	-	-	-	8.7	-
	02/05/96	-		6.12	0.00	2.48	<50	-	-	<5.0	<10	<10	<10	<100	-	-	-	-	-	-	-	-	1.5	-
	04/24/96	-		6.23	0.00	2.37	<50	-	-	<5.0	<10	<10	<10	<100	-	-	-	-	-	-	-	-	8.7	-
	07/15/96	-		6.70	0.00	1.90	<250	-	-	<2.5	<5.0	<5.0	<5.0	<50	-	-	-	-	-	-	-	-	8.4	-
	07/30/96	-		6.64	0.00	1.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-8	11/04/96	-	8.60	8.36	0.00	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/05/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.2	-
	05/17/97	-		7.03	0.00	1.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/11/97	-		6.05	0.00	2.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/17/97	-		9.14	0.00	-0.54	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	7.7	-
	01/29/98	-		7.90	0.00	0.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/22/98	-		7.72	0.00	0.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/98	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	03/09/99	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/23/99	-		4.70	0.00	3.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		4.22	0.00	4.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		4.12	0.00	4.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		4.71	0.00	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		4.98	0.00	3.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		4.62	0.00	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		4.77	0.00	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/27/01	-		5.11	0.00	3.49	570	-	-	<2.5	<2.5	2.6	<7.5	3.4	-	-	-	-	-	-	-	-	-	-
	09/19/01	-		5.00	0.00	3.60	<500	-	-	<5.0	<5.0	<5.0	<15	<5.0	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		4.15	0.00	4.45	440	-	-	<0.50	<0.50	0.98	<1.0	6.3	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		4.35	0.00	4.25	330	-	-	<2.5	<2.5	<2.5	<5.0	8.7	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		5.09	0.00	3.51	<500	-	-	<5.0	<5.0	<5.0	<10	16	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		5.18	0.00	3.42	98	-	-	<0.50	<0.50	<0.50	<0.50	76	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		4.84	0.00	3.76	120	-	-	<0.50	<0.50	0.94	0.52	140	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		4.45	0.00	4.15	<2,500	-	-	<25	<25	<25	<25	800	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		5.00	0.00	3.60	<50,000	-	-	<500	<500	<500	<500	17,000	<20,000	<500	<500	<500	<100,000	-	-	-	-	-
	08/07/03	-		4.84	0.00	3.76	<2,500	-	-	<25	<25	<25	<25	2,400	<1,000	<25	<25	44	<5,000	<25	<25	-	-	-
	11/20/03	P		4.48	0.00	4.12	<2,500	-	-	<25	<25	<25	<25	1,400	4,100	<25	<25	<25	<5,000	-	-	-	-	-
	04/28/04	P		9.66	0.00	-1.06	730	-	-	<2.5	<2.5	<2.5	<2.5	170	42,000	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	r
	08/26/04	P		4.73	0.00	3.87	<2,500	-	-	<25	<25	<25	<25	170	47,000	<25	<25	<25	-	<25	<25	-	-	-
	12/01/04	P		4.80	0.00	3.80	<250	-	-	<2.5	<2.5	<2.5	<2.5	36	9,700	<2.5	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	02/02/05	P		4.50	0.00	4.10	810	-	-	<0.50	<0.50	<0.50	<0.50	41	<20	<0.50	0.72	0.64	<100	<0.50	<0.50	-	-	q(Ethanol)
	04/25/05	P	11.08	4.99	0.00	6.09	1,400	-	-	<12	<12	<12	<12	32	45,000	<12	<12	<12	<2,500	<12	<12	-	-	-
	09/30/05	P		4.89	0.00	6.19	840	-	-	<5.0	<5.0	<5.0	<10	17	8,500	<5.0	<5.0	<5.0	<500	<5.0	<5.0	-	-	m
	12/28/05	P		4.81	0.00	6.27	<250	-	-	<2.5	<2.5	<2.5	<5.0	17	7,400	<5.0	<2.5	<2.5	<500	<2.5	-	-	-	-
	03/23/06	P		4.22	0.00	6.86	660	-	-	<2.5	<2.5	<2.5	<5.0	21	11,000	<5.0	<2.5	<2.5	<500	<2.5	<2.5	-	-	-
	06/05/06	P		4.63	0.00	6.45	<2,500	-	-	<25	<25	<25	<50	30	34,000	<50	<25	<25	<5,000	<25	<25	-	-	-
	09/19/06	P		4.82	0.00	6.26	<500	-	-	<5.0	<5.0	<5.0	<10	17	7,500	<10	<5.0	<5.0	<2,500	<5.0	<5.0	-	-	p
	12/01/06	P		4.83	0.00	6.25	350	-	-	<2.5	<2.5	<2.5	<5.0	16	1,900	<5.0	<2.5	<2.5	<1,300	<2.5	<2.5	-	-	-
	03/01/07	**P**		**4.43**	**0.00**	**6.65**	**<500**	**-**	**-**	**<5.0**	**<5.0**	**<5.0**	**<10**	**20**	**6,200**	**<10**	**<5.0**	**<5.0**	**<2,500**	**<5.0**	**<5.0**	**-**	**-**	**-**
MW-9	10/12/93	-	8.08	5.66	0.08	2.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/15/94	-		5.32	0.05	2.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/11/94	-		5.57	0.00	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08/01/94	-		6.25	0.00	1.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/18/94	-		5.59	0.13	2.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/13/95	-		4.42	0.14	3.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3
Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-9	04/13/95	-	8.08	4.06	0.11	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/11/95	-		4.21	0.08	3.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/02/95	-		5.22	0.05	2.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/05/96	-		4.76	0.01	3.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/24/96	-		4.62	0.09	3.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/15/96	-		5.11	0.04	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/30/96	-		5.15	0.00	2.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/96	-		6.75	0.01	1.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/17/97	-	-	-	-	-	97,000	-	-	16,000	8,200	2,300	17,000	39,000	-	-	-	-	-	-	-	-	-	c
	05/17/97	-	8.08	5.42	0.00	2.66	97,000	-	-	16,000	7,700	2,300	18,000	40,000	-	-	-	-	-	-	-	-	7.0	
	08/11/97	-	-	-	-	-	100,000	-	-	14,000	360	3,200	5,800	27,000	-	-	-	-	-	-	-	-	-	c
	08/11/97	-	8.08	5.37	0.00	2.71	71,000	-	-	12,000	340	2,100	4,300	26,000	-	-	-	-	-	-	-	-	9.1	
	11/17/97	-	-	-	-	-	100,000	-	-	24,000	5,300	3,500	19,000	35,000	-	-	-	-	-	-	-	-	-	c
	11/17/97	-	8.08	5.62	0.00	2.46	100,000	-	-	22,000	4,800	3,100	18,000	32,000	-	-	-	-	-	-	-	-	8.3	SHEEN
	01/29/98	-		4.07	0.00	4.01	250,000	-	-	20,000	21,000	3,100	18,000	110,000	-	-	-	-	-	-	-	-	6.6	SHEEN
	01/29/98	-	-	-	-	-	250,000	-	-	20,000	20,000	3,100	18,000	110,000	-	-	-	-	-	-	-	-	-	c
	06/22/98	-	8.08	4.28	0.00	3.80	280,000	-	-	21,000	18,000	3,800	21,000	110,000	-	-	-	-	-	-	-	-	5.8	-
	06/22/98	-	-	-	-	-	290,000	-	-	20,000	17,000	3,800	21,000	110,000	-	-	-	-	-	-	-	-	-	c
	12/30/98	-	8.08	4.95	0.00	3.13	150,000	-	-	10,000	3,800	2,000	9,600	86,000/89,000	-	-	-	-	-	-	-	-	-	-
	03/09/99	-		3.95	0.00	4.13	82,000	-	-	6,800	570	1,400	4,700	100,000	-	-	-	-	-	-	-	-	-	-
	06/23/99	-		5.12	0.00	2.96	41,000	-	-	11,000	820	2,300	5,200	92,000	-	-	-	-	-	-	-	-	-	-
	09/23/99	-		4.74	0.00	3.34	57,000	-	-	12,000	5,400	1,900	9,500	89,000	-	-	-	-	-	-	-	-	-	-
	12/28/99	-		4.58	0.00	3.50	46,000	-	-	15,000	490	2,500	3,500	100,000	-	-	-	-	-	-	-	-	-	-
	03/22/00	-		3.90	0.00	4.18	86,000	-	-	18,000	1,800	2,300	6,800	120,000	-	-	-	-	-	-	-	-	-	-
	05/26/00	-		4.15	0.00	3.93	82,000	-	-	17,000	680	1,800	3,800	100,000	-	-	-	-	-	-	-	-	-	-
	09/06/00	-		4.47	0.00	3.61	100,000	-	-	19,000	280	2,400	6,400	84,000	-	-	-	-	-	-	-	-	-	-
	09/15/00	-		4.34	0.00	3.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/00	-		4.41	0.00	3.67	110,000	-	-	14,000	770	2,600	6,700	120,000	-	-	-	-	-	-	-	-	-	-
	03/29/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	INA
	06/26/01	-		5.03	0.13	3.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	f
	09/19/01	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/01	-		3.73	0.00	4.35	110,000	-	-	15,000	1,500	2,300	5,500	61,000	-	-	-	-	-	-	-	-	-	-
	03/12/02	-		4.93	0.00	3.15	88,000	-	-	12,000	2,600	2,800	9,000	44,000	-	-	-	-	-	-	-	-	-	-
	06/13/02	-		4.13	0.00	3.95	59,000	-	-	9,900	160	2,600	5,600	36,000	-	-	-	-	-	-	-	-	-	-
	09/06/02	-		4.39	0.00	3.69	47,000	-	-	10,000	<100	2,100	4,600	31,000	-	-	-	-	-	-	-	-	-	-
	12/13/02	-		3.97	0.00	4.11	57,000	-	-	11,000	1,000	2,300	5,800	28,000	-	-	-	-	-	-	-	-	-	h
	02/19/03	-		3.25	0.00	4.83	76,000	-	-	10,000	2,100	3,000	8,900	11,000	-	-	-	-	-	-	-	-	-	i
	06/06/03	-		3.94	0.00	4.14	66,000	-	-	9,000	<500	2,500	4,400	17,000	<20,000	<500	<500	<500	<100,000	-	-	-	-	-
	08/07/03	-		3.92	0.00	4.16	53,000	-	-	7,600	<250	2,600	4,700	17,000	<10,000	<250	<250	350	<50,000	<250	<250	-	-	SHEEN
	11/20/03	P		4.89	0.00	3.19	40,000	-	-	6,800	<250	860	1,100	16,000	12,000	<250	<250	<250	<50,000	-	-	-	-	-
	04/28/04	P		3.19	0.00	4.89	47,000	-	-	5,600	690	2,300	6,800	8,500	<5,000	<120	<120	170	<25,000	<120	<120	-	-	SHEEN
	08/26/04	P		3.61	0.00	4.47	35,000	-	-	3,700	500	1,300	5,300	6,500	2,600	<50	<50	140	-	<50	<50	-	-	s(TBA)
	12/01/04	P		3.99	0.00	4.09	36,000	-	-	3,500	<250	1,200	4,300	8,300	<10,000	<250	<250	<250	<50,000	<250	<250	-	-	-
	02/02/05	P		3.71	0.00	4.37	21,000	-	-	1,800	130	670	2,000	3,600	5,600	<50	<50	88	<10,000	<50	<50	-	-	SHEEN, q(Ethanol)
	04/25/05	P	10.55	3.31	0.00	7.24	5,900	-	-	190	<5.0	120	77	540	1,400	<5.0	<5.0	14	<1,000	<5.0	<5.0	-	-	SHEEN, q(Ethanol)
	09/30/05	P		4.02	0.00	6.53	26,000	-	-	2,400	360	1,600	4,200	2,400	520	<20	<20	61	<2,000	<20	<20	-	-	m

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Historical Groundwater Monitoring & Analytical Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

Well No.	Date	P/NP	TOC (ft-MSL)	DTW (feet)	SPH (feet)	GWE (ft-MSL)	GRO (µg/L)	DRO (µg/L)	TOG (mg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	HVOC (µg/L)	D.O. (mg/L)	Comments
MW-9	12/28/05	P	10.55	2.99	0.00	7.56	14,000	-	-	1,400	22	350	450	2,200	1,800	<20	<10	49	<2,000	<10	-	-	-	-
	03/23/06	P		2.50	0.00	8.05	4,100	-	-	250	<10	130	110	330	2,400	<20	<10	<10	<2,000	<10	<10	-	-	-
	06/05/06	P		3.34	0.00	7.21	8,200	-	-	2,200	79	500	1,200	1,800	1,100	<25	<13	75	<2,500	<13	<13	-	-	p
	09/19/06	P		4.06	0.00	6.49	9,000	-	-	2,600	15	440	370	3,100	3,900	<25	<13	100	<6,300	<13	<13	-	-	p
	12/01/06	P		3.88	0.00	6.67	5,400	-	-	1,600	15	310	140	1,400	2,400	<25	<13	46	<6,300	<13	<13	-	-	p
	03/01/07	**P**		**2.79**	**0.00**	**7.76**	**6,300**	**-**	**-**	**250**	**<13**	**270**	**75**	**240**	**580**	**<25**	**<13**	**<13**	**<6,300**	**<13**	**<13**	**-**	**-**	**-**
MW-10	04/25/05	P	12.53	8.37	0.00	4.16	<50	-	-	<0.50	<0.50	<0.50	<0.50	1.5	<20	<0.50	<0.50	<0.50	<100	<0.50	<0.50	-	-	q(Ethanol)
	09/30/05	P		8.41	0.00	4.12	<50	-	-	<0.50	<0.50	<0.50	<1.0	1.5	<5.0	<0.50	<0.50	<0.50	<50	<0.50	<0.50	-	-	-
	12/28/05	P		7.78	0.00	4.75	<50	-	-	<0.50	<0.50	<0.50	<1.0	0.78	<5.0	<1.0	<0.50	<0.50	<100	<0.50	-	-	-	-
	03/23/06	P		7.77	0.00	4.76	<50	-	-	<0.50	<0.50	<0.50	<1.0	0.67	<5.0	<1.0	<0.50	<0.50	<100	<0.50	<0.50	-	-	-
	06/05/06	P		8.38	0.00	4.15	<50	-	-	<0.50	<0.50	<0.50	<1.0	1.8	<5.0	<1.0	<0.50	<0.50	<100	<0.50	<0.50	-	-	-
	09/19/06	P		7.99	0.00	4.54	<50	-	-	<0.50	<0.50	<0.50	<1.0	0.59	<5.0	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	-
	12/01/06	P		5.47	0.00	7.06	<50	-	-	<0.50	<0.50	<0.50	<1.0	0.89	<5.0	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	p
	03/01/07	**P**		**7.92**	**0.00**	**4.61**	**<50**	**-**	**-**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<5.0**	**<1.0**	**<0.50**	**<0.50**	**<250**	**<0.50**	**<0.50**	**-**	**-**	**-**
MW-11	04/25/05	P	14.55	9.29	0.00	5.26	<50	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<0.50	<0.50	-	-	-
	09/30/05	P		10.23	0.00	4.32	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<0.50	<0.50	<0.50	<50	<0.50	<0.50	-	-	o
	12/28/05	P		9.09	0.00	5.46	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<1.0	<0.50	<0.50	<100	<0.50	-	-	-	-
	03/23/06	P		8.75	0.00	5.80	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<1.0	<0.50	<0.50	<100	<0.50	<0.50	-	-	-
	06/05/06	P		9.47	0.00	5.08	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<1.0	<0.50	<0.50	<100	<0.50	<0.50	-	-	-
	09/19/06	P		10.16	0.00	4.39	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	-
	12/01/06	P		10.46	0.00	4.09	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<1.0	<0.50	<0.50	<250	<0.50	<0.50	-	-	-
	03/01/07	**P**		**9.62**	**0.00**	**4.93**	**<50**	**-**	**-**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**<5.0**	**<1.0**	**<0.50**	**<0.50**	**<250**	**<0.50**	**<0.50**	**-**	**-**	**-**
QC-2	11/05/92	-	-	-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	10/12/93	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	02/15/94	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	05/11/94	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	08/01/94	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	10/18/94	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<0.50	-	-	-	-	-	-	-	-	-	-	-
	01/13/95	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	-	-
	04/13/95	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	-	-
	07/11/95	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	-	-	-	-	-	-	-	-	-	-	-
	11/02/95	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<5.0	-	-	-	-	-	-	-	-	-	-
	02/05/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	-	-
	04/24/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	-	-
	07/16/96	-		-	-	-	<50	-	-	<0.50	<1.0	<1.0	<1.0	<10	-	-	-	-	-	-	-	-	-	-
QCTB	09/30/05	-	-	-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	12/28/05	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	03/23/06	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	06/05/06	-		-	-	-	50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	09/19/06	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	12/01/06	-		-	-	-	<50	-	-	<0.50	<0.50	<0.50	<1.0	<0.50	-	-	-	-	-	-	-	-	-	-
	03/01/07	**-**		**-**	**-**	**-**	**<50**	**-**	**-**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

TABLE 4
Groundwater Flow Direction and Hydraulic Gradient Data
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, California

Monitoring Date	Groundwater Flow Direction	Groundwater Gradient (foot per foot)
03/29/01	South	0.020
06/27/01	South	0.020
09/19/01	South	0.020
12/28/01	South	0.035
03/12/02	South-Southeast	0.018
06/13/02	Northwest to Southeast	0.007
09/06/02	South	0.010
12/13/02	Southeast	0.020
02/19/03	West-Southwest	0.025
06/06/03	East-Southwest	0.018 - 0.041
08/07/03	East-Southwest	0.019 - 0.038
11/20/03	Northwest to Southeast	0.014 - 0.04
02/05/04	Northwest to Southeast	0.020
04/28/04	West-Southwest	0.023 - 0.025
08/26/04	South-Southwest	0.036
12/01/04	Northwest to Southeast	0.020
02/02/05	South	0.020
04/25/05	Southwest	0.020
09/30/05	Southwest	0.081
12/28/05	Southwest	0.081
03/23/06	Southwest	0.040
06/05/06	Southwest	0.020
09/19/06	Southwest	0.013
12/01/06	Southwest	0.030
03/01/07	**Southwest**	**0.010**
		Average: 0.027

Notes:

Number of monitoring events: 25

- The groundwater was flowing in two directions (Northwest and Southeast) during the second quarter of 2002, the fourth quarter of 2003, and the first and fourth quarters of 2004.
- Data included in this table were found from current and historical documents.

