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April 1, 2008

Mr. Steven Plunkett
Alameda County
Department of Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: SLIC Case No. RO0002948, 557 Merrimac Street, Oakland, CA

Dear Mr. Plunkett:

SOMA's "Soil, Soil Vapor and Groundwater Investigation" report for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

cc: Mr. Noel Yi w/report enclosure

Soil, Soil Vapor and Groundwater Investigation Report

557 Merrimac Street
Oakland, California

April 1, 2008

Project 3022

Prepared for
Mr. Noel Yi
2756 Alvarado Street #A-B
San Leandro, California 94577

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CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Noel Yi, owner of the property located at 557 Merrimac Street, Oakland, California. The report was prepared in accordance with SOMA's Workplan entitled "Workplan to Conduct Additional Soil and Groundwater Investigation Around Former Underground Storage Tanks at 557 Merrimac Street, Oakland, California," dated October 3, 2007, and in compliance with Alameda County Health Care Services Agency correspondence dated December 14, 2007, granting approval of the Workplan.

Mansour Sepehr, Ph.D., P.E.
Principal Hydrogeologist

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1. INTRODUCTION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Noel Yi, owner of the property located at 557 Merrimac Street, Oakland, California (the Site, Figure 1). The report was prepared in accordance with SOMA's Workplan entitled "Workplan to Conduct Additional Soil and Groundwater Investigation Around Former Underground Storage Tanks at 557 Merrimac Street, Oakland, California," dated October 3, 2007, and in compliance with the Alameda County Health Care Services Agency (ACHCSA) correspondence dated December 14, 2007, granting approval of the Workplan.

This report was prepared to further evaluate the presence of petroleum hydrocarbons in soil and groundwater and determine whether existing chemicals in soil and groundwater pose an unacceptable human health risk to future residents of the property. This report also includes a summary of Site history, constituents of concern (COCs), their representative residual concentrations and known lateral and vertical extent of petroleum hydrocarbon contamination as compared to the cleanup levels, a preferential flow pathway study, and recommendations for Site closure.

The Site was formerly used as a gasoline service station. The property consists of a rectangular-shaped parcel of approximately 14,162 square feet and contains a former service station building, currently vacant and used for storage of the owner's belongings. Areas around the former underground storage tank (UST) pit and former waste oil tank pit are patched with concrete. The concrete foundations for the former pump island are still visible. Three groundwater monitoring wells formerly present at the Site have been decommissioned under the supervision of ACHCSA. Figure 2 shows locations of the decommissioned groundwater monitoring wells.

This report presents the current status of Site environmental conditions and further characterizes the extent of soil and groundwater contamination beneath the Site.

1.1 Site Background

The Site is a closed Leaking Underground Storage Tank (LUST) case. In January 1995, four USTs were removed from the Site, including one 6,000-gallon, one 8,000-gallon and one 10,000-gallon gasoline UST, and one 500-gallon waste oil UST. The removals were witnessed by the ACHCSA. Holes were reported in one of the fuel USTs and in the waste oil UST. Following the UST removals, 17 soil samples were collected from UST pit excavations and stockpiled soils and witnessed by the ACHCSA (sample locations shown in Figure 2). In addition to the 17 samples, three soil samples were collected from beneath the dispenser islands. A groundwater sample was collected from the UST pit.

Results of laboratory analyses showed non-detectable levels for only six soil samples of total petroleum hydrocarbons as gasoline (TPH-g), and for BTEX (benzene, toluene, ethylbenzene and total xylenes). The three samples collected from beneath the dispenser islands yielded largely non-detectable results. The groundwater sample collected from the excavation contained 910 µg/L TPH-g, and BTEX constituents ranging from 6.9 µg/L to 19 µg/L. The soil sample collected from beneath the waste oil tank contained 8.1 mg/kg TPH-g, 74 mg/kg total petroleum hydrocarbon as diesel (TPH-d), and BTEX constituents ranging up to 92 mg/kg xylenes. Oil and grease was detected at 2,500 mg/kg. The LUFT five metals (calcium, chromium, lead, nickel, and zinc) were detected at background concentrations. Chlorinated hydrocarbons were non-detectable.

In February 1995, under supervision of ACHCSA, the waste oil tank was over-excavated. The excavated area was 25' x 25' x 9' and during this process 250 cubic yards of soil were excavated and disposed of off-site at the appropriate waste disposal facility. Furthermore, another 100 cubic yards generated during the gasoline tank removal activities were stockpiled on-site; at this time it is unclear whether said soil was reused or disposed of at the appropriate facility. Four soil samples from sidewalls yielded non-detectable levels of petroleum hydrocarbons. However, a soil sample collected from the bottom of the excavation just above water table contained elevated levels of petroleum hydrocarbons.

Due to presence of petroleum hydrocarbons in soil samples collected from the bottom of the excavation, per ACHCSA's request three groundwater monitoring wells were installed at the Site (Figure 2). Following groundwater monitoring well installations, four quarterly groundwater monitoring events from July 1995 through June 1996 were conducted at the Site. Results indicated non-detectable levels of petroleum hydrocarbons in groundwater with one exception in the March 1996 groundwater monitoring event, when TPH-g and TPH-d were detected at 2,300 µg/L and 1,100 µg/L, respectively, at MW-3 located downgradient of the USTs. In addition, a groundwater sample collected from MW-3 contained benzene, ethylbenzene and xylenes concentrations at 30 µg/L, 140 µg/L, and 22 µg/L, respectively.

In a letter dated January 29, 1997, "no further action" (NFA) status was granted by the ACHCSA. In the Case Closure Summary that accompanied this letter, the remaining residual hydrocarbons in soil are stated as 120 mg/kg of TPH-g; 420 mg/kg of TPH-d; 6,800 mg/kg of total oil and grease; and BTEX constituents ranging between 0.032 mg/kg and 0.140 mg/kg. Residual concentrations of dissolved-phase hydrocarbons in groundwater are stated as 150 µg/L of TPH-g, 58 µg/L of TPH-d, 0.73 µg/L of ethylbenzene, and below environmental screening levels (ESLs) of chromium, nickel, and zinc.

The Case Closure Summary specifically states that the reason for Site case closure included removal of the source of contaminants, adequate characterization of the Site, absence of sensitive environmental receptors, and absence of significant human health risk in using the site as commercial development. It was noted that agency notification is required if there is a proposal for change in land use or site activity, or if basements to buildings are to be constructed.

The property owner, Mr. Noel Yi, is planning to convert the Site into a residential dwelling consisting of a 40-unit condominium development with an underground parking garage. Figure 2A shows the footprint of proposed condominium development as well as the surrounding residential properties. There is a potential exposure pathway for volatile organic compounds (VOCs) to impact indoor air quality inside the underground parking garage. As such, in early 2007, the owner informed ACHCSA about his conversion plan and retained PIERS Environmental Services, Inc. (PIERS) to conduct additional investigations to evaluate the current status of environmental conditions at the Site. On February 9, 2007, PIERS drilled two exploratory soil borings, designated B1 and B1A, within 1.5 feet of MW-3. Mr. Jesse Kupers of the Oakland Fire Department witnessed the drilling and sampling collection activities. During drilling no evidence of odor or staining was noted. A soil sample from 11.5 feet below ground surface (bgs) was collected, which would correspond to the area directly below the slab of the proposed parking garage floor. Based on PIERS field observation, a hydrocarbon-stained interval that corresponds with the first water-bearing zone was encountered between 9.25 and 10.8 feet bgs. A soil sample from approximately 10.3 feet bgs was also retained from this interval. Based on PIERS observation, groundwater stabilized at 7.8 feet bgs. A groundwater sample was collected from the borehole using a small-diameter vinyl tubing fitted with a chuck ball tip to surge the water to the surface. No odor or sheen was observed in the water sample.