FIGURES

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

REFERENCE: USGS 7.5 MINUTE QUADRANGLE, OAKLAND WAEST, CALIFORNIA

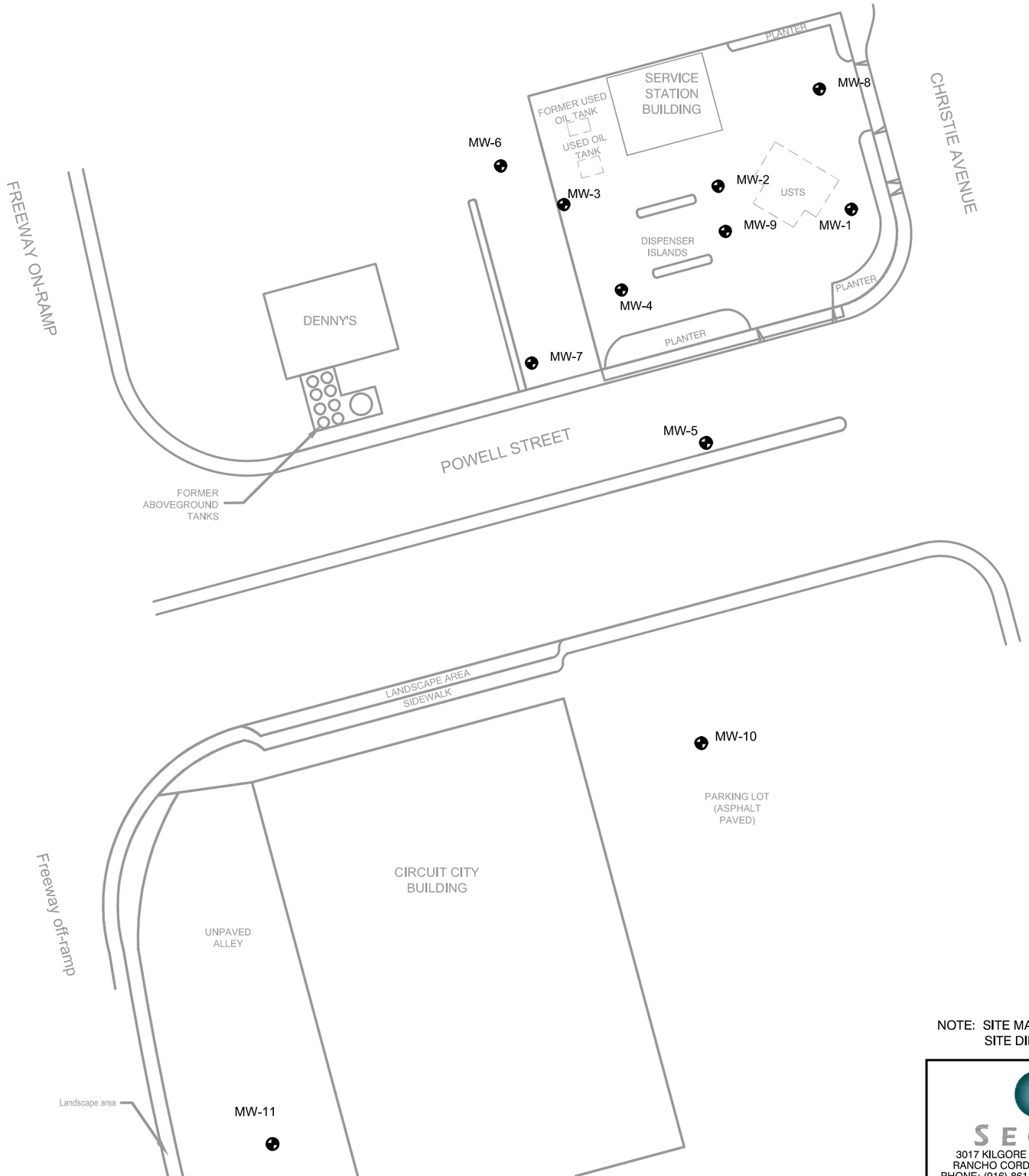
SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

FOR:
76 (FORMER BP)
SERVICE STATION NO 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.00 77CP.01731.01	MDR	CO	BS	03/21/07



LEGEND:

GROUNDWATER MONITORING WELL

N

0 50 100

SCALE IN FEET

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

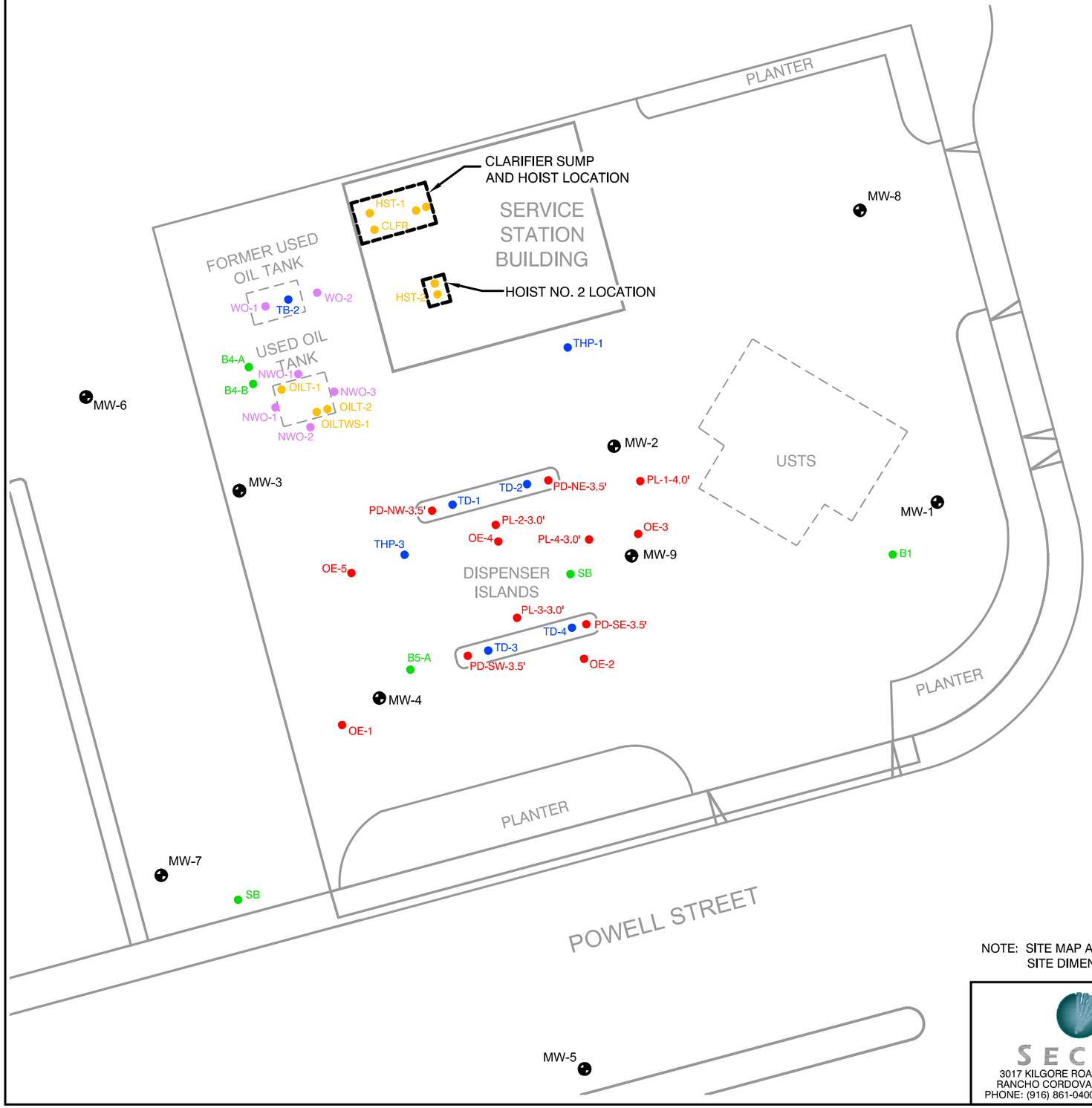
SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

FOR:
76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

SITE PLAN

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.00 77CP.01731.01	MDR	CO	BS	03/21/07



LEGEND:

- GROUNDWATER MONITORING WELL
- NWO-1, SOIL SAMPLE LOCATION KAPREALIAN ENGINEERING, INC. (1989)
- B4-A, SOIL SAMPLE LOCATION ALISTO ENGINEERING GROUP (1993)
- TD-1, SOIL SAMPLE LOCATION EMCAN NORTHWEST, INC. (1994)
- OILT-2 SOIL SAMPLE LOCATION SECOR INTERNATIONAL INC. (1999)
- PD-NE-3.5' SOIL SAMPLE LOCATION SECOR INTERNATIONAL, INC. (2000)

N

0 20 40

SCALE IN FEET

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

FOR:
76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

SOIL BORING AND WELL LOCATION MAP

FIGURE: **3**

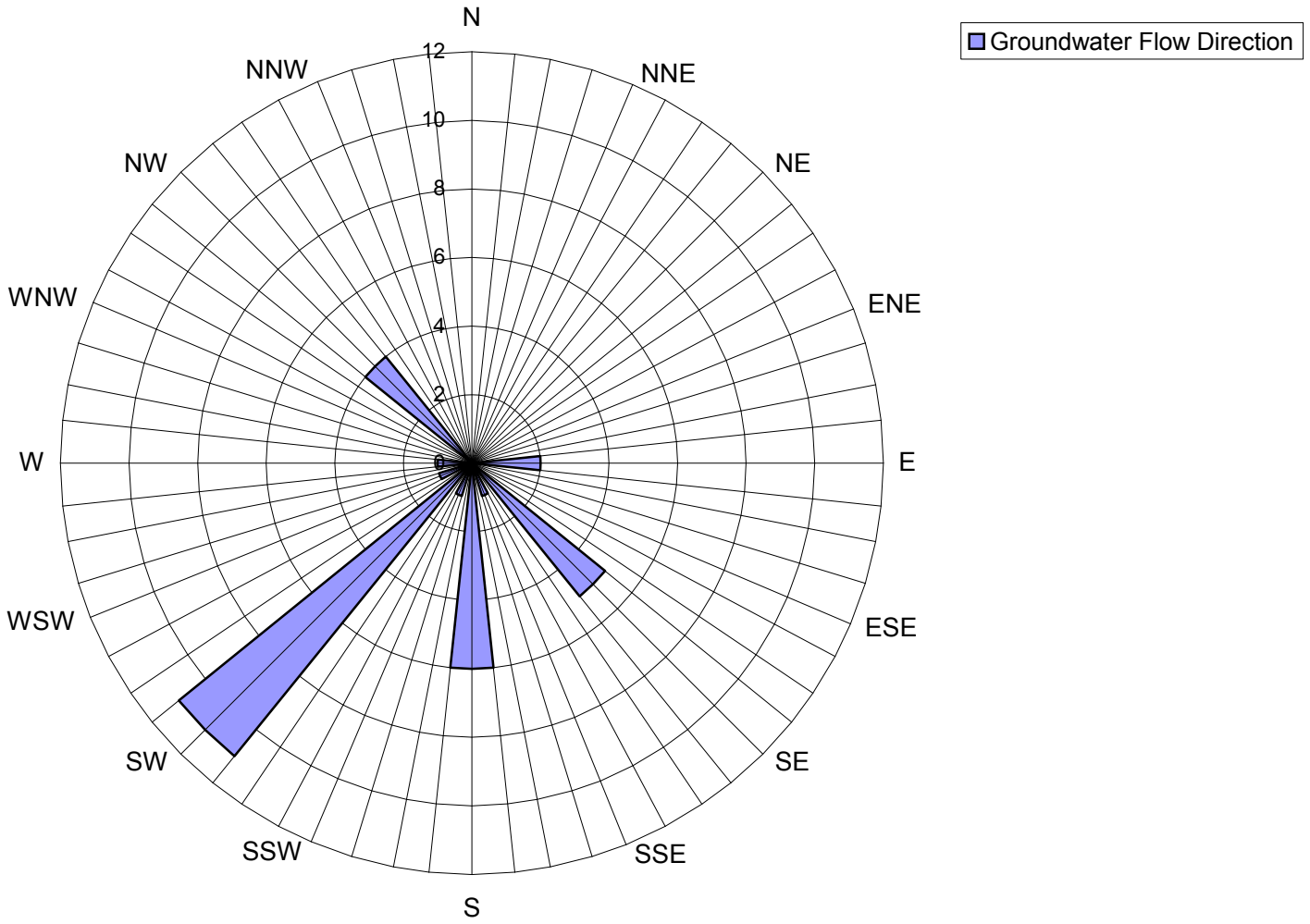
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.00 77CP.01731.01	MDR	CO	BS	03/21/07

FIGURE 4
Groundwater Flow Direction Rose Diagram
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, California

Legend:

Each concentric gridline represents the number of monitoring events.

Diagram includes data from the First Quarter 2001 through the First Quarter 2007.



ATTACHMENT A
ALAMEDA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT LETTER
DATED FEBRUARY 1, 2007

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

February 1, 2007

Mr. Paul Supple
Atlantic Richfield Company
PO Box 6459
Moraga, CA 94570

Ms. Shelby Lathrop
Conoco Phillips
76 Broadway
Sacramento, CA 95818

Subject: Fuel Leak Case No. RO0000066, Former BP Service Station #11126, 1700 Powell Street, Emeryville, CA – Work Plan and Remedial Action Plan

Dear Mr. Supple and Ms. Lathrop:

Alameda County Environmental Health Department (ACEH) staff has reviewed the reports entitled, "Quarterly Groundwater Monitoring Report, 4th Quarter 2006," dated January 9, 2007 prepared by Secor International and "Offsite Soil and Groundwater Investigation Report" dated June 15, 2005 and prepared by URS Corp. Water quality analytical data collected in December 2006 indicate that high levels of TPHg, Benzene, MtBE and TBA were detected at concentrations of up to 61,000 µg/L, 15,000 µg/L, 10,000 µg/L and 31,000 µg/L, respectively. In addition, review of historical groundwater analytical data show that as recently as December 2005 up to 210,000 µg/L TPHg and 22,000 µg/L MtBE were detected in monitoring well MW-2, indicating that residual contamination in the source area may be continuing to add mass to the dissolved petroleum hydrocarbon plume. Consequently, ACEH is concerned that remaining petroleum hydrocarbon contamination in the source area is migrating off site. Furthermore, documented hydraulic gradient, which is toward the west/southwest, confirms that dissolved hydrocarbon contamination is moving downgradient of the site.

Our review of the case file indicates that additional offsite characterization activities associated with the MtBE plume, followed by onsite interim remediation in the source area are required. Therefore, ACEH requests you provide a remedial action plan that details your proposal to rectify groundwater contamination onsite and characterize groundwater contamination associated with the MtBE plume downgradient of your site.

Based on ACEH staff review of the case file, we request that you address the following technical comments and prepare a work plan detailing work to be performed, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Contamination Plume Delineation.**

   The purpose of contaminant plume delineation is to determine the lateral extent of MtBE/TBA contamination in soil and groundwater from the unauthorized release at your site. The extent of MtBE contamination in soil and groundwater downgradient toward the west of your site is

undefined. The results of recent groundwater monitoring indicate the presence of high levels of dissolved phase MtBE and other petroleum products at your site. Water quality data from downgradient monitoring well MW-4 detected up to 10,000 µg/L MtBE and 31,000 µg/L TBA, demonstrating that offsite migration is an ongoing issue.

MTBE is highly soluble, very mobile in groundwater and is not readily biodegradable. Conventional monitoring well networks currently installed at fuel leak sites are generally insufficient to properly locate and define the extent of MTBE plumes. MTBE plumes can be long, narrow, and erratic (meandering). In addition, the plumes can appear as discontinuous slugs particularly for those releases that occurred during the use of MTBE as a wintertime oxygenate (the period 1991 to 1995 in northern California). Thus, the positioning of current monitoring well networks can miss the MTBE plume core, and the monitoring well's design can incorrectly reflect the severity of the release. Please discuss your proposal to perform MtBE plume characterization work in the work plan requested below.

2. **Source Area Remediation.** The purpose of source are remediation is to immediately remove any source(s) that may be continuing to add mass to the dissolved plume and immediately begin removal of dissolved contaminant mass in the source area. Source area cleanup is necessary to prevent dissolved phase petroleum hydrocarbon pollution from impacting or continuing to impact drinking water supply aquifers, reduce the ultimate impact of the unauthorized release on the resource, limit continued migration and growth of the petroleum hydrocarbon plume, and reduce overall cleanup costs.

   ACEH is concerned that delays in the submission of a remedial action plan for the site are allowing for the continued migration of pollution downgradient of the site. On December 15, 2005 ACEH requested Secor to proceed with the submission of a Remedial Action Plan (RAP). To date, ACEH has yet to received the requested RAP; therefore, we request that you evaluate several remedial alternatives that could be used to mitigate offsite migration of groundwater contamination. Please prepare a Remedial Action Plan that details your proposal to mitigate contamination in the source area in the report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Steven Plunkett), according to the following schedule:

- **March 1, 2006** – Work Plan for Soil and Groundwater Investigation and Remedial Action Plan

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.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) 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. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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." An officer or legally authorized representative of your company must sign this letter. 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, 6835, and 7835.1) require 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, later 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.

Should you have any questions, do not hesitate to call me at (510) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: Brad Shelton
Secor International
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95607

Donna Drogos, ACEH
Steven Plunkett, ACEH
File

ATTACHMENT B
BORING LOGS AND WELL CONSTRUCTION DETAILS

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING B-2/MW-1

SEE SITE PLAN

ALISTO PROJECT NO: 10-081 DATE DRILLED: 10/20/92

CLIENT: BP Oil Company

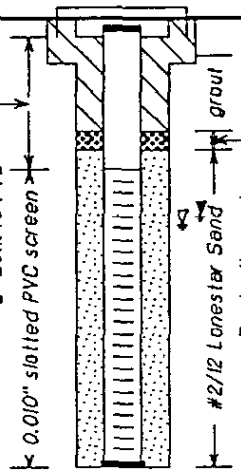
LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-stem Auger (8")

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: 7.78 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SW	3" Asphalt. gravelly SAND: brown/green, damp, very loose; medium- to very coarse-grained sand; abundant rounded gravel to 1".
9	47					ML	sandy SILT: gray/blue, damp, soft; abundant very fine-grained sand; minor clay.
1,1,1 1,1			5			CL	silty CLAY: dark gray, wet, very soft; abundant silt; very fine- to medium-grained sand; minor rounded gravel to 1".
						SM	silty SAND: blue/gray, wet, very loose; very fine- to fine-grained sand; minor clay.
2,3,3			10			CL	silty CLAY: blue/green, wet, medium firm; minor very fine-grained sand.
			15				Groundwater Monitoring Well MW-1 was installed in Soil Boring B-2. Soil Boring B-2 was drilled within 3 feet of Soil Boring B-1. Soil classification/contacts, PID readings, and blow counts presented on this boring log were copied from Soil Boring B-1.
			20				
			25				
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING B-3/MW-2

SEE SITE PLAN

ALISTO PROJECT NO: *10-061* DATE DRILLED: *10/20/92*

CLIENT: *BP Oil Company*

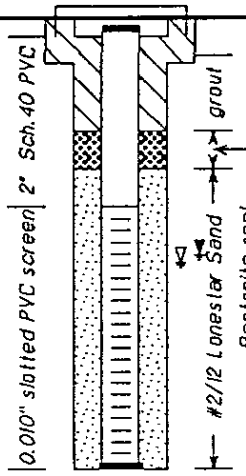
LOCATION: *1700 Powell Street, Emeryville, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

DRILLING COMPANY: *Great Sierra Exploration* CASING ELEVATION: *8.58 ' MSL*

LOGGED BY: *Ted Moise* APPROVED BY: *Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SW	3" Asphalt. gravelly SAND: brown, damp, loose; fine- to very coarse-grained sand; gravel to 1"; minor fines.
1,3,3	200		5			ML	sandy SILT: black, moist to wet, medium firm; very fine- to medium-grained sand; minor clay.
1,3,3						CL	silty CLAY: gray, wet, medium firm; minor very fine- to fine-grained sand; minor angular gravel to 1/2".
5,3,4			10			SM	silty SAND: gray, wet, loose; very fine- to medium-grained sand; minor clay.
4,3,4						CL	silty CLAY: blue/green, wet, medium firm; minor silt; rootlets.
			15				
			20				
			25				
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING B-4/MW-3

Page 1 of 1

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

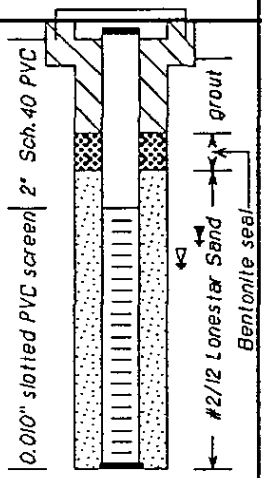
CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-Stem Auger (8")

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: 8.25 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
			0			SW	3" Asphalt. gravelly SAND: tan, damp, loose; medium- to very coarse-grained sand; gravel to 1".
							Concrete in cuttings.
50/5"			5	⊠		SM	silty SAND: black, wet, loose; very fine- to medium-grained sand; abundant silt; minor gravel to 1/2".
4,6,6	0.2			■			
3,4,5			10	⊟			
4,3,4				⊟		CL	silty CLAY: blue/green, damp, medium firm; minor silt; rootlets.
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING B-5/MW-4

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

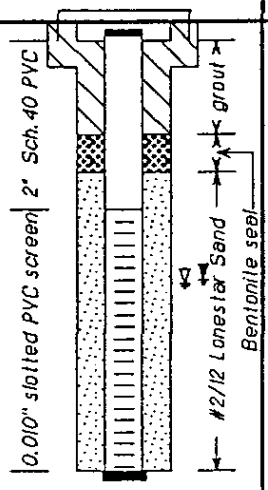
CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-Stem Auger (8")

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: 8.12 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SW	gravelly SAND: tan, damp, loose; fine- to very coarse-grained sand; rounded gravel to 3/4".
						ML	sandy SILT: brown, damp, soft; minor angular gravel to 1"; minor clay.
3,2,3	3.2		5			CL	silty CLAY: gray/brown, damp, soft; minor very fine- to medium-grained sand.
5,8,8						SM	silty SAND: gray, wet, loose; very fine- to medium-grained sand; abundant silt; minor clay.
4,4,8			10			CL	CLAY: blue/green, damp, medium firm; minor silt.
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-5

SEE SITE PLAN

ALISTO PROJECT NO: 10-061-02 DATE DRILLED: 09/02/93

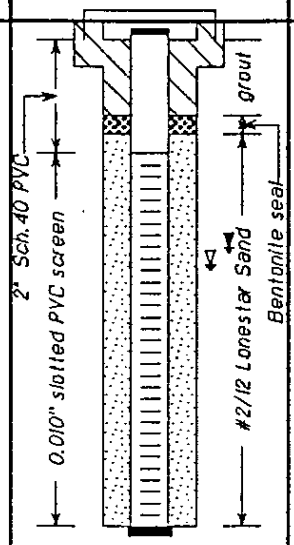
CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-Stem Auger (8")

DRILLING COMPANY: Soils Exploration Srv. CASING ELEVATION: 7.89 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							9" Asphalt, 2" Roadbase with red brick.
2,3,4	12		5	■		CL	silty CLAY: gray/green, moist, medium firm; minor fine-grained sand; rootlets present.
						SC	clayey SAND: black, wet, very loose; very fine- to fine-grained sand; abundant fines.
2,1,3			10			CL	silty CLAY: black, soft.
						SC	clayey SAND: black, very loose.
1,1,2						CL	silty CLAY: black/gray, very soft; minor shell fragments.
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-6

SEE SITE PLAN

ALISTO PROJECT NO: 10-081-02 DATE DRILLED: 09/03/93

CLIENT: BP Oil Company

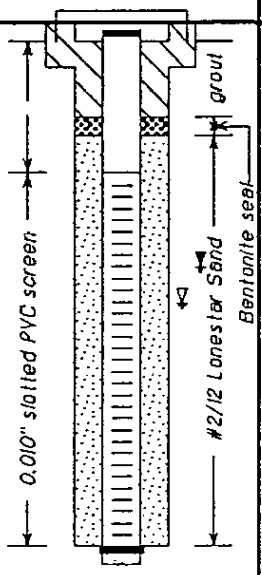
LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-Stem Auger (8")

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: 8.52 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							4" Asphalt.
						SW	gravelly SAND: brown, damp, loose; very fine- to very coarse-grained sand; abundant rounded and angular gravel to 1" diameter.
4,4,7	0		5				SAND: gray/green, damp, loose; very fine- to coarse-grained sand; minor angular gravel to 1/2".
5,6,8			10				Same: black, wet, loose.
3,3,8							fine SAND at 13 feet.
						CL	silty CLAY: black, medium firm.
			15				
			20				
			25				
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-7

SEE SITE PLAN

ALISTO PROJECT NO: *10-081-02* DATE DRILLED: *09/03/93*

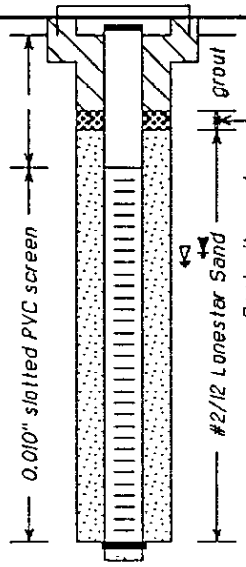
CLIENT: *BP Oil Company*

LOCATION: *1700 Powell Street, Emeryville, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

DRILLING COMPANY: *Great Sierra Exploration* CASING ELEVATION: *7.61 ' MSL*

LOGGED BY: *Ted Moise* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SP	4" Asphalt.
7,7,5	17		5				gravelly SAND: brown, damp, loose; fine- to medium-grained sand; concrete blocks and bricks.
							SAND: gray, damp, loose; fine- to medium-grained sand.
6,7,2			10				Same: black, wet.
2,3,7						CL	silty CLAY: gray/blue, medium firm.
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-8

SEE SITE PLAN

ALISTO PROJECT NO: *10-081-02* DATE DRILLED: *09/03/93*

CLIENT: *BP Oil Company*

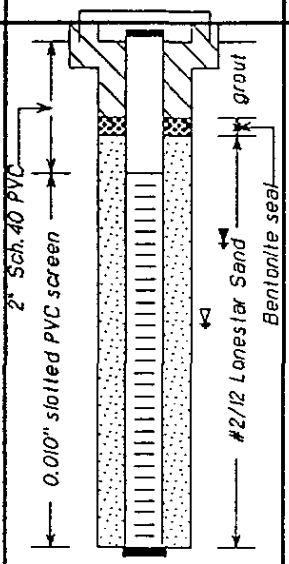
LOCATION: *1700 Powell Street, Emeryville, California*

DRILLING METHOD: *Hollow-Stem Auger (8")*

DRILLING COMPANY: *Soils Exploration Srv.* CASING ELEVATION: *8.80 ' MSL*

LOGGED BY: *Ted Moise* *APPROVED BY: Al Sevilla*

BLOWS/6 IN.	PID VALUES	WELL DIAGRAN	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SM	2" Asphalt
							silty SAND: gray, loose, damp.
3,4,8	0		5			CL	silty CLAY: gray/blue, damp, medium firm.
4,5,5			10			ML	sandy SILT: black, wet, medium firm; very fine-grained sand.
7,7,9							
			15			CL	silty CLAY: gray/green, stiff; organics present.
			20				
			25				
			30				



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF BORING MW-9

SEE SITE PLAN

ALISTO PROJECT NO: 10-061-02 DATE DRILLED: 09/03/93

CLIENT: BP Oil Company

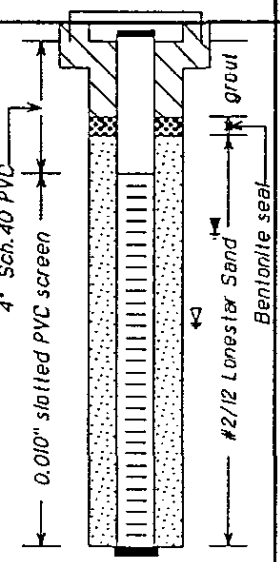
LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-Stem Auger (10")

DRILLING COMPANY: Soils Exploration Srv. CASING ELEVATION: 8.08 ' MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						SM	3" Asphalt
							silty SAND: brown, loose, damp; very fine- to very coarse-grained sand; minor angular gravel to 3/4" diameter.
4,6,4	188		5			ML	sandy SILT: gray/green, moist, medium firm; very fine- to fine-grained sand.
3,3,5			10				clayey SILT: brown/gray, wet, medium firm; minor very fine- to medium-grained sand.
						CL	silty CLAY: blue/green, medium firm.
			15				
			20				
			25				
			30				



URS

1333 Broadway, Suite 800
Oakland, California 94612

MONITORING WELL LOG

Well ID: MW-10

Total Depth: 17 ft. bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Offsite Well Installation	**Drilling Company:** Gregg Drilling
Site Location: 5795 Christie Ave, Emeryville, CA	**Driller:** Robert Deason
Site Number: Former BP 11126	**Type of Drilling Rig:** Marl M5T Rhino
Project Manager: Lynelle Onishi	**Drilling Method:** 2" Cont. Core/ 8" HSA
Geologist: Kevin Uno	**Sampling Method:** Continuous Core
Job/Cost Code Number: 38487322	**Date(s) Drilled:** 4/15/05

WELL INFORMATION

Groundwater Depth (ft bgs): Exploratory	**Well Location:** Near NE side of Circuit City building in parking lot
Top of Casing Elevation (ft msl): 12.53 ft.	**Well Diameter:** 2 inch
Coordinates: **Latitude** 37.8380746 **Longitude** -122.2952280	**Screened Interval:** 7'-17' bgs

Depth (ft)	Elevation (ft) (NAVD '88)	Lithologic Description	Blow Counts	USCS	PID	Recovery	Sample ID and Interval	Well Completion	Well Description/ Comments
0	12	ASPHALT: 20" Asphalt.							Slightly raised 12" well box w/concrete skirt.
2	10	FILL: 60% angular gravel, 30% sand, 10% fines. Asphalt pieces. Water knife from 2.5-5 ft. bgs.		GM					Cement grout from 0.5 to 5 feet bgs
4	8	CLAY: Visual observation only.		CL					Schedule 40 2" PVC Blank Well Casing from 0.3 to 7.0 ft. bgs
6	6	CLAYEY SANDY SILT: (10GY 2.5/1) Greenish black. 60% silt, 30% clay, 10% angular sand. Soft, moist, low plasticity.		ML			MW-10-7.0		Bentonite annular seal from 5 to 6 feet bgs
8	4	NO RECOVERY							#2/12 sand filter pack from 6 to 17.5 feet bgs
10	2	FILL: Dark red (10YR 3/6). Brick fragments: sand to medium gravel size. Angular, moist to wet, loose, no plasticity.		GW	0.8				
12	0	GRAVELLY SAND: FILL: (2.5 N) Black. 60% angular fine to medium gravel and asphalt, 40% fine to coarse angular sand.			0.2				2" diameter schedule 40, 0.010" sloted screen from 7 to 17 feet bgs
14	-2	SILTY CLAY: (2.5N) Black. 55% clay, 40% silt, 5% fine to medium sand. Shell fragments. Wet, medium plasticity.		CL					
16	-4	CLAYEY SILT: (5GY 2.5/1) Greenish black. 65% silt, 20% clay, 15% fine to medium sand. Shell fragments. Moist to wet, medium plasticity.		ML					2" diameter 6" schedule 40 PVC cap
18	-6	Decrease in moisture. Increase in clay to 30%. Trace (<5%) gravel. Medium plasticity. End of Boring: 20 ft. bgs.			0.2				Bentonite plug from 17 to 20 ft bgs.
20									

URS

1333 Broadway, Suite 800
Oakland, California 94612

MONITORING WELL LOG

Well ID: MW-11

Total Depth: 17 ft. bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Offsite Well Installation	**Drilling Company:** Gregg Drilling
Site Location: 5795 Christie Ave, Emeryville, CA	**Driller:** Robert Deason
Site Number: Former BP 11126	**Type of Drilling Rig:** Marl M5T Rhino
Project Manager: Lynelle Onishi	**Drilling Method:** 2" Cont. Core/ 8" HSA
Geologist: Kevin Uno	**Sampling Method:** Continuous Core
Job/Cost Code Number: 38487322	**Date(s) Drilled:** 4/15/05

WELL INFORMATION

Groundwater Depth (ft bgs): Exploratory	**Well Location:** West side of Circuit City building in landscaped area.
Top of Casing Elevation (ft msl): 14.55 ft.	**Well Diameter:** 2 inch
Coordinates: **Latitude** 37.8377200 **Longitude** -122.2958459	**Screened Interval:** 7'-17' bgs

Depth (ft)	Elevation (ft) (NAVD '88)	Symbol	Lithologic Description	Blow Counts	USCS	PID	Recovery	Sample ID and Interval	Well Completion	Well Description/ Comments
0	14		SILTY SAND: Logged from Air Knife cuttings: 80% fine to coarse sand, 20% silt. Moist, no plasticity.		SM					Slightly raised 12" well box w/concrete skirt.
2	12		Increase in sand.							Cement grout from 0.5 to 5 feet bgs
4	10									Schedule 40 2" PVC Blank Well Casing from 0.3 to 7.0 ft. bgs
6	8		NO RECOVERY							Bentonite annular seal from 5 to 6 feet bgs
8	6									#2/12 sand filter pack from 6 to 17 feet bgs
10	4		GRAVELLY SAND: Shoe only: (5Y 4/3) Olive. 85% fine to course sand, 10% fine to medium subangular gravel, 5% fines. Very loose, wet, no plasticity.		SP					
12	2		SAND: (10Y 4/1) Dark greenish gray.100% fine to medium sand. Loose, wet, no plasticity. Occasional shell fragments.			4.0				2" diameter schedule 40, 0.010" sloted screen from 7 to 17 feet bgs
14	0		Color change to olive brown (2.5Y4/4). Trace medium gravel, up to 2.5cm.							
16	-2									2" dia. 6" schedule 40 PVC cap
18	-4		Slight odor					MW-11-18.0		
20	-6									Bentonite plug from 17 to 24 ft. bgs
22	-8		CLAYEY SILT: (5GY 4/1) Dark greenish gray. 75% clay and silt, 15% fine to coarse sand, trace fine gravel. Rootlets, poorly lithified silt clasts gray and 10R 3/3 dusky red) up to 0.75 cm. Low to medium plasticity. Slight odor.		ML			MW-11-23.5		
24			End of Boring: 24 ft. bgs.							