Soil and groundwater samples were analyzed for TPH-g, TPH-d, BTEX and methyl tertiary-butyl ether (MtBE) using EPA Methods 8015 and 8020.

Soil samples collected from 10.3 feet bgs contained 20 mg/kg TPH-g, 0.065 mg/kg toluene, and 0.0081 mg/kg xylenes. Soil samples collected from 11.5 feet depth did not contain petroleum hydrocarbons above the laboratory-detection limit. The grab groundwater sample collected from the same borehole contained 2,300 µg/L of TPH-d, and 11,000 µg/L of motor oil.

1.2 Scope of Work

The purpose of this investigation was to delineate the extent of soil and groundwater chemical plume and verify the concentrations of VOCs in the vadose zone at the Site. The data was used to evaluate the impact of the residual VOC concentrations on the indoor air inside the hypothetical future

parking garage at the Site. The combination of the current and historical investigation data was used to provide a better understanding of subsurface conditions and determine Site eligibility for NFA status under the residential exposure scenario.

The scope of work included the following tasks:

- Task 1: Permit acquisition and preparation of a Site Health and Safety Plan
- Task 2: Advancement of boreholes using direct push technology (DPT) and collection of soil and groundwater samples
- Task 3: Soil gas survey
- Task 4: Laboratory analysis
- Task 5: Preferential flow pathway study
- Task 6: Report preparation

2. SOIL AND GROUNDWATER INVESTIGATION

2.1 Introduction

The Remedial Action Completion Certification, dated January 29, 1997, issued by ACHCSA indicated that residual hydrocarbons were present in soil at up to 120 mg/kg of TPH-g, 420 mg/kg of TPH-d, and residual hydrocarbon contamination remained in groundwater at concentration of up to 150 µg/L for TPH-g, and 58 µg/L for TPH-d. Furthermore, four quarterly groundwater monitoring events conducted at the Site, indicated non-detectable levels of petroleum hydrocarbons in groundwater with one exception in the March 1996 groundwater monitoring event, when TPH-g and TPH-d were detected at 2,300 µg/L and 1,100 µg/L, respectively at MW-3 located downgradient of USTs. In addition, groundwater sample collected from MW-3 contained benzene, ethylbenzene and xylenes concentrations at 30 µg/L, 140 µg/L, and 22 µg/L, respectively. Benzene concentration at 30 µg/L exceeded Tier 1 Risk Based Screening Level (RBSL) “groundwater to indoor air” pathway, for residential exposure scenario at 7 µg/L.

To evaluate whether the existing chemical concentrations in soil and groundwater are harmful to human health under the residential exposure scenario, SOMA drilled eight soil borings and collected soil and groundwater samples for laboratory analysis, and advanced four soil vapor sampling boreholes and collected soil vapor samples.

2.2 Permit Acquisition, Health and Safety Plan Preparation, and Subsurface Utility Clearance

Prior to commencing field activities, SOMA obtained a drilling permit (No. W2008-0052) from the Alameda County Public Works Agency (ACPWA). The permit is included in Appendix A.

Written drilling notifications and grouting inspection requests were emailed to ACHCSA and ACPWA, on February 11, 2008.

On February 4, 2008 all proposed drilling locations were marked with washable white paint. To protect the field crew from underground utility hazards, on February 5, 2008, SOMA contacted Underground Service Alert (USA ticket No 040208), to allow the members of USA to provide information about the location, mark or stake the horizontal path, provide clearance or advise on clearance for facilities that they own. On February 14, 2008, following USA clearance, SOMA retained a private utility locator to survey the proposed drilling areas and locate any additional subsurface conduits.

Before initiating field activities, SOMA prepared a site-specific Health and Safety Plan (HASP). The HASP is a requirement of the Occupational Safety and Health Administration (OSHA), "Hazardous Waste Operation and Emergency Response" guidelines (29 CFR 1910.120) and the California Occupational Safety and Health Administration (Cal/OSHA) "Hazardous Waste Operation and Emergency Response" guidelines (CCR Title 8, section 5192). The HASP is designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. The HASP establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans. The HASP was reviewed and signed by field staff and contractors prior to beginning field operations at the Site.

2.3 Advancement of Boreholes and Sample Collection

On February 14 and 15, 2008, under SOMA's oversight, Fisch Drilling advanced eight soil boreholes (B-1 through B-8), using direct push drilling method. The direct-push borings were advanced to approximately 20 to 26 feet bgs (Figure 3). Each boring was continuously cored, and the cored soils were described in accordance with the Unified Soil Classification System (USCS). Boring logs are included in Appendix B. In addition, the cored soils were checked for hydrocarbon odors, visual staining, liquid-phase hydrocarbons (free product), and screened using a photo-ionization detector (PID). PID readings were noted on the boring logs. The only elevated PID reading was noted in boring B-8 at approximately 10 feet bgs. At each boring location, two soil samples were collected from the top of water table (capillary fringe area) and one to two below the water table for laboratory analyses, with the exception of boring B-5. Since

boring B-3 was advanced to a greater depth (26 feet bgs) an additional sample was collected at 25 feet bgs and put on hold pending results for the shallower soil sample. Furthermore, once each boring was advanced one grab groundwater sample was collected using 5-foot screen. Groundwater sample collection depths are illustrated on geologic cross-sections AA' and BB'. Boring B-8 did not yield any water at the time of the advancement, so a temporary well casing was installed to allow for groundwater collection. A groundwater sample from the said boring was collected on February 19, 2008.

Following soil and groundwater sampling, all boreholes were decommissioned according to Cal/EPA guidelines with a neat-cement grout mixture. To prevent bridging and help ensure a good seal, grout was kept under pressure during emplacement. This was achieved by use of a tremie pipe to feed grout into the bottom of the hole. At all times, the opening of the tremie pipe was submerged several feet below the level of grout in the hole; the amount of submergence was dependent on the amount of pressure needed to ensure adequate penetration of grout into the formation.

Waste generated during boring activities was temporarily stored on the Site pending transportation to an approved disposal/recycling facility.

2.3.1 Site Geology

Each boring was continuously cored, and the cored soils were described in accordance with the USCS. Based on the soil borings, the Site is underlaid with unconfined sediments consisting primarily of inorganic clays up to approximately 9 feet bgs, with the exception of the fill material in the area of former UST over-excavation. The lower portion of the study area from 9 to 24 feet bgs is a water bearing zone consisting primarily of interbedded clayey sands, sands and gravelly clays. Furthermore, the interbedded sequence is underlain by a clayey layer, visible in borings B-5 and B-8. Boring logs are included in Appendix B. Figure 3 shows locations of geologic cross sections (AA' and BB') for the Site; Figures 4 and 5 show geologic cross sections AA' and BB'. The geologic cross-sections illustrate lateral and vertical extent of soil lithology, location of the former UST pit, encountered and stabilized groundwater, and soil and groundwater analytical results.

2.3.2 Soil Vapor Survey

On February 15, 2008, under SOMA's oversight, Fisch Drilling advanced four soil gas sampling boreholes (SV1 through SV4) using direct push drilling technology (DPT).

As shown in Figure 2, soil vapor probes were drilled around former USTs and waste oil tank areas. Vapor samples were collected at a sampling depth of 5 feet bgs.

The samples were analyzed to evaluate the potential health risk posed by inhaling contaminant vapors from the petroleum hydrocarbon-impacted soil at the Site. SOMA followed protocols for subsurface vapor sampling established by Department of Toxic Substances Control (DTSC).

2.3.2.1 Soil Vapor Sampling Procedures

Soil vapor samples were collected by temporarily inserting a 1-inch-diameter steel drilling rod equipped with a steel drop-off tip. The probe was hydraulically driven through the ground surface by DPT using a Geoprobe. Once the probe reached the designated sampling depth of 5 feet bgs, a ¼-inch diameter Teflon flow sampling tube was inserted down the center of the probe and threaded into the sampling port at the end of the rod. The sampling tube was then capped with a vapor tight valve and the probe was retracted 6 inches and allowed to equilibrate for approximately 20 to 30 minutes. After each use, drive rods and other reusable components were properly decontaminated to prevent cross contamination.

Hydrated bentonite was placed around the top opening of the drill rod and on the ground surface surrounding the drill rod to inhibit surface air migration down the center or outer portion of the drill rod and allowed to set for 30 to 45 minutes. A pre- and post-sample vacuum reading was recorded for each Summa canister sample.

A 200 milliliter/minute (mL/min) flow regulator with a built-in vacuum gauge was connected to the downhole side of the tee fitting. A particulate filter was also installed on the downhole side of the regulator. A vacuum test (mechanical leak check) was performed for 10 minutes to test the connections between the Summa canisters and vapor tight valve. A leak detector compound (isopropyl alcohol) was placed around the borehole subsurface, top of the probe rod, and at the vapor tight valve. The vapor tight valve and purge canister valve were then opened to purge three volumes of air from the sample tubing and borehole. In addition to purging the calculated volume, a visual inspection of the vacuum gauge was noted to insure adequate flow.

After three tubing volumes had been purged, the vapor-tight valve and the purge canister valve were closed. The vapor-tight valve and sample canister valve were closed until after the sample canister gauge indicated approximately 5 inches mercury (Hg) of vacuum remaining in the canister, approximately 20 percent of the pre-sample vacuum. As a quality control measure, one field duplicate field sample was collected from boring SV1 (SV1-DUP).

After the vapor samples were collected, SOMA's field geologist properly labeled the 6-L Summa canisters with the final post-sample recorded vacuum. Fisch then removed the tubing and drilling rod and grouted the borehole with Portland

cement to surface grade. Soil vapor samples were delivered to Torrent Laboratory, Inc, a state-certified analytical laboratory. Please note, samples arrived at the laboratory airtight, and no leaks or receiving discrepancies were reported.

2.3.2.2 Field Parameters During Collection of Vapor Samples

To ensure that stagnant or ambient air is removed from the sampling system and to assure that collected samples are representative of subsurface conditions, prior to collection of each sample, three volumes were purged using a purge Summa canister. The purge volume or "dead space volume" was estimated based on the volume of the sample container, internal volume of tubing used, and annular space around the probe tip.

The effective volume of ¼-inch (1/8-inch inner diameter) diameter Teflon tubing is about 2.41 mL/ft; the average vapor flow rate through the sampling tube was 200 mL/min. The total length of the Teflon tubing was about 6 feet. Additionally, the volume of the 6-inch-long retracting probe rod was about 80 mL. During the sampling event, three tube volumes were purged through the sampling tubes. Therefore, the total purged air volume is calculated as follows:

Total volume of purged air = (2.41 mL/ft x 6 ft+80ml) x 3 = 283.38 mL.

To calculate time during purging, 283.38 mL was divided by 200 mL/min, which equals 1.42 minutes. Since 6-L Summa canisters were used, the sample collection duration at 200 mL/min is:

Sample collection time = 6,000 mL / 200 mL/min = 30 minutes

Appendix B contains the boring logs, which include borehole-specific information of the soil vapor probes (e.g., drilling rod diameter, sampling interval, etc.). In addition, a schematic of the vapor probe sampling system is also included in Appendix B.

2.4 Summary of Soil, Groundwater and Soil Vapor Analytical Results

2.4.1 Sample Analysis

Soil and groundwater samples were submitted to Pacific Analytical Laboratory (PAL), a state-certified environmental laboratory on February 20, 2008. The samples were analyzed for:

- TPH-g (EPA Method 8015)
- TPH-d (EPA Method 8015)
- BTEX and MtBE (EPA Method 8260B).

Please note, the soil vapor samples were not analyzed for total oil and grease and TPH-d, as documented in the "Workplan to Conduct Additional Soil and Groundwater Investigation Around Former Underground Storage Tanks at 557 Merrimac Street, Oakland, California," dated October 3, 2007. With the verbal approval from the regulatory agency (2/11/2008), soil vapor samples were analyzed for TPH-g using Modified TO-3 Method and for VOCs using TO-15 Method.

2.4.2 Current Soil and Groundwater Analytical Data

2.4.2.1 Soil Sampling Results

As Table 1 indicates, laboratory analysis shows that all constituents in soils beneath the Site were detected either below laboratory-reporting limits or at levels significantly lower than the ESLs for the residential exposure scenario.

In the samples collected, benzene (primary constituent of concern [COC]) was not detected above the laboratory-reporting limit. Maximum TPH-g was detected at 10 feet bgs sampling intervals in borings B-1, B-4, and B-8 at 4,090 µg/kg, 4,290 µg/kg, and 1,860 µg/kg respectively. Furthermore, trace concentrations of toluene, ethylbenzene, total xylenes and MtBE were reported in boring B-1 (10 feet bgs sampling interval) at 90.6 µg/kg, 19.2 µg/kg, 15 µg/kg, and 14.8 µg/kg, respectively. Furthermore, the soil sample B5-25, previously put on hold pending results of the shallower soil sampling, was not analyzed because all constituents of the shallower sample (B5-20) were reported below the laboratory-reporting limit. Soil and groundwater analytical report is attached in Appendix C

2.4.2.2 Groundwater Sampling Results

As Table 2 indicates, laboratory analysis shows that all constituents in the groundwater beneath the Site were detected either below the laboratory-reporting limits or at levels significantly lower than the ESLs for the residential exposure scenario (groundwater is not a drinking water source). Furthermore, benzene was not detected above the laboratory reporting limit, and as such is below the 7 µg/L Tier 1 risk-based screening level (RBSL) for residential exposure scenario "groundwater to indoor air".

The soil and groundwater analytical laboratory report is included as Appendix C.

2.4.2.3 Soil Vapor Sampling Results

Soil vapor samples were submitted to Torrent Laboratory on February 20, 2008. Soil vapor samples collected from borings SV1 through SV4 were analyzed using EPA Modified Methods TO-3 and TO-17. As a quality control measure, one field duplicate field sample was collected from boring SV1, and labeled as SV1-DUP.

As Table 3 indicates, the results of the laboratory analysis show that all constituents in the soil vapors beneath the Site were detected either below the laboratory-reporting limits or at levels significantly lower than the ESLs "Shallow Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion Concerns" for the lowest residential exposure scenario.