ALISTO ENGINEERING GROUP
CONCORD, CALIFORNIA

LOG OF BORING B-1

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hollow-stem Auger (8")

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: N/A ft. MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
							3" Asphalt.
						SW	gravelly SAND: brown/green, damp, very loose, medium- to very coarse- grained sand, abundant rounded gravel to 1".
9	47					ML	sandy SILT: gray/blue, damp, soft, abundant very fine-grained sand, minor clay.
1,1,1 1,1			5			CL	silty CLAY: dark gray, wet, very soft, abundant silt, very fine- to medium-grained sand, minor rounded gravel to 1".
						SM	silty SAND: blue/gray, wet, very loose, very fine- to fine-grained sand, minor clay.
2,3,3		Grout	10			CL	silty CLAY: blue/green, wet, medium firm, minor very fine-grained sand.
7,7,8							Same: no sand, minor silt, plant rootlets.
7,11,12			15				Plant rootlets, very fine- to fine-grained sand.
9,14,14						ML	sandy SILT: blue/brown, wet, very stiff, very fine- to medium- grained sand, minor clay, minor angular gravel to 1/2".
10,11 12,12			20			SM	silty SAND: brown, wet, medium dense, fine- to very coarse-grained sand, minor angular gravel to 1/2".
			25				
			30				

ALISTO ENGINEERING GROUP
CONCORD, CALIFORNIA

LOG OF BORING B-4a

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hand Auger

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: N/A ft. MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
		Grout					3" Asphalt.
						SW	gravelly SAND: brown, damp, very loose, fine- to very coarse-grained sand, angular gravel to 1-1/2".
						ML	sandy SILT: black, damp, soft, fine- to medium-grained sand, minor clay, minor gravel to 1".
							Auger refusal at 2.5 Feet (Concrete slab).
			5				
			10				
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
CONCORD, CALIFORNIA

LOG OF BORING B-4b

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hand Auger

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: N/A ft. MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
		Grout	0				3" Asphalt
						SW	gravelly SAND: brown, damp, very loose, fine- to very coarse-grained sand, angular gravel to 1-1/2".
						ML	sandy SILT: black, damp, soft, fine- to medium-grained sand, minor clay, minor gravel to 1".
			2.5				Auger refusal at 2.5 Feet (Concrete slab).
			5				
			10				
			15				
			20				
			25				
			30				

ALISTO ENGINEERING GROUP
CONCORD, CALIFORNIA

LOG OF BORING B-5a

SEE SITE PLAN

ALISTO PROJECT NO: 10-061 DATE DRILLED: 10/20/92

CLIENT: BP Oil Company

LOCATION: 1700 Powell Street, Emeryville, California

DRILLING METHOD: Hand Auger

DRILLING COMPANY: Great Sierra Exploration CASING ELEVATION: N/A ft. MSL

LOGGED BY: Ted Moise APPROVED BY: Al Sevilla

BLOWS/6 IN.	PID VALUES	WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
		grout	5			SW	3" Asphalt. gravelly SAND: tan, damp, loose, fine- to very coarse-grained sand, rounded gravel to 3/4". Boring terminated at 5', (8" clay pipe).

ATTACHMENT C
SECOR'S HISTORICAL WATER WELL SURVEY TABLE
76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

RALSTON
COPY

SECOR
International Incorporated

August 9, 2002

Mr. David Camille
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, CA. 94583

RE: CONSULTANT WELL SURVEY FOR TOSCO SERVICE STATIONS

Dear Mr. Camille:

SECOR International Incorporated (SECOR) is pleased to submit this letter to Phillips 66 Company (Phillips) for work completed as part of the Consultant Well Survey. This work was completed in response to the e-mail received by you on August 1, 2002 that requested existing information regarding wells surrounding environmental case sites.

An Excel template, provided by you in the aforementioned e-mail, was used to store the requested data. The data was located in historical records currently on file at SECOR, as well as in the GeoTracker database found on the Internet at http://geotracker2.arsenaultlegg.com. The complete table was e-mailed to you today, August 9, 2002. A copy of this table has been attached to this letter as Appendix A, while the requested copies of MtBE concentration figures from the latest sampling work performed at the sites have been attached as Appendix B.

If you have any questions or comments regarding this report, feel free to contact us at 650-691-0131.

Sincerely,

SECOR International Incorporated

Michael Asakawa

Michael Asakawa
Staff Scientist

Store # 2611126 Date: 8/9/02
Unit # 11126 Code: GEN Color ☐
Description: Well Survey

Attachments:
Appendix A – Well Survey Data
Appendix B – MtBE Concentration Figures for TOSCO Sites

cc: Forrest McFarland, SECOR International Incorporated

Store#_____
Report Type Code:_____
Description:_____
Date:_____

FILE # 2611126 SS ✓ BP _____
RPT ____ QM ____ TRANSMITTAL ____
1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ✓

2301 Leghorn Street, Mountain View, CA 94043 650.691.0131 650.691.9837 Fax www.secor.com

ATTACHMENT A

WELL SURVEY DATA

WELL SURVEY DATA

for TOSCO sites managed by SECOR

Cost Center	Distance From Site (ft)	Direction From Site	Well Name	Well Status	Well Use	Well Screen Interval(s)	Well Depth (ft)	Survey Year	Info Source	Station GW Gradient	Most Down Gradient Well MtBE Conc. (ppb)	Comments
270155	--	--	--	--	--	--	--	--	--	--	--	No well search completed
270477	--	--	--	--	--	--	--	--	--	--	--	No well search completed
2705426	1,000	SW	--	--	D	--	165	2000	S	NE	<100	Owner: Adolph Basaldella; Drilled in 1966; Location: 645 W. Cotati Avenue, Cotati, CA
2705426	1,050	SE	--	--	A	--	388	2000	S	NE	<100	Owner: St. Joseph's Church; Drilled in 1978; Location: 150 St. Joseph Way, Cotati, CA
2705426	1,050	SE	--	--	D	--	309	2000	S	NE	<100	Owner: Fred Andreoli; Drilled in 1983; Location: 7971 Old Redwood Highway, Cotati, CA
2705426	1,100	SW	--	--	D	--	266	2000	S	NE	<100	Owner: K. Anderson; Drilled in 1969; Location: W. Cotati Avenue, Cotati, CA
2705426	1,200	N	--	--	D	--	223	2000	S	NE	<100	Owner: Fred Andeoli; Drilled in 1980; Location: 187 Helman Lane, Cotati, CA
2705426	1,200	N	--	--	D	--	170	2000	S	NE	<100	Owner: Gerald Narron; Drilled in 1979; Location: 200 Helman Lane, Cotati, CA
2705426	1,400	N	--	--	D	--	89	2000	S	NE	<100	Owner: Charles Badger; Drilled in 1978; Location: 170 Helman Lane, Cotati, CA
2705426	1,500	NE	--	--	T	--	4,035	2000	S	NE	<100	Owner: Stephens and Rohnert; Drilled in 1951 for oil exploration; Location: 1.54 miles S. Wilfred Avenue and 240 feet E. U.S. Highway 101
2705426	1,500	N	--	--	D	--	213	2000	S	NE	<100	Owner: Loren Nibe; Drilled in 1974; Location: 280 Helman Lane, Cotati, CA
2705426	1,500	NW	--	--	D	--	221	2000	S	NE	<100	Owner: Richard Gardner; Drilled in 1979; Location: 1583 Rose Avenue, Santa Rosa, CA
2705426	1,700	N	--	--	D	--	70	2000	S	NE	<100	Owner: DeWayne Strawther; Drilled in 1971; Location: Helman Lane, Cotati, CA
2705426	1,900	SW	--	--		--	75	2000	S	NE	<100	Owner: M. Mulligan; Drilled in 1948; Location: School Road, Cotati, CA
2705426	1,900	N	--	--	D	--	52	2000	S	NE	<100	Owner: L.C. Batkin; Drilled in 1910; Location: 363 Helman Lane, Cotati, CA
2705426	2,482	Unknown	4910016-004	--	--	--	--	2002	G	--	--	Water System Name: City of Cotati
2708563	416	Unknown	06S/11E-25D01 M	--	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	875	Unknown	06S/11E-24N01 M	D	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	1,385	Unknown	06S/11E-24N02 M	--	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	1,619	Unknown	06S/11E-25E01 M	D	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	1,710	Unknown	06S/11E-23R02 M	D	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	1,710	Unknown	06S/11E-23R03 M	I	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	2,064	Unknown	06S/11E-25F01 M	I	--	--	--	2002	G	--	--	Water System: City of Livingston
2708563	2,610	Unknown	2410004-015	--	--	--	--	2002	G	--	--	Water System: City of Livingston
2611102	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2705443	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611107	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611112	>2,640	--	--	--	--	--	--	2002	G	--	550	Groundwater gradient listed as "varied".

WELL SURVEY DATA

for TOSCO sites managed by SECOR

Cost Center	Distance From Site (ft)	Direction From Site	Well Name	Well Status	Well Use	Well Screen Interval(s)	Well Depth (ft)	Survey Year	Info Source	Station GW Gradient	Most Down Gradient Well MtBE Conc. (ppb)	Comments
2611113	>2,640	--	--	--	--	--	--	2002	G	--	<2.0	Groundwater gradient listed as "varied".
2611124	--	--	--	--	--	--	--	--	--	--	--	INFORMATION UNAVAILABLE
2611126	>2,640	--	--	--	--	--	--	2002	G	--	320,000	Groundwater gradient to the SW and SE.
2611132	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611139	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2611146	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2611147	213	Unknown	0707619-001GEN	--	--	--	--	2002	G	--	--	Water System Name: Mitchell & Ann Ward
2611147	213	Unknown	2900620-001GEN	--	--	--	--	2002	G	--	--	Water System Name: Liahona Club
2611151	2,571	Unknown	0400134-001GEN	--	--	--	--	2002	G	--	--	Water System Name: Proterra Corporation
2611165	--	--	--	--	--	--	--	--	--	--	--	INFORMATION UNAVAILABLE
2611175	--	--	--	--	--	--	--	--	--	--	--	INFORMATION UNAVAILABLE
2611185	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2611206	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2705442	914	Unknown	08S/02E-20F01 M	--	D	--	--	2002	G	--	--	Water System Name: Santa Teresa Golf Club
2611213	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611215	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611220	>1,000	--	--	--	--	--	--	2002	G	--	--	--
2611228	>1,000	--	--	--	--	--	--	2002	G	N	<0.5	--
2611230	--	--	--	--	--	--	--	--	--	--	--	No well search completed
2611235	2,416	Unknown	06S/01E-31K02 M	--	--	--	--	2002	G	--	--	Water System Name: San Jose Water Company
2611235	2,568	Unknown	06S/01E-31K01 M1	I	--	--	--	2002	G	--	--	Water System Name: San Jose Water
2611246	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2611266	>2,640	--	--	--	--	--	--	2002	G	--	--	--
2611269	>2,640	--	--	--	--	--	--	2002	G	NE	5,400	--
2611270	>2,640	--	--	--	--	--	--	2002	G	NW	49	--
251527	1,800	SW	--	--	--	--	--	1997	S	--	--	Located on Travis Air Force Base
251527	2,000	SW	--	--	--	--	--	1997	S	--	--	Located on Travis Air Force Base
251527	2,600	NE	--	--	--	--	--	1997	S	--	--	Located along Air Force Base Parkway (Fairfield, CA)
251527	2,950	NE	--	--	--	--	--	1997	S	--	--	Located along Air Force Base Parkway (Fairfield, CA)
251527	3,200	NW	--	--	--	--	--	1997	S,D	--	--	Extraction well located in an empty lot adjacent to 198 Dobe Lane (Fairfield, CA).
251527	3,300	NE	--	--	--	--	--	1997	S	--	--	Located along Air Force Base Parkway (Fairfield, CA)
251527	4,750	N	--	--	A	--	--	1997	R,D	--	--	Located at North Campus High School on Vanden Road (Fairfield, CA)
252913	>2,640	--	--	--	--	--	--	2002	G	--	--	--
253652	2,030	Unknown	05S/03W-33K05 M	--	--	--	--	2002	G	N	6.07	Water System Name: Menlo School and College
253857	--	--	--	--	--	--	--	--	--	--	--	No well search completed
254296	>2,640	--	--	--	--	--	--	2002	G	--	--	--
254374	>2,640	--	--	--	--	--	--	2002	G	NW	20	--
254563	--	--	--	--	--	--	--	--	--	--	--	No well search completed

WELL SURVEY DATA
for TOSCO sites managed by SECOR

Cost Center	Distance From Site (ft)	Direction From Site	Well Name	Well Status	Well Use	Well Screen Interval(s)	Well Depth (ft)	Survey Year	Info Source	Station GW Gradient	Most Down Gradient Well MtBE Conc. (ppb)	Comments
254821	>1,000	--	--	--	--	--	--	2002	G	--	--	--
254831	--	--	--	--	--	--	--	--	--	--	--	No well search completed
255293	--	--	--	--	--	--	--	--	--	--	--	INFORMATION UNAVAILABLE
255406	--	--	--	--	--	--	--	--	--	--	--	No well search completed
255427	--	--	--	--	--	--	--	--	--	N	170	No well search completed
255902	--	--	--	--	--	--	--	--	--	SW,NW	<5.0,<5.0	Station gradient and MtBE concentrations: (A zone),(B zone)
256031	--	--	--	--	--	--	--	--	--	--	--	No well search completed
256115	--	--	--	--	--	--	--	--	--	--	--	No well search completed
256259	--	--	--	--	--	--	--	--	--	NE	<1.0	No well search completed
256429	100	SE	06S01W26K003	A	O	--	8	2001	R	N	200	Location: 43N Channing Ave/155W Seaboard Ave
256429	550	N	06S01W26K001	A	O	--	65	2001	R	N	200	Location: 88N Trimble/121W Guadalupe River
256429	650	N	06S01W26K002	A	O	--	31	2001	R	N	200	Location: 90N Trimble/120W Guadalupe River
256429	950	NW	06S01W26L003	A	O	--	17	2001	R	N	200	Location: 36N Gianni St/220W Belick St
256429	1,150	NE	06S01W26J004	A	O	--	20	2001	R	N	200	Location: 462SE W. Trimble/2975SW N. First
256429	1,250	NE	06S01W26J003	A	O	--	20	2001	R	N	200	Location: 465SE W. Trimble/3015SW N. First
256429	1,300	N	06S01W26F003	D	A	--	--	2001	R	N	200	Location: 30N Laurel Wood/2417E Lafayette
256429	1,300	NE	06S01W26J002	A	O	--	20	2001	R	N	200	Location: 445SE W. Trimble/2970SW N. First
256429	1,350	NW	06S01W26F001	D	A	--	--	2001	R	N	200	Location: 75N Laurel Wood Rd/200E Lafayette St.
256429	1,400	NE	06S01W26J005	A	O	--	20	2001	R	N	200	Location: 495SE W. Trimble/2845SW N. First
256429	1,400	SW	06S01W26P001	D		--	--	2001	R	N	200	Water producing but for unknown purpose; Location: 1100S Laurelwood/1280E Lafayette
256429	1,500	NW	06S01W26F002	D	D	--	--	2001	R	N	200	Location: 250N Laurel Wood/1700E Lafayette
256429	1,500	NE	06S01W26H003	A	O	--	25	2001	R	N	200	Static Water = 13 ft bgs; Location: 260N Trimble Rd/1385W Orchard Pkwy
256429	1,650	NW	06S01W26L005	A	O	--	18	2001	R	N	200	Location: 192NW Laurelwood/110SW Woodward
256429	1,700	N	06S01W26G005	A	O	--	20	2001	R	N	200	Static Water = 8 ft bgs; Location: 552N Laurelwood/41W Edward
256429	1,800	N	06S01W26G001	D	D	--		2001	R	N	200	155N Laurelwood/3300E Sprr
256429	1,800	NW	06S01W26M007	D	D	--		2001	R	N	200	Infiltration trench; Location: 125S Laurelwood/750E Lafayette
256429	1,850	N	06S01W26F021	A	O	--	25	2001	R	N	200	Static Water = 9 ft bgs; Location: 675N Laurelwood/208W Edward Ave
256429	1,900	N	06S01W26G007	A	O	--	20	2001	R	N	200	Static Water = 12 ft bgs; Location: 696N