In the samples collected, benzene (primary COC) was detected at 12 µg/m^3 in SV2. Maximum toluene, ethylbenzene, total xylenes were detected in SV2 at 62 µg/m^3, 16 µg/m^3, 107 µg/m^3, respectively. Maximum TPH-g was detected in SV3 at 1,900 µg/m^3. Table 3 summarizes soil vapor sampling results as compared to the ESLs.

Because results of the soil vapor sampling beneath the Site showed presence of only trace VOC concentrations, illustrating no impact in the form of vapor intrusion into a hypothetical residential building, no further simulation for the indoor air concentrations was conducted at this time.

The laboratory report for the soil vapor samples is attached in Appendix C.

3. PREFERENTIAL FLOW PATHWAY STUDY

3.1 Scope of Work

The purpose of this preferential pathway study was to locate potential migration pathways and conduits and evaluate probability for the residual Site plume to migrate to off-site receptors via preferential pathways and conduits. The State Water Board's "Guidelines for Identification, Location, and Evaluation of Deep Well Conduits" (1986, 2003) was used as a guideline in conducting the study. Furthermore, this study contains all information required by the California Code of Regulations, Division 3, Chapter 16, Section 2654 (b). This study included review of all reasonably obtainable records and maps.

The scope of work is as follows:

Task 1: Identification of Wells
Task 2: Location of Subsurface Utilities
Task 3: Climatological Conditions
Task 4: Land Use
Task 5: Evaluation of Available Information

3.2 Identification of Wells

As part of this study, SOMA reviewed available well data from the California Department of Water Resources (CDWR) and the ACPWA. SOMA located all wells within a ½-mile radius of the Site. The wells were screened to identify

presence of the following wells: abandoned, improperly destroyed, pumping, monitoring, inactive, domestic or irrigation, dewatering, drainage, and cathodic.

On March 5, 2008, SOMA's representative submitted a written request in the form of a well completion report release agreement to the ACPWA and CDWR. In accordance with Water Code Section 13752, information obtained from above agencies shall be kept confidential and shall not be disseminated, published, or made available for inspection by the public without written authorization from the owner(s) of the well(s). This information was solely used for conducting the preferential flow study. Copies obtained from the above agencies were stamped CONFIDENTIAL and are kept in a restricted file at SOMA's office in Pleasanton, California.

Review of CDWR records indicated the presence of 202 entries within the ½-mile radius of the Site. Available records indicated presence of 11 destroyed wells, two irrigation wells, 142 monitoring or test wells, 46 soil borings, and one cathodic well.

Review of ACPWA records indicated the presence of 240 entries within the ½-mile radius of the Site. Available records indicated presence of nine destroyed or abandoned wells, one irrigation well, one industrial well, 217 monitoring or test wells, and three cathodic wells.

During this sensitive receptor study, 105 duplicate wells that were already identified in the search of the CDWR records were identified. "Raw" results of this inquiry and some relevant documentation are included in Appendix D. Table 4 summarizes results of this survey and shows additional information, such as total depth and diameter, for each identified well or boring.

3.3 Location of Subsurface Utilities

In March 2008, SOMA Environmental performed an underground utility survey. This survey consisted of record search with the city of Oakland, and review of the "as build" utility maps. Results of this survey indicated the presence of numerous underground utility lines in the vicinity of the Site. Specifically, 12- to 15-inch storm drain lines, 10- to 12-inch sanitary sewer lines, and a 6-inch waterline main located at shallow depths of approximately 4 to 5 feet bgs, immediately north and west of the Site, under the western portion of Merrimac Street. Furthermore, 10- to 12-inch sanitary sewer lines located at 6.5 to 7 feet bgs were identified as located immediately north of the Site under the Merrimac Street. In addition, a 10-inch sanitary sewer line was identified as located at around 9 feet bgs approximately 110 feet south of the Site under southbound 27th Street. Figure 2 shows locations and flow directions of the utility lines. Detailed maps and construction diagrams are included in Appendix D.

The first encountered groundwater at the time of the drilling, as well as the historical groundwater levels observed in groundwater monitoring wells, suggest that groundwater occurs at 10 feet bgs and deeper. Since the utility lines adjacent to the Site are primarily located between 4 to 7 feet bgs, they cannot act as preferential flow paths.

3.4 Climatological Conditions

The Oakland general area can be characterized as a temperate and seasonally arid Mediterranean climate with dry summers and wet winters, but with a cool modification in summer due to upwelling ocean currents along the California coast. The local climate is influenced by the area's proximity to the Pacific Ocean and San Francisco Bay and the local topography of the area.

Winters are abundant with rainstorms of varying strength and duration, but also produce stretches of bright sunny days and clear cold nights. It does not normally snow, though occasionally the hilltops get a dusting. Spring and fall are transitional and intermediate, with some rainfall and variable temperatures. In late spring and early fall, strong offshore winds of sinking air typically bring heat and dryness to the area. Oakland gets significant cooling maritime fog during the summer but is far enough inland that the fog often burns off by midday, allowing typically sunny California days. The warmest and driest months are typically June and September, with the highest temperatures occurring in September. The average low winter temperatures range from 48 to 49 degrees Fahrenheit, and average high summer temperatures range from 69 to 75 degrees Fahrenheit, with average annual precipitation of 22.94 inches.

3.5 Land Use

According to the City of Oakland General Plan, the Site’s general planning design is urban residential “R-80” with commercial land use. The Site is located in an area consisting primarily of residential properties with a community commercial district to the east. Figure 6 illustrates the land use and zoning subdivision of the Site and its general vicinity.

3.6 Evaluation of Available Information

According to Regional Water Board guidance for identification of potential deep conduits, the first well standards in California were adopted in 1968. As such, it is reasonable to assume that the majority of municipal and domestic water wells installed prior to establishment of the well standards might not have been properly constructed with adequate seals, and wells destroyed prior to 1968 were likely not properly destroyed.

Therefore, based on results of the well identification and location program, SOMA conducted this evaluation to determine potential of wells to act as a vertical conduit. Based of the four consecutive groundwater monitoring events at the Site, the groundwater flow is generally southward.

Review of the ACPWA records indicated the presence of two abandoned wells, located at 2821 West Street and 730 29th Street, between 400 feet and 500 feet to the northwest (upgradient) of the Site with unknown or unclear drill dates. Though these wells could act as potential deep preferential pathway conduits, due to their location with respect to the Site this scenario is highly unlikely.

All destroyed wells identified during the present sensitive receptor survey, with the exception of four located at 2720 San Pablo Ave, were destroyed after 1968, and thus assumed to be destroyed in accordance with applicable laws and regulations. Though for the aforementioned four wells records did not indicate the destruction date, their northwesterly (upgradient) locations with respect to the Site indicate that they cannot act as potential deep preferential conduits.

Furthermore, the two irrigation wells identified during the present sensitive receptor survey are located far beyond the study area, and thus can have no potential adverse impact on Site hydrogeology and cannot act as sensitive receptors.

Results of the current preferential pathway study, which were based on information obtained from variety of public and other reasonably available sources, illustrated that the probability of a hypothetical plume emanating from the Site, and encountering preferential pathways and conduits and thus spreading contamination, is minimal.

4. CONCLUSIONS AND RECOMMENDATIONS

Upon further evaluation of current soil analytical data as compared with historical levels of petroleum hydrocarbons around and beneath the former USTs, it was determined that petroleum hydrocarbon impact is minimal and does not pose any danger to human health and the environment under the residential exposure scenario. Furthermore, results of the recent soil gas sampling confirmed that all soil gas levels evaluated for the purpose of vapor intrusion into the future hypothetical residential building are well within the acceptable ESL for vapor intrusion under the residential exposure scenario.

According to the California Regional Water Quality Control Board Interim Guidance Document, dated January 5, 1996, the Site can be categorized as a “Low Risk” petroleum release site based on the following:

1. The leak has been stopped and USTs as potential future sources of petroleum hydrocarbons as well as 250 cubic yards of contaminated soil were removed and disposed of off-site.
2. The Site has been adequately characterized. Numerous soils, groundwater sampling, and three monitoring wells were constructed on-site, to determine the extent of soil and groundwater contamination. Prior to decommissioning, the aforementioned wells were sampled during four consecutive groundwater monitoring events. Historical groundwater monitoring data reveals that concentrations of COCs are either below the laboratory-reporting limit or at low concentrations. Impacted soils were located primarily under the former USTs and fuel dispensers that have already been removed from the Site.
3. No water wells, deeper drinking water aquifers, surface water, or sensitive receptors are likely to be impacted. Due to the low or non-detectable levels of chemicals found on-site, and great distances to the sensitive receptors, the transport of these chemicals to the above-mentioned surface water bodies is highly unlikely. In addition, because the two water supply wells, identified during the sensitive receptor survey, are located beyond the ½-mile radius from the Site, the potential for the groundwater plume emanating from the Site to impact well receptors is unlikely.
4. Based on ASTM's E1739-95 "Risk Based Corrective Action Applied at Petroleum Release Sites," as confirmed by current soil, soil vapor and groundwater investigation, the Site presents no significant risk to human health and the environment using a residential exposure scenario. Consequently, remaining residual concentrations of chemicals do not pose any adverse health effects to current or future site workers and residents, or to the environment.

In light of current investigation results, it does not appear that the Site poses any adverse human health risks to current or future Site workers or current or future Site residents. Therefore, SOMA recommends that NFA status be adopted by ACHCSA for the Site, to allow future residential development.

Tables

Table 1
Soil Analytical Results
557 Merrimac Street, Oakland CA

Sample	Date	TPH-g (µg/Kg)	TPH-d (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethylbenzene (µg/Kg)	Total Xylenes (µg/Kg)	MtBE (µg/Kg) EPA 8260B
B1-5	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B1-10	2/14/08	**1,090**	<50.0	<10.0	**90.6**	**19.2**	**15.0**	**14.8**
B1-20	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B2-5	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B2-10	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B2-15	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B2-20	2/15/08	**100**	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B3-5	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B3-10	2/15/08	**643**	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B3-15	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B3-20	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B4-5	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B4-10	2/14/08	**4,290**	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B4-15	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B4-20	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B5-5	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B5-10	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B5-15	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B5-20	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B5-25	2/14/08	Hold						
B6-5	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B6-10	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B6-15	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B6-20	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B7-5	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B7-10	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B7-15	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B7-20	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B8-5	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B8-10	2/15/08	**1,860**	<50.0	<0.500	<2.00	<0.500	**0.860**	<0.500
B8-15	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B8-20	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
ESL Residential GW non drinking source		**100,000**	**100**	**120**	**29,000**	**33,000**	**31,000**	**8400**

Notes:

Note 1: Laboratory reporting limit for m&p-Xylene is 2.00 µg/Kg; for o-xylene it is 0.500 µg/Kg.

< : Not detected at or above laboratory reporting limit (shown)

NA: Not Analyzed; Not Applicable

ESL = environmental screening level, "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" prepared by the CRWQCB San Francisco Bay Region (Interim Final November 2007), soils less than 3 meters depth, groundwater is a current or potential drinking water source, residential land use

Table 2
Groundwater Analytical Results
557 Merrimac Street, Oakland CA

Sample	Date	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L) EPA 8260B
B1-W	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B2-W	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B3-W	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B4-W	2/14/08	**220**	**196**	<0.500	<2.00	<0.500	<2.00	<0.500
B5-W	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B6-W	2/15/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B7-W	2/14/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
B8-W	2/19/08	<50.0	<50.0	<0.500	<2.00	<0.500	<2.00	<0.500
ESL Residential GW for vapor intrusion		**use soil gas**	**use soil gas**	**540 (7.0*)**	**380000**	**170000**	**160000**	**24000.0**
ESL Residential GW non drinking		**5,000**	**2,500**	**540**	**400**	**300**	**5,300**	**1,800**

Notes:

Note 1: Laboratory reporting limit for m&p-Xylene is 2.00 µg/L; for o-xylene it is 0.500 µg/L.

< : Not detected at or above laboratory reporting limit (shown)

NA: Not Analyzed; Not Applicable

ESL = environmental screening level, "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" prepared by the CRWQCB San Francisco Bay Region (Interim Final November 2007), soils less than 3 meters depth, groundwater is a current or potential drinking water source, residential land use

*RBSL = Risk Based Screening Level: Enclosed Space Vapor Inhalation pathways Residential exposure;Building Present

TABLE 3
Soil Vapor Analytical Results
557 Merrimac Street, Oakland CA

Analyte	Units	Date	Sample ID					ESLs (Residential)
			SV1	SV1-DUP	SV2	SV3	SV4	
2-Butanone (MEK)	**(µg/m^3)**	**2/15/2008**	<1.48	**8.7**	**410**	<1.48	<1.48	**1,000,000**
Acetone	**(µg/m^3)**	**2/15/2008**	**9.9**	**48**	**600**	**17**	**42**	**660,000**
Benzene	**(µg/m^3)**	**2/15/2008**	<1.6	<1.6	**12**	<1.6	<1.6	**84**
Ethyl Benzene	**(µg/m^3)**	**2/15/2008**	<2.17	<2.17	**16**	<2.17	<2.17	**210,000**
Total Xylenes	**(µg/m^3)**	**2/15/2008**	<2.17	<2.17	**107**	<2.17	**14**	**21,000**
Toluene	**(µg/m^3)**	**2/15/2008**	**2.0**	<1.89	**62**	**2.8**	**12**	**63,000**
trans-1,2-Dichloroethene	**(µg/m^3)**	**2/15/2008**	<1.98	<1.98	**11**	<1.98	<1.98	**15,000**
Gasoline	**(µg/m^3)**	**2/15/2008**	<352	<352	**630**	**1,900**	<352	**10,000**

Notes:

< Less Than Laboratory Reporting Limit

NA Not Analyzed (Not Applicable)

ESL: Environmental Screening Levels SF Bay RWQCB-Interim Final (Table E-2: Shallow Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion Concerns, lowest residential exposure scenario)