Well Survey Data
for TOSCO sites managed by SECOR

Cost Center	Distance From Site (ft)	Direction From Site	Well Name	Well Status	Well Use	Well Screen Interval(s)	Well Depth (ft)	Survey Year	Info Source	Station GW Gradient	Most Down Gradient Well MtBE Conc. (ppb)	Comments
256429	2,000	N	06S01W26F037	A	O	--	20	2001	R	N	200	Location: 226SW Edward/685NW Laurelwood
256429	2,000	SW	06S01W26N001	D	NA	--	766	2001	R	N	200	Water producing but for unknown purpose;
256429	2,100	N	06S01W26F038	A	O	--	20	2001	R	N	200	Static Water = 12 ft bgs; Location: 949N Laurelwood/229W Edward
256429	2,100	N	06S01W26G006	A	O	--	20	2001	R	N	200	Static Water = 12 ft bgs; Location: 922N Laurelwood/83W Edward
256429	2,200	NE	06S01W26H005	A	O	--	25	2001	R	N	200	Static Water = 10 ft bgs; Location: 167N Trimble/617W Orchard Pkwy
256429	2,300	NE	06S01W26H004	A	O	--	25	2001	R	N	200	Static Water = 11 ft bgs; Location: 665N Trimble/685W Orchard Pkwy
256429	2,300	SW	06S01W26N013	A	O	--	25	2001	R	N	200	Static Water = 14 ft bgs; Location: 985E Lafayette/590N Comstock
256429	2,350	NE	06S01W26H006	A	O	--	25	2001	R	N	200	Static Water = 13 ft bgs; Location: 145N Trimble Rd/345W Orchard Pkwy
256429	2,400	NW	06S01W26F010	A	O	--	32	2001	R	N	200	Static Water = 10 ft bgs; Location: 250S Aldo/392W De La Cruz Blvd
256429	2,400	NW	06S01W26F011	A	O	--	26	2001	R	N	200	Static Water = 11 ft bgs; Location: 333S Aldo/193E Woodward
256429	2,400	NW	06S01W26F012	A	O	--	--	2001	R	N	200	Location: 324S Aldo/68E Woodward
256429	2,400	NW	06S01W26F013	A	O	--	--	2001	R	N	200	Location: 345S Aldo/266E Woodward
256429	2,400	NW	06S01W26F014	A	O	--	--	2001	R	N	200	Location: 350S Aldo/187E Woodward
256429	2,400	NW	06S01W26F015	A	O	--	--	2001	R	N	200	Location: 290S Aldo/90E Woodward
256429	2,400	NW	06S01W26F016	A	O	--	--	2001	R	N	200	Location: 403S Aldo/61E Woodward
256429	2,400	NW	06S01W26F017	A	O	--	--	2001	R	N	200	Location: 395S Aldo/120E Woodward
256429	2,400	NW	06S01W26F018	A	O	--	--	2001	R	N	200	Location: 335 N Perry Ct/530W De La Cruz
256429	2,400	NW	06S01W26F019	A	O	--	--	2001	R	N	200	333S Aldo/440W De La Cruz
256429	2,400	NW	06S01W26F022	A	O	--	25	2001	R	N	200	Location: 290S Aldo/255E Woodward
256429	2,400	NW	06S01W26F036	A	O	--	26	2001	R	N	200	Static Water = 12 ft bgs; Location: 277NW Perry/458SW De La Cruz
256429	2,400	NW	06S01W26F039	A	O	--	22	2001	R	N	200	Static Water = 11 ft bgs; Location: 227S Aldo/380W De La Cruz
256429	2,400	NW	06S01W26F040	A	O	--	50	2001	R	N	200	Location: 282S Aldo/402W De La Cruz
256429	2,400	SW	06S01W26P002	A	M,I	--	460	2001	R	N	200	Location: 110N Kifer Rd/350W De La Cruz
256429	2,500	NW	06S01W26F008	A	O	--	26	2001	R	N	200	Static Water = 8 ft bgs; Location: 332S Aldo Ave/42E Woodward Ave
256429	2,500	NW	06S01W26M002	D	A	--	300	2001	R	N	200	Location: 35N Laurelwood/50E Sprr
256429	2,500	SW	06S01W35C001	D	A	--		2001	R	N	200	Location: 35N Walsh Ave/70E Sprr
256429	2,600	NW	06S01W26M008	A	O	--	42	2001	R	N	200	Static Water = 11 ft bgs; Location: 340S Nuttman/38W Keller
256429	2,600	SW	06S01W26N012	A	O	--	25	2001	R	N	200	Static Water = 14 ft bgs; Location: 375N Comstock St/755E Lafayette
256429	2,650	NW	06S01W26E005	A	O	--	32	2001	R	N	200	Static Water = 10 ft bgs; Location: 110N Nuttman St/245E Keller St.
256429	--	Unknown	06S01W26J001	A	O	--	20	2001	R	N	200	Location: 2940SW N. First St/480SE Trimble

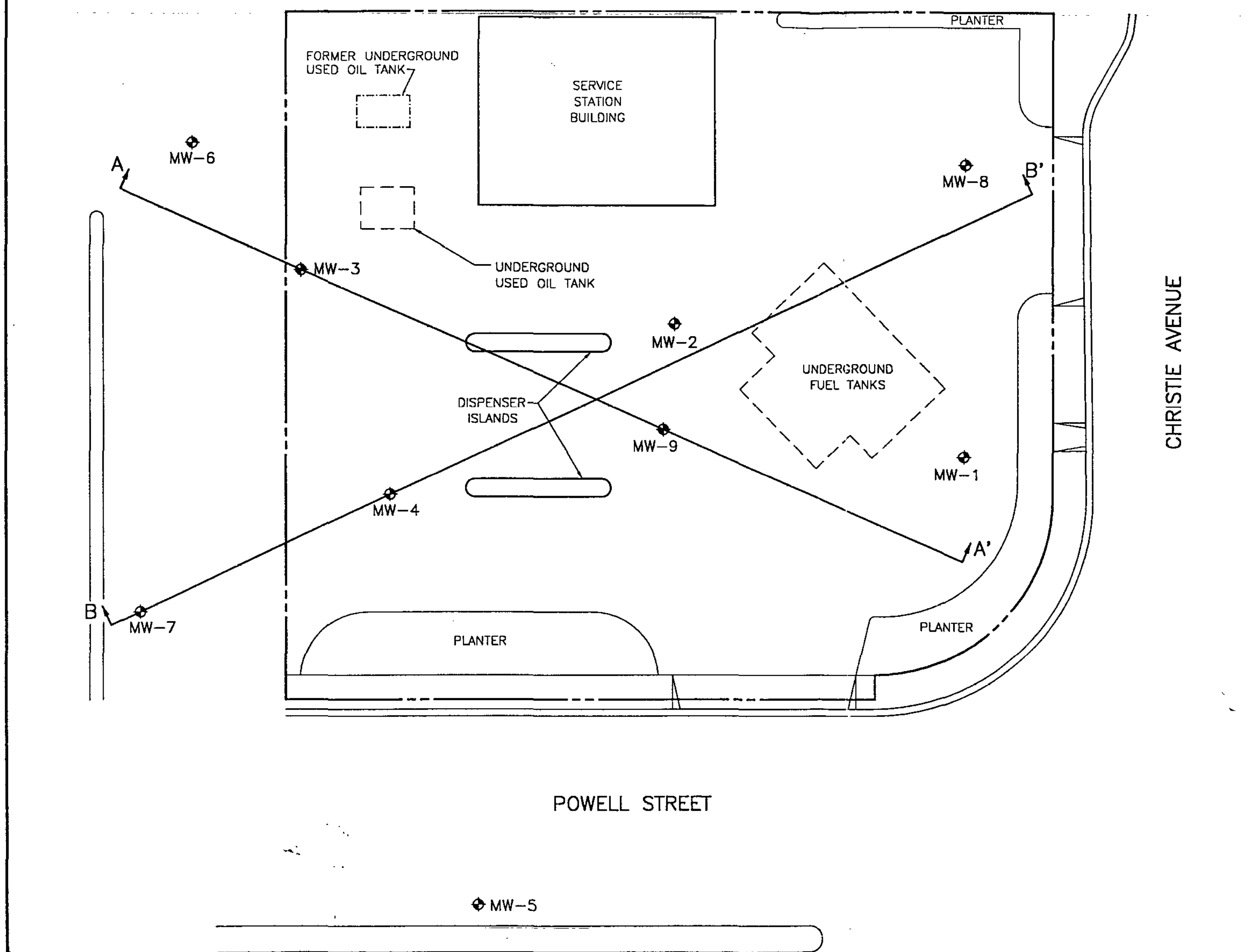
WELL SURVEY DATA

for TOSCO sites managed by SECOR

Cost Center	Distance From Site (ft)	Direction From Site	Well Name	Well Status	Well Use	Well Screen Interval(s)	Well Depth (ft)	Survey Year	Info Source	Station GW Gradient	Most Down Gradient Well MtBE Conc. (ppb)	Comments
257001	--	--	--	--	--	--	--	--	--	--	--	No well search completed
257124	>1,000	--	--	--	--	--	--	2002	G	NW	8,300	--
2705735	--	--	--	--	--	--	--	--	--	--	--	No well search completed
257316	>1,000	--	--	--	--	--	--	2002	G	--	--	--

Well Status Codes		Well Use Codes		Information Source Codes			
A = Active		A = Agriculture / Irrigation	O = Observation	G = Geotracker		C = City or Public Works	
I = Inactive		I = Industrial / Dairy	M = Municipal	R = Regulatory Agency		S = State Well Database (not Geotracker)	
D = Destroyed / Abandoned		T = Test	D = Domestic	W = Water Purveyor		D = Door to Door Survey	

ATTACHMENT D
HISTORIC CROSS-SECTIONS
76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California



N

0 20 40
SCALE IN FEET

LEGEND

GROUNDWATER MONITORING WELL

A–A' LINE OF HYDROGEOLOGIC CROSS SECTION

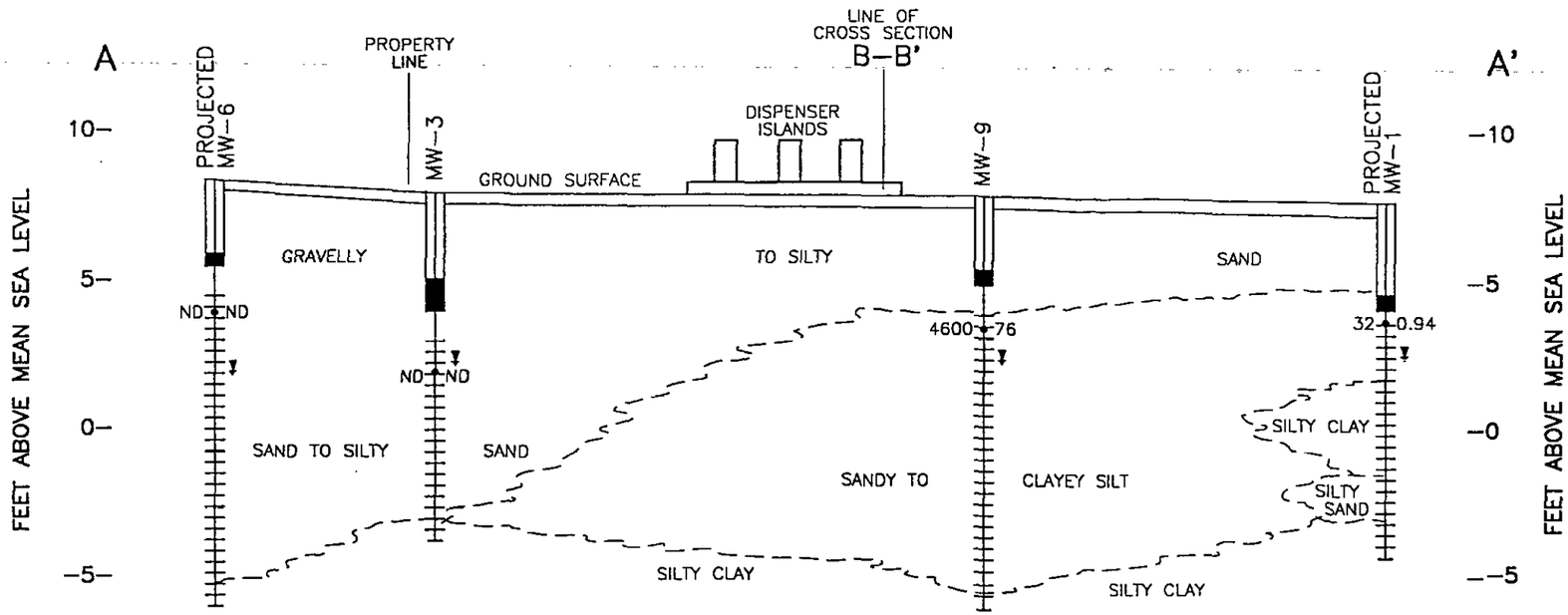
FIGURE 2

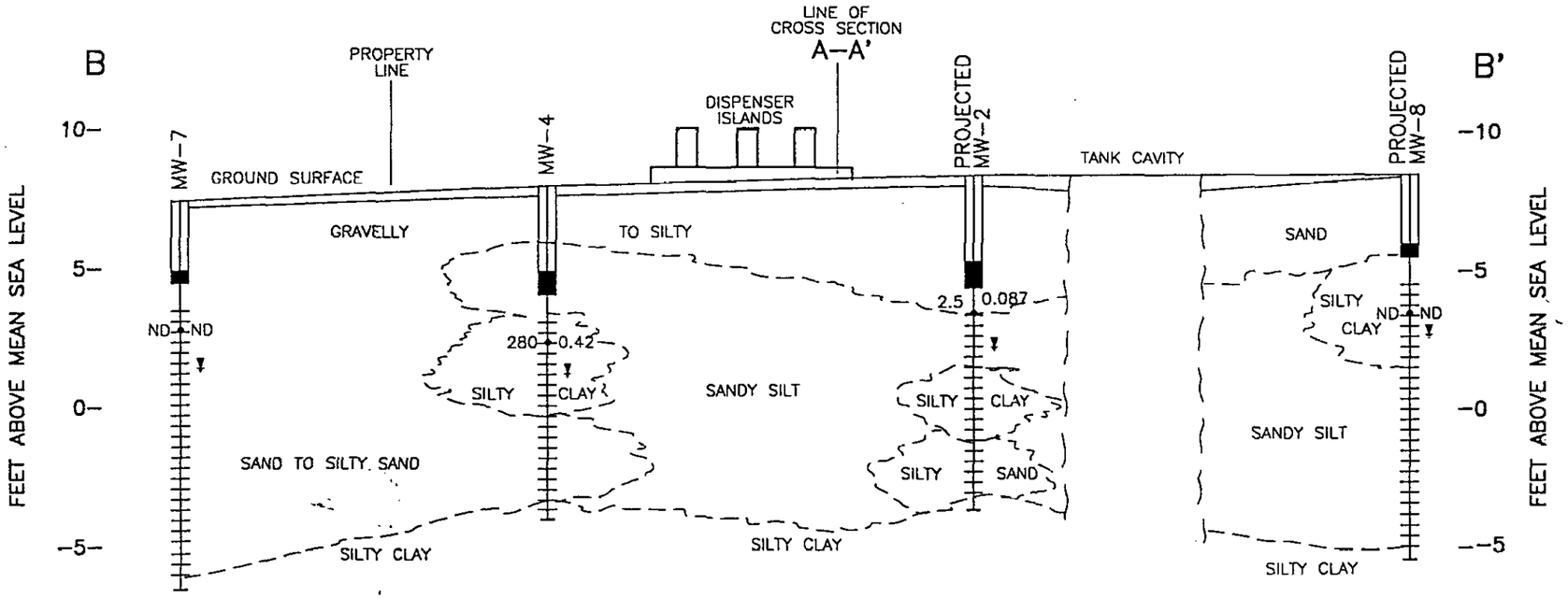
SITE PLAN

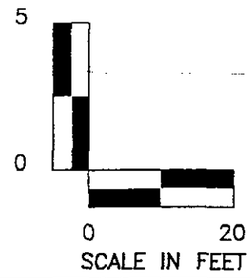
BP OIL SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

PROJECT NO. 10-061

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA







LEGEND

- GROUNDWATER MONITORING WELL SHOWING SEAL, BENTONITE AND SCREENED INTERVAL
- GEOLOGIC CONTACT
- 4600 • SOIL SAMPLE AND TOTAL PETROLEUM HYDROCARBONS AS GASOLINE CONCENTRATION IN PARTS PER MILLION
- • 76 SOIL SAMPLE AND BENZENE CONCENTRATION IN PARTS PER MILLION
- ND NOT DETECTED ABOVE REPORTED DETECTION LIMIT
- ▼ GROUNDWATER ELEVATION AS MEASURED ON OCTOBER 12, 1993

FIGURE 5

HYDROGEOLOGIC CROSS SECTIONS A–A' AND B–B'