Table 4: Sensitive Receptor Survey Data

Permit	Tr	Section	Address	Longcity	Owner	Update	Xcoord	Ycoord	Matchlevel	Tsrqq	Rec_code	Phone	City	Drilldate	Elevation	Totaldepth	Waterdepth	Diameter	Use
Listed in ACDPW and DWR																			
	1S/4W	26C 1	2821 WEST ST	Oakland	F.L. BROWN	7/31/1984	122273607	37818792	0	1S/4W 26C	2438	0	OAK	?	0	180	30	8	ABN
	1S/4W	26C 2	730 29 ST	Oakland	OAKLAND LDY CO.	7/31/1984	122271876	37819113	8	1S/4W 26C	2439	0	OAK	/28	0	136	33	0	ABN
	1S/4W	26E 1	889 W. Grand Ave	Oakland	Arco Products	9/18/1992	122277801	37814690	1	1S/4W 26E	7837	0	OAK	5/91	0	0	0	0	DES
	1S/4W	26G12	2800 TELEGRAPH S-2	Oakland	SHELL OIL S-2	6/17/1993	122267087	37817164	1	1S/4W 26G	0	0	OAK	4/93	0	29	0	3	DES
	1S/4W	26K12	2225 Telegraph Ave	Oakland	Texaco MW6A	9/21/1992	122268454	37812090	1	1S/4W 26K	7878	0	OAK	5/92	0	21	0	12	DES
	1S/4W	26K4	2225 Telegraph Ave	Oakland	Texaco MW6C	9/26/1992	122268454	37812090	1	1S/4W 26K	8128	0	OAK	Nov-91	100	20	0	2	DES
	1S/4W	26M					0	0	9	1S/4W 26M	6906	0		Apr-89	0	35	0	11	DES
	1S/4W	26M					0	0	9	1S/4W 26M	6907	0		Apr-89	0	35	0	11	DES
	1S/4W	26P 2	1700 JEFFERSON (@17th)	Oakland	BLUE PRINT SERVICES	2/23/1988	122272770	37808224	2	1S/4W 26P	2488	0	OAK	Nov-87	31	32	27	4	DES
	1S/4W	26C 4	900 HIGH ST.	Oakland	OAKLAND SCHOOL DIST.	7/31/1984	122216888	37769642	0	1S/4W 26C	2441	0	OAK	?	0	120	0	0	IRR
93655	1S/4W	2.60E+16	889 W Grand Ave	Oakland	Arco Products Company	12/4/1997	122277825	37814567	1	1S/4W 26E	0	0	OAK	Dec-93	0	15	14	4	EXT
93655	1S/4W	2.60E+17	889 W Grand Ave	Oakland	Arco Products Company	12/4/1997	122277825	37814567	1	1S/4W 26E	0	0	OAK	Dec-93	0	15	13	4	EXT
96544	1S/4W	26F 4	2703 Martin Luther King J	Oakland	Shell Oil Products Compan	11/3/1997	122271197	37817400	1	1S/4W 26F	0	0	OAK	7/96	0	13	11	2	EXT
96544	1S/4W	26F 5	2703 Martin Luther King J	Oakland	Shell Oil Products Compan	11/3/1997	122271197	37817400	1	1S/4W 26F	0	0	OAK	7/96	0	13	8	2	EXT
	1S/4W	26K11	2225 Telegraph Ave	Oakland	Exxon Service Stn RW3A	9/21/1992	122268454	37812090	1	1S/4W 26K	7877	0	OAK	5/92	0	22	13	4	EXT
	1S/4W	26K 2	2225 Telegraph Avenue	Oakland	Texaco	7/30/1990	122268454	37812090	8	1S/4W 26K	750	0	OAK	May-90	99	25	14	4	EXT
	1S/4W	26K 6	2225 Telegraph Avenue	Oakland	Texaco	7/30/1990	122268454	37812090	8	1S/4W 26K	751	0	OAK	May-90	100	25	0	4	EXT
	1S/4W	26K 7	2225 Telegraph Avenue	Oakland	Texaco	7/30/1990	122268600	37811700	3	1S/4W 26K	752	0	OAK	May-90	98	25	0	4	EXT
	1S/4W	26P 8	570 18th Street	Oakland	City of Oakland Redvlpmnt	6/12/1991	122271885	37808538	0	1S/4W 26P	1690	0	OAK	1/91	97	15	0	4	EXT
	1S/4W	26B 1	29 & TELEGRAPH AV	Oakland	PG&E	7/31/1984	122266800	37818400	8	1S/4W 26B	2437	0	OAK	4/74	0	0	8	0	CAT
	1S/4W	26D 1	26 & LINDEN ST	Oakland	PACIFIC GAS & ELECTRIC	7/19/1984	122280000	37818500	8	1S/4W 26D	2442	0	OAK	Dec-76	0	120	0	0	CAT
	1S/4W	26P	S. Pablo & 18th/19th St	Oakland	E.B. Galleria	7/9/1991	122271800	37808400	3	1S/4W 26P	1721	0	OAK	Dec-90	0	120	0	2	CAT
	1S/4W	26A 4	3093 Broadway	Oakland	Connell Oldsmobile	4/17/1991	122260700	37820830	0	1S/4W 26A	1628	0	OAK	2/91	0	15	7	4	MON
	1S/4W	26A 5	3093 Broadway	Oakland	Connell Oldsmobile	4/17/1991	122260700	37820830	0	1S/4W 26A	1629	0	OAK	2/91	0	40	27	2	MON
	1S/4W	26A 6	3093 Broadway	Oakland	Connell Oldsmobile	4/17/1991	122260700	37820830	0	1S/4W 26A	1630	0	OAK	2/91	0	35	22	2	MON
	1S/4W	26A 7	3093 Broadway	Oakland	Connell Oldsmobile	4/17/1991	122260700	37820830	0	1S/4W 26A	1631	0	OAK	2/91	0	30	24	2	MON
	1S/4W	26A 8	3093 Broadway	Oakland	Connell Oldsmobile	4/17/1991	122260700	37820830	0	1S/4W 26A	1632	0	OAK	3/91	0	35	25	2	MON
95814	1S/4W	26B 2	3045 Telegraph Av	Oakland		7/21/1998	122266610	37819664	1	1S/4W 26B	0	0	OAK	4/96	0	16	11	1	MON
95814	1S/4W	26B 3	3045 Telegraph Av	Oakland		7/21/1998	122266610	37819664	1	1S/4W 26B	0	0	OAK	4/96	0	16	11	1	MON
95814	1S/4W	26B 4	3045 Telegraph Av	Oakland		7/21/1998	122266610	37819664	1	1S/4W 26B	0	0	OAK	4/96	0	16	11	1	MON
96026	1S/4W	26C 5	730 29th St	Oakland	Civic Bank of Commerce	3/12/1998	122272018	37819249	1	1S/4W 26C	0	0	OAK	2/96	0	25	19	2	MON
96026	1S/4W	26C 6	730 29th St	Oakland	Civic Bank of Commerce	3/12/1998	122272018	37819249	1	1S/4W 26C	0	0	OAK	2/96	0	21	15	2	MON
96026	1S/4W	26C 7	730 29th St	Oakland	Civic Bank of Commerce	3/12/1998	122272018	37819249	1	1S/4W 26C	0	0	OAK	2/96	0	21	11	2	MON
94105	1S/4W	26D10	958 28th St	Oakland	Aramark Uniform Services,	2/24/1998	122277679	37819666	1	1S/4W 26D	0	0	OAK	2/94	0	25	17	2	MON
	1S/4W	26D 8	958 28th St	Oakland	AraTex Service Inc.MW-4A	9/24/1991	122277660	37819674	0	1S/4W 26D	1996	0	OAK	7/91	0	27	13	4	MON
	1S/4W	26D 9	958 28th St	Oakland	AraTex Service Inc.MW7	9/24/1991	122277660	37819674	0	1S/4W 26D	1997	0	OAK	7/91	0	30	14	4	MON
	1S/4W	26D 2	958 EAST 28TH STREET	Oakland	ARATEX SERVICES INC.	10/1/1989	122236735	37801086	0	1S/4W 26D	2443	0	OAK	Feb-89	0	32	22	4	MON
	1S/4W	26D 3	958 EAST 28TH STREET	Oakland	ARATEX SERVICES INC.	10/1/1989	122236735	37801086	0	1S/4W 26D	2444	0	OAK	Feb-89	0	28	22	4	MON
	1S/4W	26D 4	958 EAST 28TH STREET	Oakland	ARATEX SERVICES INC.	10/1/1989	122236735	37801086	0	1S/4W 26D	2445	0	OAK	Dec-88	0	36	27	4	MON
	1S/4W	26D 5	958 28th Street	Oakland	Aratex Servisco	6/21/1990	122277660	37819674	0	1S/4W 26D	304	0	OAK	3/90	0	25	22	2	MON
	1S/4W	26D 6	958 28th Street	Oakland	Aratex Servisco	6/21/1990	122277660	37819674	0	1S/4W 26D	305	0	OAK	3/90	0	30	17	4	MON
	1S/4W	26D 7	958 28th Street	Oakland	Aratex Servisco	6/21/1990	122277660	37819674	0	1S/4W 26D	306	0	OAK	2/90	0	30	18	4	MON
	1S/4W	2.60E+13	889 W. Grand Ave.	Oakland	Arco A-5	7/21/1993	122277844	37814558	1	1S/4W 26E	0	0	OAK	2/93	0	30	11	2	MON
	1S/4W	2.60E+14	889 W. Grand Ave.	Oakland	Arco A-6	7/21/1993	122277844	37814558	1	1S/4W 26E	0	0	OAK	2/93	0	29	10	2	MON
	1S/4W	26E 3	889 W. Grand Ave	Oakland	ARCO Products A-2	9/21/1992	122277801	37814690	1	1S/4W 26E	7888	0	OAK	3/92	0	27	12	3	MON
	1S/4W	26E 4	889 W. Grand Ave	Oakland	ARCO Products A-3	9/21/1992	122277801	37814690	1	1S/4W 26E	7889	0	OAK	4/92	0	30	12	3	MON
	1S/4W	26E 5	889 W. Grand Ave	Oakland	ARCO Products A-4	9/21/1992	122277801	37814690	1	1S/4W 26E	7890	0	OAK	4/92	0	30	11	3	MON
	1S/4W	26E 2	889 W. Grand Ave	Oakland	ARCO Products A-1	9/21/1992	122277801	37814690	1	1S/4W 26E	7887	0	OAK	3/92	0	30	11	3	MON
	1S/4W	26E 8	889 W. Grand Ave	Oakland	ARCO Products AR-1	6/18/1993	122277844	37814544	1	1S/4W 26E	0	0	OAK	6/92	0	29	15	4	MON
	1S/4W	26E 6	889 W. Grand Ave	Oakland	ARCO Products AR-1	9/21/1992	122277801	37814690	1	1S/4W 26E	7891	0	OAK	4/92	0	30	11	6	MON
	1S/4W	26E 9	889 W. Grand Ave	Oakland	ARCO Products AV-1	6/23/1993	122277845	37814547	1	1S/4W 26E	0	0	OAK	6/92	0	14	12	2	MON
	1S/4W	2.60E+11	889 W. Grand Ave	Oakland	ARCO Products AV2	6/23/1993	122277845	37814547	1	1S/4W 26E	0	0	OAK	6/92	0	14	12	2	MON
	1S/4W	2.60E+12	889 W. Grand Ave	Oakland	ARCO Products AV3	6/23/1993	122277845	37814547	1	1S/4W 26E	0	0	OAK	6/92	0	14	12	2	MON
	1S/4W	26E 7	2400 Filbert St	Oakland	Cal West MW-1	10/1/1992	122279510	37816804	1	1S/4W 26E	8217	0	OAK	Oct-91	0	20	9	2	MON
	1S/4W	2.60E+15	2400 Filbert St	Oakland	Cal West MW-2	7/22/1993	122279504	37816822	1	1S/4W 26E	0	0	OAK	Dec-92	0	25	13	2	MON
	1S/4W	26F 1	633 Sycamore St	Oakland	Gilbert Lopez (MW-1)	12/21/1993	122271088	37815824	1	1S/4W 26F	0	0	OAK	8/93	0	22	9	2	MON
	1S/4W	26F 2	633 Sycamore St	Oakland	Gilbert Lopez (MW-2)	12/21/1993	122271088	37815824	1	1S/4W 26F	0	0	OAK	8/93	0	22	9	2	MON
	1S/4W	26F 3	633 Sycamore St	Oakland	Gilbert Lopez (MW-3)	12/21/1993	122271088	37815824	1	1S/4W 26F	0	0	OAK	8/93	0	23	11	2	MON
96544	1S/4W	26F 6	2703 Martin Luther King J	Oakland	Shell Oil Products Compan	11/3/1997	122271197	37817400	1	1S/4W 26F	0	0	OAK	7/96	0	21	11	2	MON
96544	1S/4W	26F 7	2703 Martin Luther King J	Oakland	Shell Oil Products Compan	11/3/1997	122271197	37817400	1	1S/4W 26F	0	0	OAK	7/96	0	21	9	2	MON
98WR283	1S/4W	26G29	450 25th St	Oakland	Friction Materials, Inc	9/29/1998	122266062	37814745	1	1S/4W 26G	0	0	OAK	7/98	0	25	15	2	MON
98WR283	1S/4W	26G30	450 25th St	Oakland	Friction Materials, Inc	9/29/1998	122266062	37814745	1	1S/4W 26G	0	0	OAK	7/98	0	25	14	2	MON
98WR283	1S/4W	26G31	450 25th St	Oakland	Friction Materials, Inc	9/29/1998	122266062	37814745	1	1S/4W 26G	0	0	OAK	7/98	0	25	15	2	MON
95379	1S/4W	26G26	554 27th St	Oakland	Joan Schoonbrood	2/24/1998	122268764	37816875	1	1S/4W 26G	0	0	OAK	6/95	0	20	10	2	MON
95379	1S/4W	26G27	554 27th St	Oakland	Joan Schoonbrood	2/24/1998	122268764	37816875	1	1S/4W 26G	0	0	OAK	6/95	0	20	10	2	MON
95379	1S/4W	26G28	554 27th St	Oakland	Joan Schoonbrood	2/24/1998	122268764	37816875	1	1S/4W 26G	0	0	OAK	6/95	0	20	10	2	MON
	1S/4W	26G22	2633 Telegraph Av	Oakland	Sears	7/22/1997	122267719	37815695	1	1S/4W 26G	0	0	OAK	Dec-93	25	22	14	2	MON
	1S/4W	26G23	2633 Telegraph Av	Oakland	Sears	7/22/1997	122267719	37815695	1	1S/4W 26G	0	0	OAK	Dec-93	25	22	14	2	MON
	1S/4W	26G24	2633 Telegraph Av	Oakland	Sears	7/22/1997	122267719	37815695	1	1S/4W 26G	0	0	OAK	Dec-93	26	22	14	2	MON
	1S/4W	26G16	2633 Telegraph Ave.	Oakland	Sears Roebuck & Co. MW1	7/15/1993	122267754	37815668	1	1S/4W 26G	0	0	OAK	Dec-92	27	22	12	2	MON
	1S/4W	26G17	2633 Telegraph Ave.	Oakland	Sears Roebuck & Co. MW2	7/15/1993	122267754	37815668	1	1S/4W 26G	0	0	OAK	Dec-92	27	22	12	2	MON
	1S/4W	26G18	2633 Telegraph Ave.	Oakland	Sears Roebuck & Co. MW3	7/15/1993	122267754	37815668	1	1S/4W 26G	0	0	OAK	Dec-92	27	25	13	2	MON
	1S/4W	26G19	2633 Telegraph Ave.	Oakland	Sears Roebuck & Co. MW4	7/15/1993	122267754	37815668	1	1S/4W 26G	0	0	OAK	Dec-92	27	23	13	2	MON
	1S/4W	26G20	2633 Telegraph Ave.	Oakland	Sears Roebuck & Co. MW5	7/15/1993	122267754	37815668	1	1S/4W 26G	0	0	OAK	Dec-92	27	25	11	2	MON
96399	1S/4W	26G25	2633 Telegraph Av	Oakland	Sears Roebuck and Company	10/19/1997	122267731	37815671	1	1S/4W 26G	0	0	OAK	Oct-96	0	20	15	2	MON
	1S/4W	26G 4	2800 TELEGRAPH AV.	Oakland	SHELL OIL	6/15/1989	122267087	37817156	0	1S/4W 26G	2449	0	OAK	Oct-88	0	30	11	3	MON
	1S/4W	26G 5	2800 TELEGRAPH AV.	Oakland	SHELL OIL	6/15/1989	122267087	37817156	0	1S/4W 26G	2450	0	OAK	Oct-88	0	24	13	3	MON
	1S/4W	26G 6	2800 TELEGRAPH AV.	Oakland	SHELL OIL	6/15/1989	122267087	37817156	0	1S/4W 26G	2451	0	OAK	Oct-88	0	22	12	3	MON
	1S/4W	26G 7	2800 TELEGRAPH AV.	Oakland	SHELL OIL	6/15/1989	122267087	37817156	0	1S/4W 26G	2452	0	OAK	Oct-88	0	30	12	3	MON
	1S/4W	26G11	2800 TELEGRAPH S11	Oakland	SHELL OIL	1/22/1990	122267087	37817156	2	1S/4W 26G	2459	0	OAK	Oct-89	0	31	14	3	MON
	1S/4W	26G 8	2800 TELEGRAPH AV S-8	Oakland	SHELL OIL CO.	11/6/1989	122267087	37817156	2	1S/4W 26G	2453	0	OAK	Sep-89	26	22	11	3	MON
	1S/4W	26G 9	2800 TELEGRAPH AV S-9	Oakland	SHELL OIL CO.	11/6/1989	122267087	37817156	0	1S/4W 26G	2454	0	OAK	Sep-89	26	32	14	3	MON
	1S/4W	26G10	2800 TELEGRAPH AV S10	Oakland	SHELL OIL CO.	11/6/1989	122267087	37817156	2	1S/4W 26G	2455	0	OAK	Sep-89	27	31	14	3	MON
	1S/4W	26G 1	2800 TELEGRAPH AVE	Oakland	SHELL OIL COMPANY	8/8/1988	122267087	37817156	0	1S/4W 26G	2446	0	OAK	Apr-88	0	28	12	3	MON