BP OIL SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

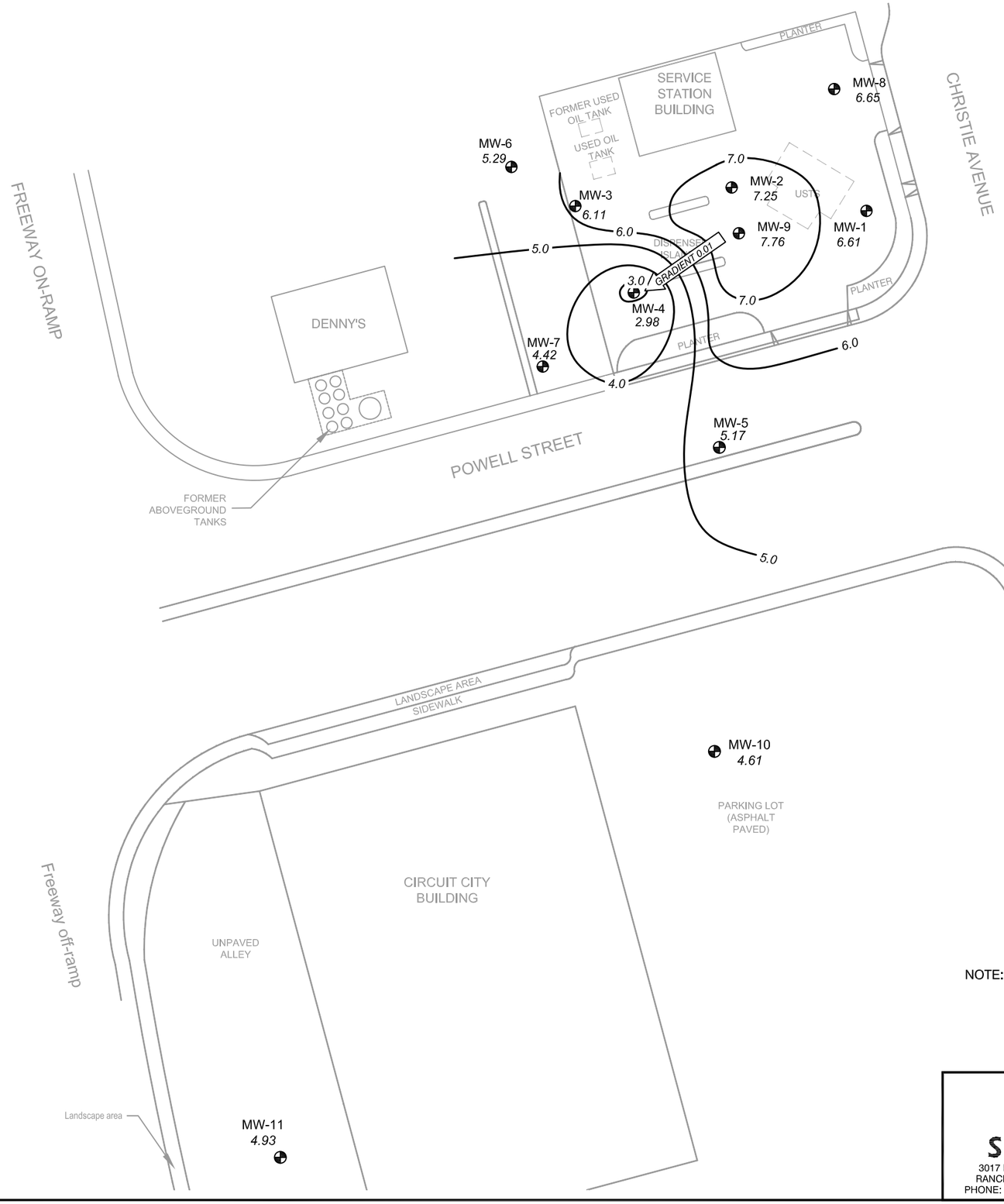
PROJECT NO. 10–061

ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

10061H---.DWG 12-30-93 RKR 1=1

ATTACHMENT E
FIGURES FROM FIRST QUARTER 2007 QUARTERLY MONITORING REPORT

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California



LEGEND:

- GROUNDWATER MONITORING WELL
- GRADIENT — APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/FT)
- 0.0 — GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL)
- 0.0 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

N

0 50 100

SCALE IN FEET

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

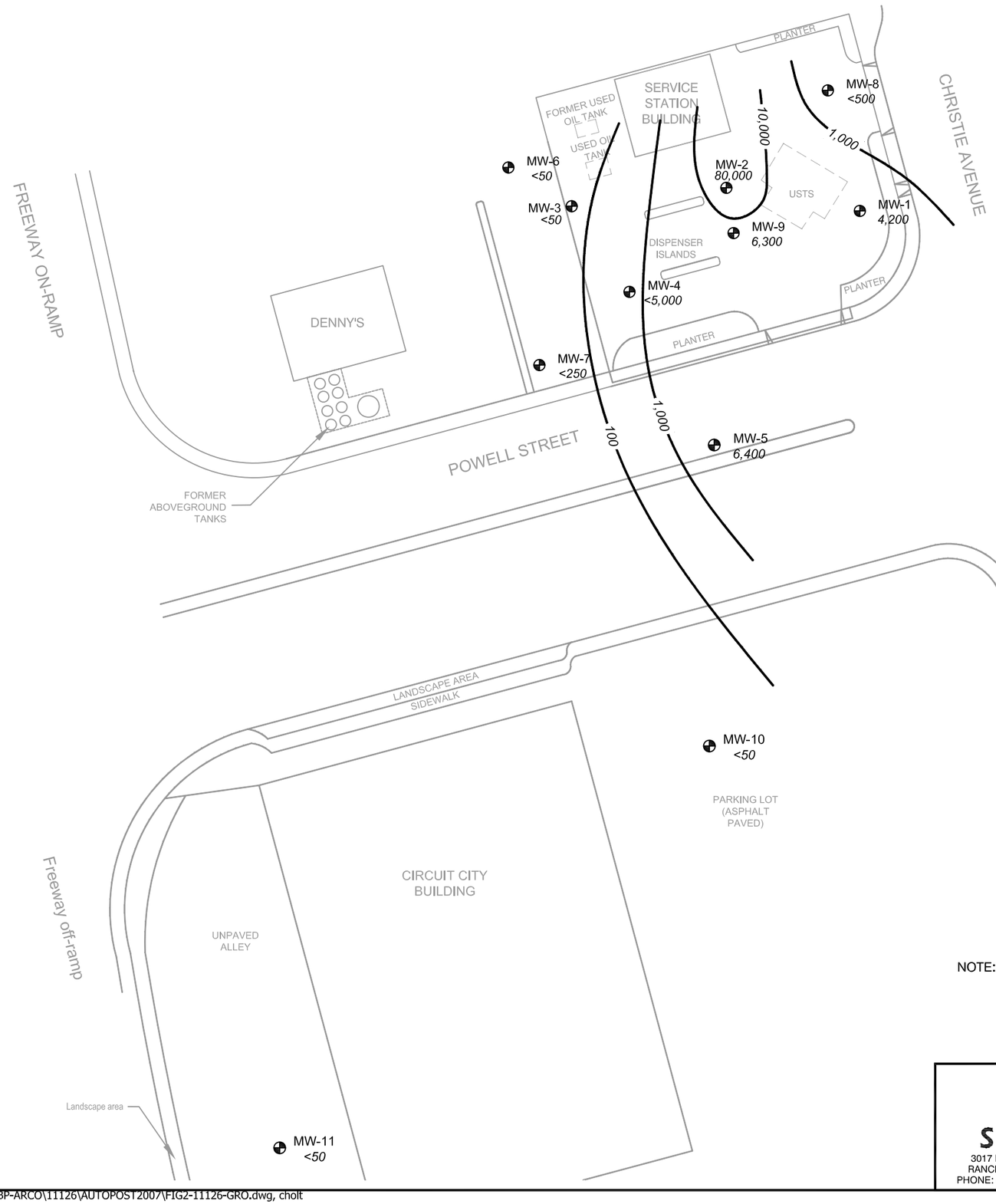
FOR: 76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP MARCH 1, 2007

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.01.0436 77CP.01731.04	DWR	KC	BS	3/16/07

Q:\CADD-77\BP-ARCO\11126\AUTOPOST2007\FIG1-11126-GW ELEV.dwg, cholt



LEGEND:

- GROUNDWATER MONITORING WELL
- 0.0 GRO ISOCONCENTRATION CONTOUR
- 4,200 GRO CONCENTRATION (µg/L)
- GRO GASOLINE RANGE ORGANICS
- µg/L MICROGRAMS PER LITER

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

N

0 50 100

SCALE IN FEET

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

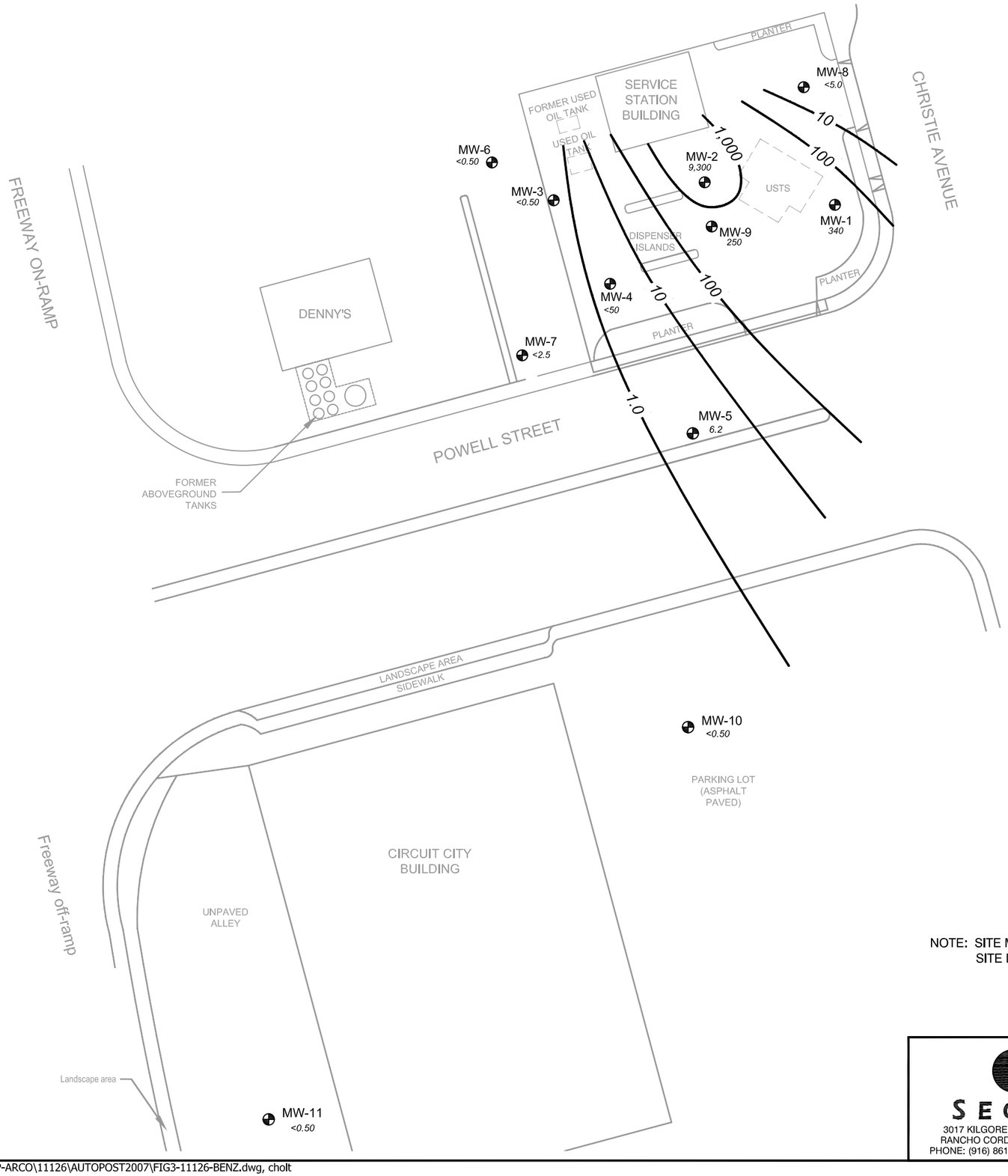
FOR:
76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

GRO ISOCONCENTRATION CONTOUR MAP MARCH 1, 2007

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.01.0436 77CP.01731.04	DWR	KC	BS	3/16/07

Q:\CADD-77\BP-ARCO\11126\AUTOPOST2007\FIG2-11126-GRO.dwg, cholt



LEGEND:

MW-1 ⊕	GROUNDWATER MONITORING WELL LOCATION
0.0	BENZENE ISOCONCENTRATION CONTOUR
250	BENZENE CONCENTRATION (µg/L)
µg/L	MICROGRAMS PER LITER

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

N

0 50 100

SCALE IN FEET

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

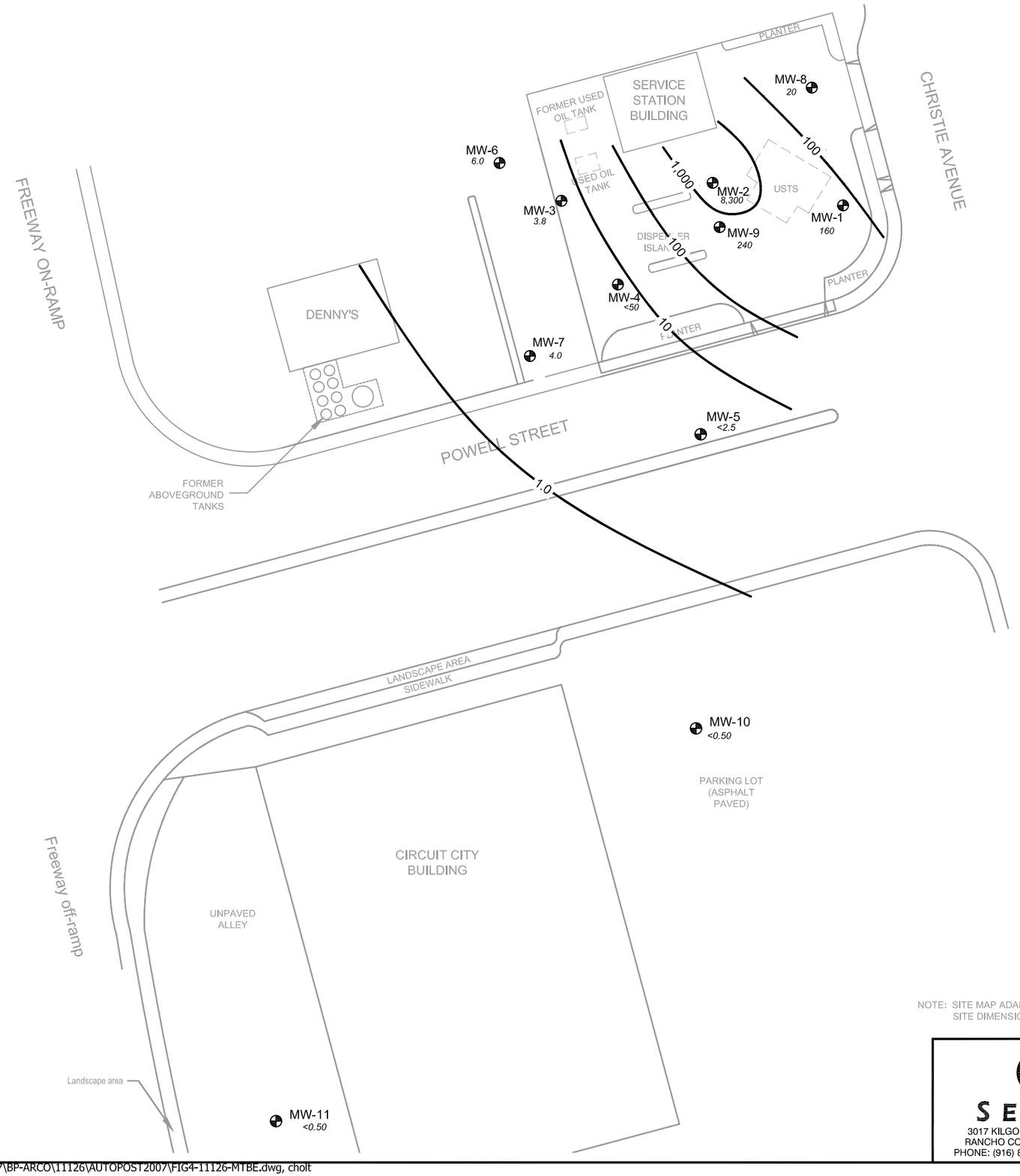
FOR:
76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

BENZENE ISOCONCENTRATION CONTOUR MAP MARCH 1, 2007

FIGURE: **3**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.01.0436 77CP.01731.04	DWR	KC	BS	3/16/07

Q:\CADD-77\BP-ARCO\11126\AUTOPOST2007\FIG3-11126-BENZ.dwg, cholt



LEGEND:

MW-1 ⊕	GROUNDWATER MONITORING WELL LOCATION
0.0	MTBE ISOCONCENTRATION CONTOUR
20	MTBE CONCENTRATION (µg/L)
MtBE	METHYL TERTIARY BUTYL ETHER
µg/L	MICROGRAMS PER LITER

N

0 50 100

SCALE IN FEET

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

SECOR
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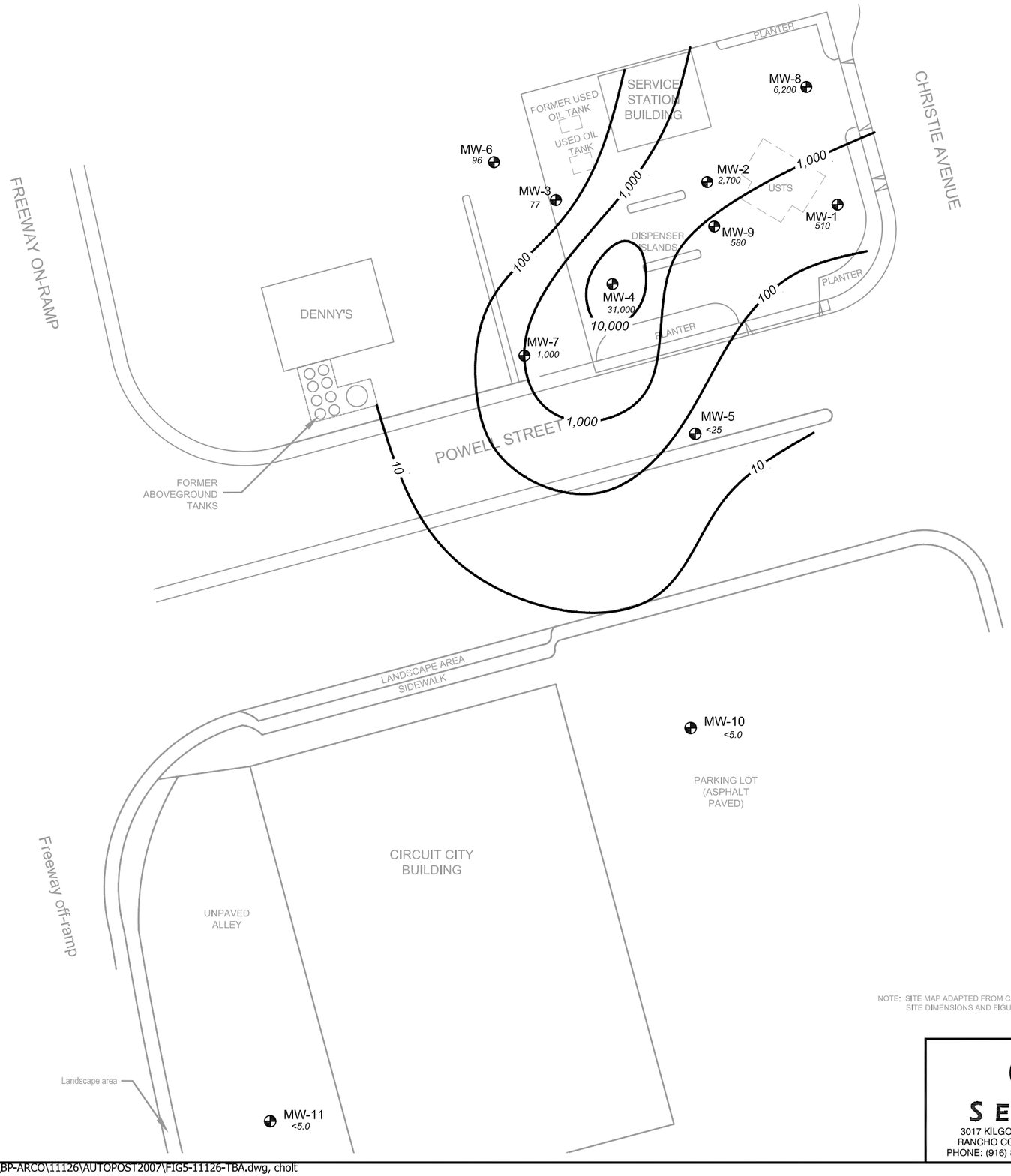
FOR:
76 (FORMER BP)
SERVICE STATION NO.
11126 1700 POWELL STREET
EMERYVILLE, CALIFORNIA

MTBE ISOCONCENTRATION CONTOUR MAP MARCH 1, 2007

FIGURE: **4**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.01.0436 77CP.01731.04	DWR	KC	BS	3/16/07

Q:\CADD-77\BP-ARCO\11126\AUTOPOST2007\FIG4-11126-MTBE.dwg, cholt



LEGEND:

MW-1 ⊕	GROUNDWATER MONITORING WELL
0.0	TBA ISOCONCENTRATION CONTOUR
96	TBA CONCENTRATION (µg/L)
TBA	TERTIARY BUTYL ALCOHOL
µg/L	MICROGRAMS PER LITER

N

0 50 100

SCALE IN FEET

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CALIFORNIA
PHONE: (916) 861-0400/861-0430 (FAX)

FOR:
76 (FORMER BP)
SERVICE STATION NO. 11126
1700 POWELL STREET
EMERYVILLE, CALIFORNIA

TBA ISOCONCENTRATION CONTOUR MAP MARCH 1, 2007

FIGURE: **5**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
77BP.11126.01.0436 77CP.01731.04	DWR	KC	BS	3/16/07

Q:\CADD-77\BP-ARCO\11126\AUTOPOST2007\FIG5-11126-TBA.dwg, cholt

ATTACHMENT F
DISSOLVED HYDROCARBON CONCENTRATION TREND GRAPHS

76 (Former BP) Service Station No. 11126
1700 Powell Street
Emeryville, California

Figure F-1
Dissolved Hydrocarbon Concentrations Trends - MW-1
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

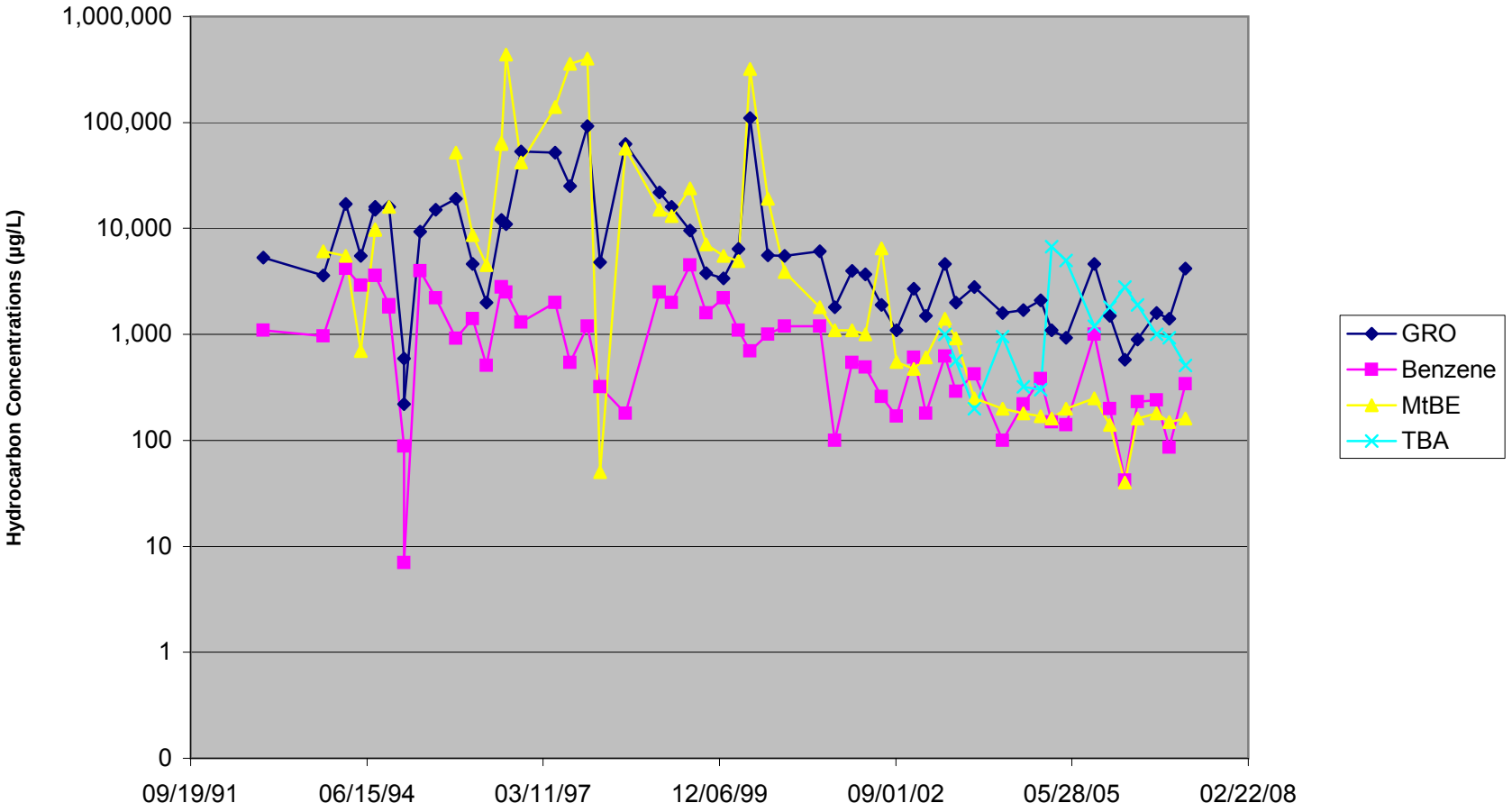


Figure F-2
Dissolved Hydrocarbon Concentrations Trends - MW-2
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

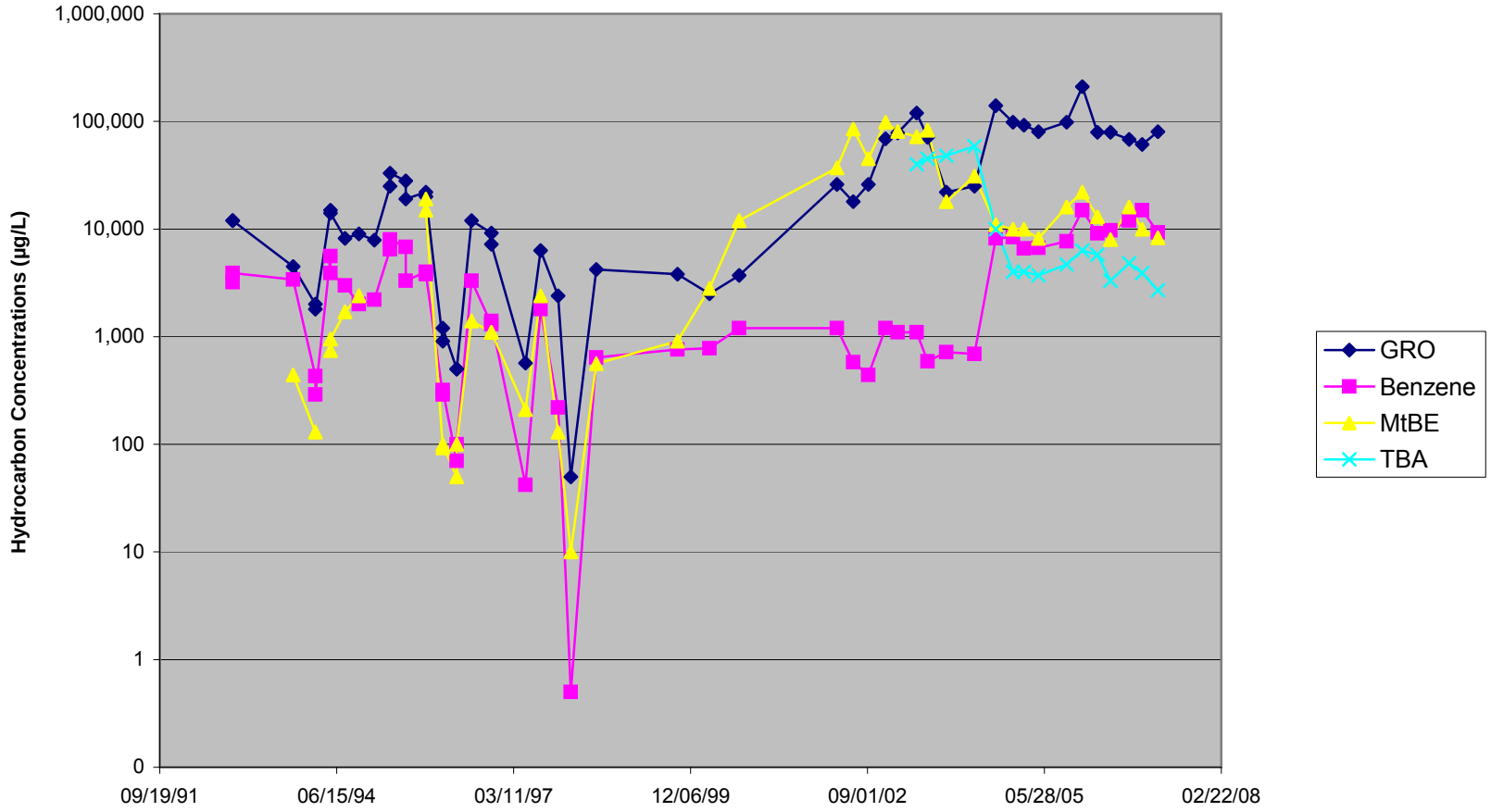


Figure F-3
Dissolved Hydrocarbon Concentration Trends MW-3
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, California

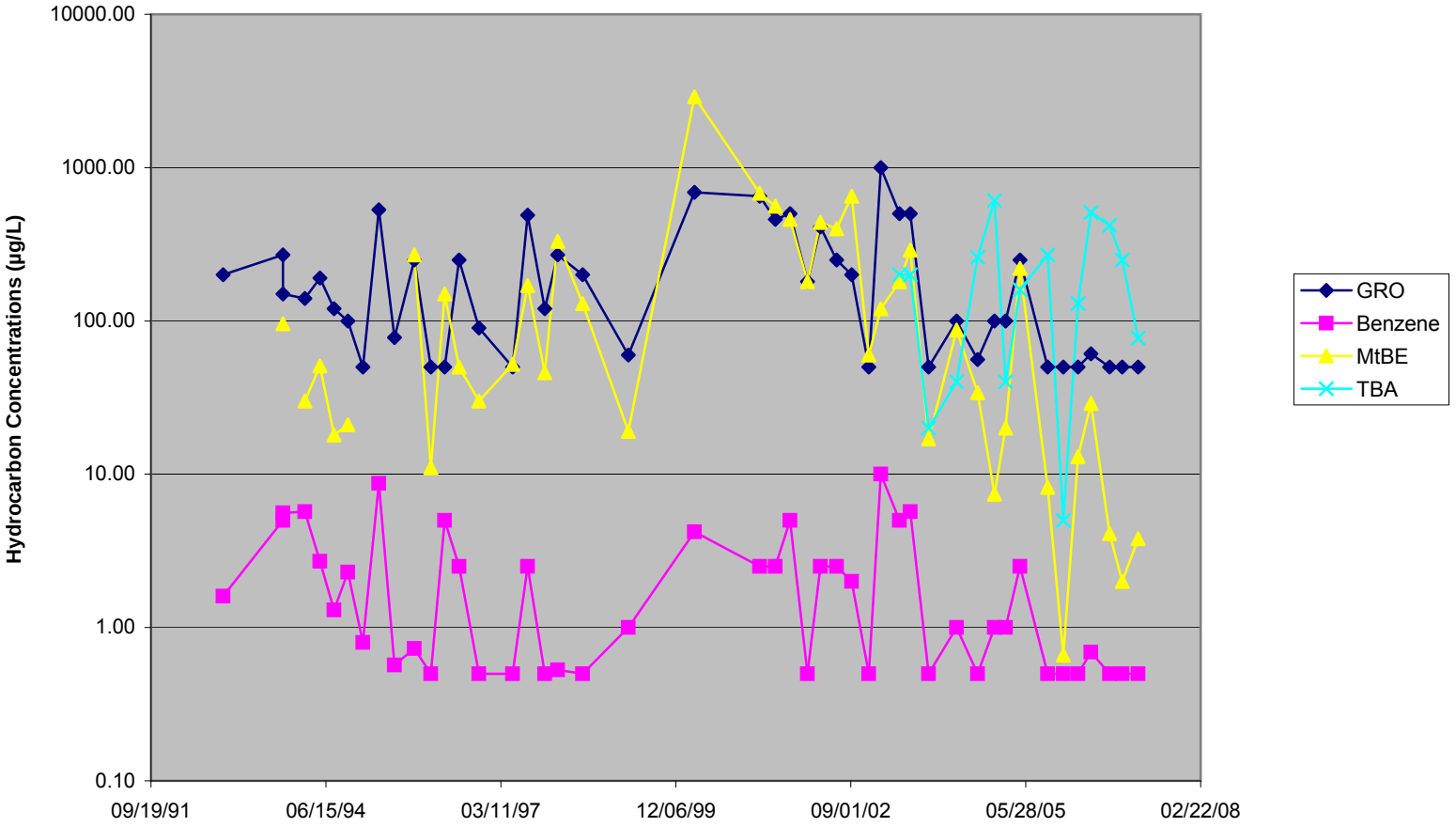


Figure F-4
Dissolved Hydrocarbon Concentrations Trends - MW-4
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

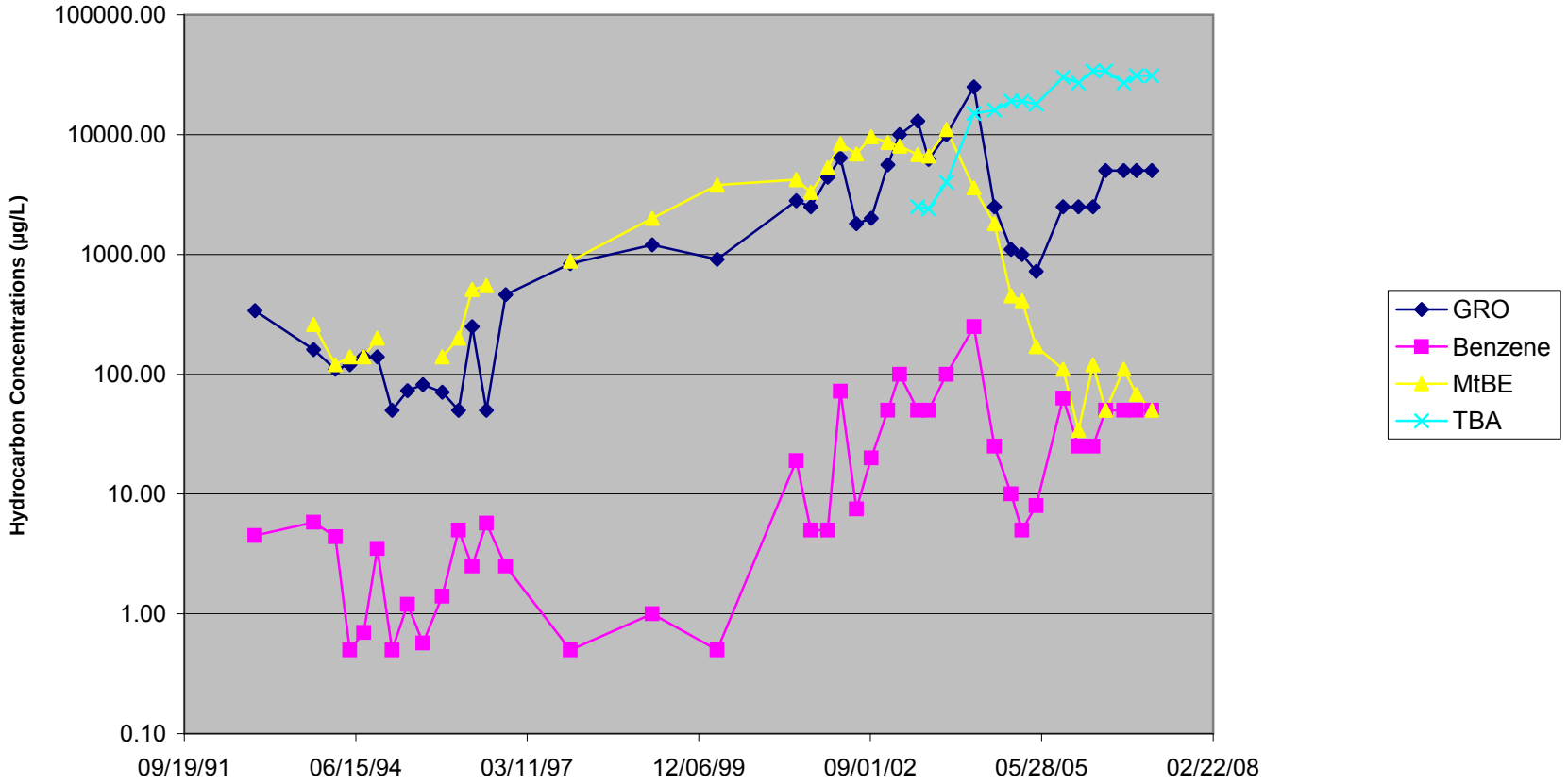


Figure F-5
Dissolved Hydrocarbon Concentrations Trends - MW-5
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

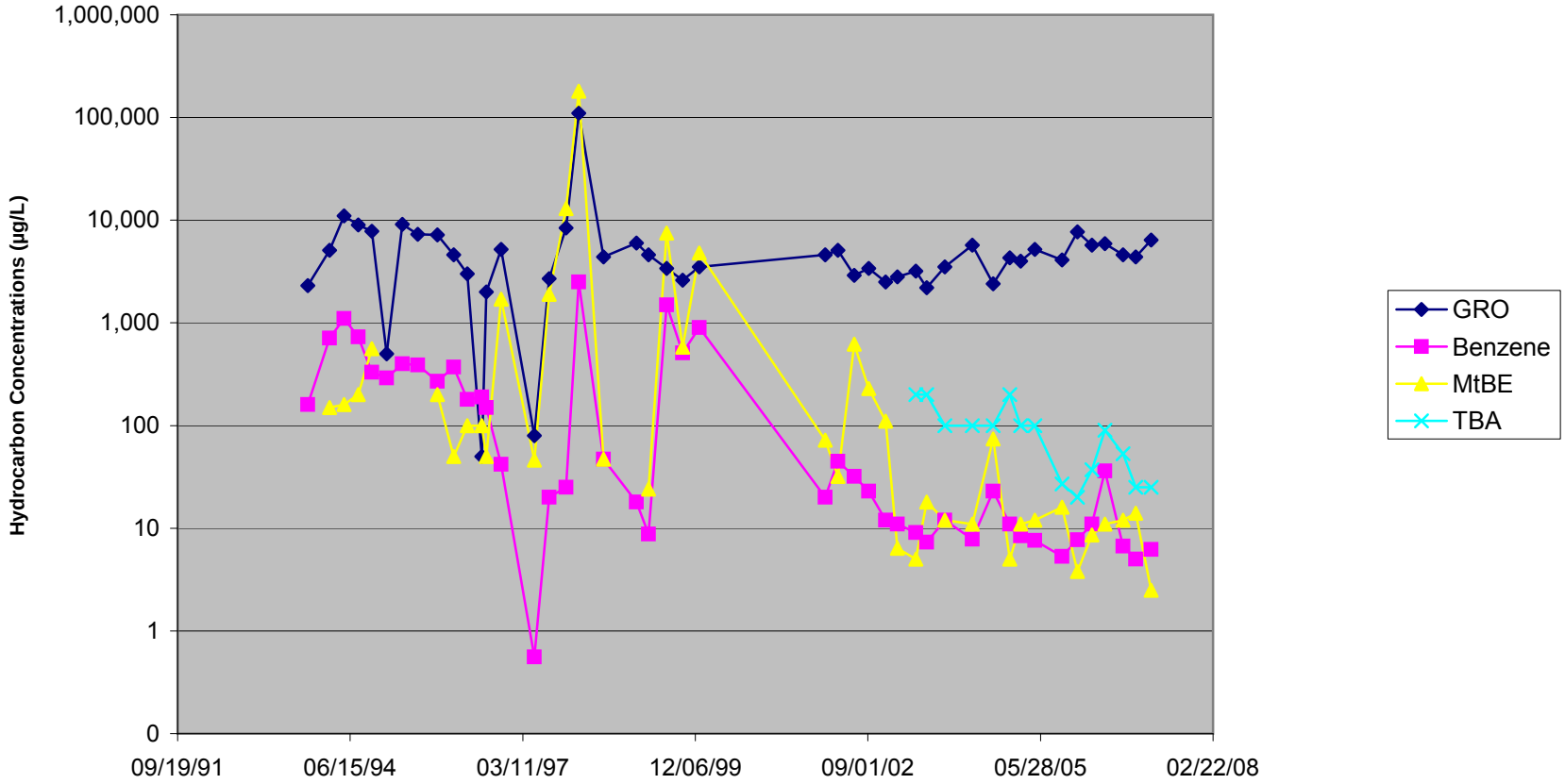


Figure F-6
Dissolved Hydrocarbon Concentrations Trends - MW-6
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

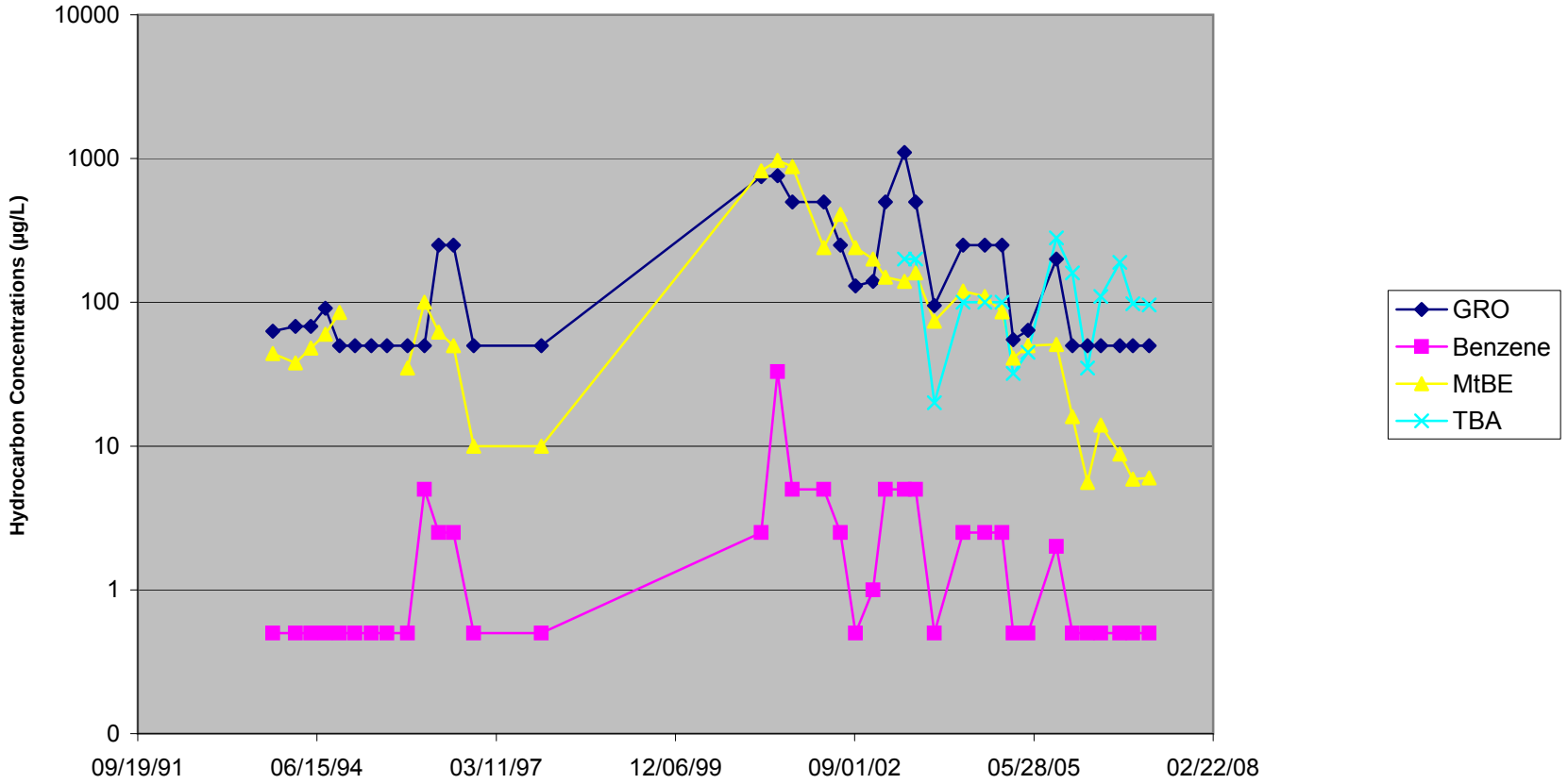


Figure F-7
Dissolved Hydrocarbon Concentrations Trends - MW-7
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

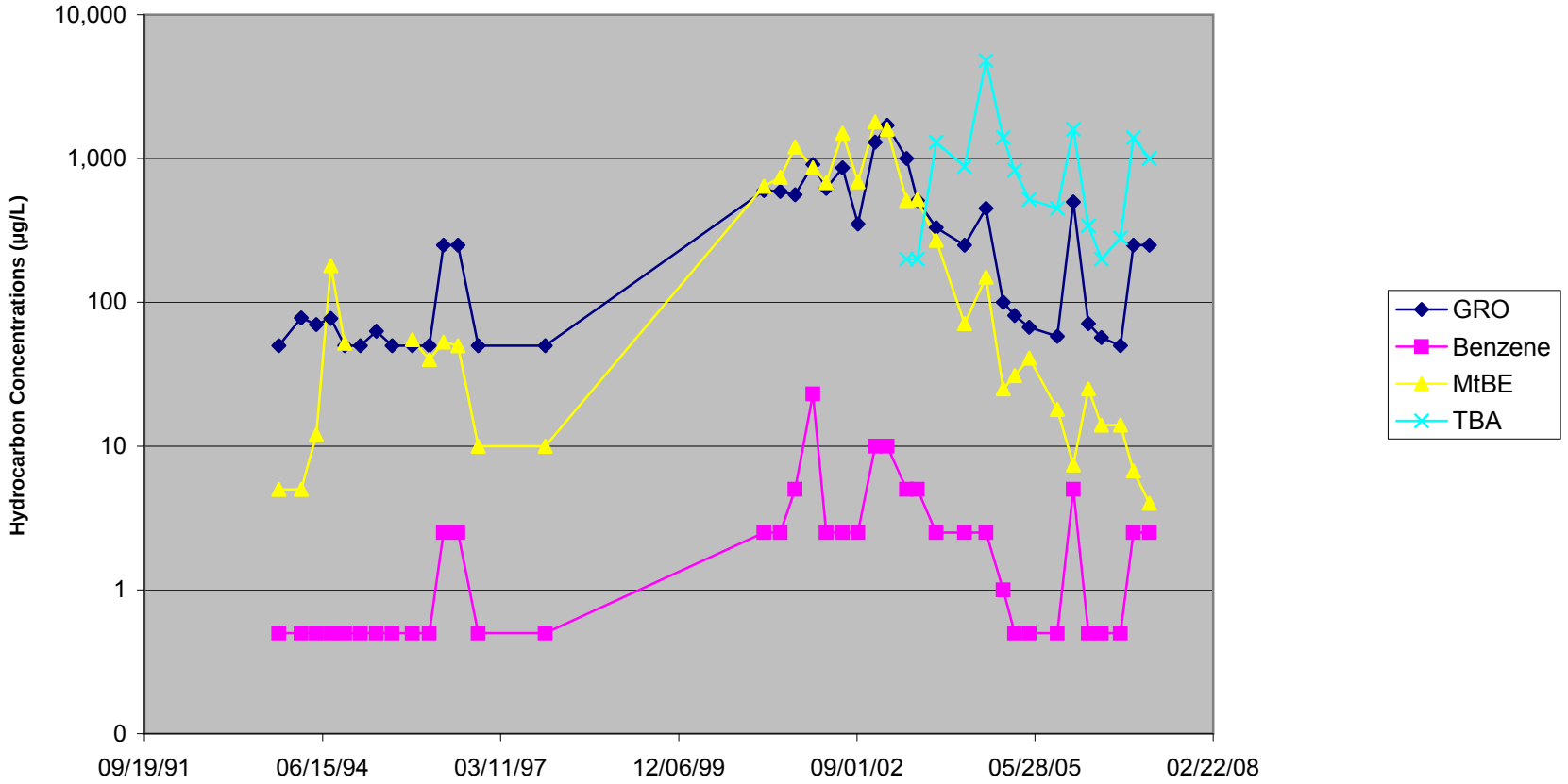


Figure F-8
Dissolved Hydrocarbon Concentrations Trends - MW-8
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA

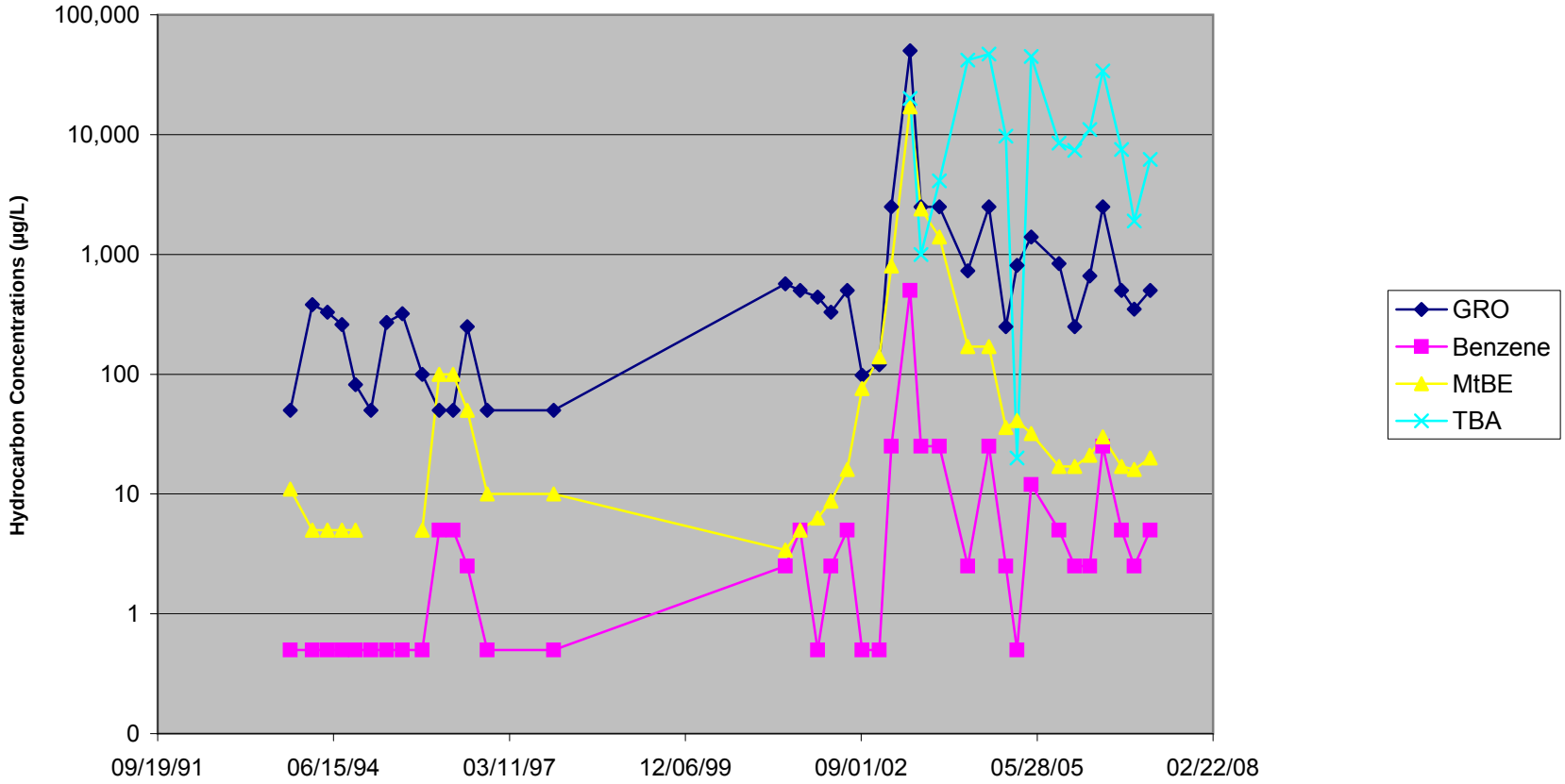


Figure F-9
Dissolved Hydrocarbon Concentrations Trends - MW-9
76 (Former BP) Service Station No. 11126
1700 Powell Street, Emeryville, CA