Table 4: Sensitive Receptor Survey Data

Permit	Tr	Section	Address	Longcity	Owner	Update	Xcoord	Ycoord	Matchlevel	Tsrqq	Rec_code	Phone	City	Drilldate	Elevation	Totaldepth	Waterdepth	Diameter	Use
	1S/4W	26G 2	2800 TELEGRAPH AVE	Oakland	SHELL OIL COMPANY	8/8/1988	122267087	37817156	0	1S/4W 26G	2447	0	OAK	Apr-88	0	28	12	3	MON
	1S/4W	26G 3	2800 TELEGRAPH AVE	Oakland	SHELL OIL COMPANY	8/8/1988	122267087	37817156	0	1S/4W 26G	2448	0	OAK	Apr-88	0	28	12	3	MON
	1S/4W	26G21	477 25th St.	Oakland	United Glass MW-1	12/29/1994	122266775	37814637	1	1S/4W 26G	0	0	OAK	1/94	0	20	9	2	MON
	1S/4W	26H19	434 25th St	Oakland	Andre Mercier	7/24/1997	122265722	37814668	1	1S/4W 26H	0	0	OAK	8/94	101	15	14	2	MON
	1S/4W	26H20	434 25th St	Oakland	Andre Mercier	7/24/1997	122265722	37814668	1	1S/4W 26H	0	0	OAK	8/94	101	15	15	2	MON
	1S/4W	26H21	434 25th St	Oakland	Andre Mercier	7/24/1997	122265722	37814668	1	1S/4W 26H	0	0	OAK	8/94	101	15	14	2	MON
97281	1S/4W	26H28	Valdez St && 26th St	Oakland	Broadway Motors Ford	3/29/1998	122263016	37814839	1	1S/4W 26H	0	0	OAK	5/97	0	15	10	2	MON
97281	1S/4W	26H29	Valdez St && 26th St	Oakland	Broadway Motors Ford	3/29/1998	122263016	37814839	1	1S/4W 26H	0	0	OAK	5/97	0	15	10	2	MON
97281	1S/4W	26H30	Valdez St && 26th St	Oakland	Broadway Motors Ford	3/29/1998	122263016	37814839	1	1S/4W 26H	0	0	OAK	5/97	0	15	0	2	MON
	1S/4W	26H 9	2740 Broadway Ave	Oakland	Broadway Volkswagen	7/29/1991	122263401	37816191	3	1S/4W 26H	1751	0	OAK	4/91	5	17	3	2	MON
	1S/4W	26H 3	2740 BROADWAY	Oakland	BROADWAY VW	6/15/1989	122263401	37816191	0	1S/4W 26H	2462	0	OAK	Jan-89	0	20	7	2	MON
	1S/4W	26H 4	2740 BROADWAY	Oakland	BROADWAY VW	6/15/1989	122263401	37816191	0	1S/4W 26H	2463	0	OAK	Jan-89	0	20	11	2	MON
	1S/4W	26H 5	2740 BROADWAY	Oakland	BROADWAY VW	6/15/1989	122263401	37816191	0	1S/4W 26H	2464	0	OAK	Jan-89	0	20	11	2	MON
	1S/4W	26H16	2630 Broadway	Oakland	Chevron Oil B-10 (MW-10)	12/29/1994	122263922	37815367	1	1S/4W 26H	0	0	OAK	7/94	0	20	18	2	MON
	1S/4W	26H17	2630 Broadway	Oakland	Chevron Oil B-11 (MW-11)	12/29/1994	122263922	37815367	1	1S/4W 26H	0	0	OAK	7/94	0	20	18	2	MON
	1S/4W	26H18	2630 Broadway	Oakland	Chevron Oil B-12 (MW-12)	12/29/1994	122263922	37815367	1	1S/4W 26H	0	0	OAK	7/94	0	20	17	2	MON
	1S/4W	26H15	2630 Broadway	Oakland	Chevron Oil B-9 (MW-9)	12/29/1994	122263922	37815367	1	1S/4W 26H	0	0	OAK	7/94	0	20	0	2	MON
94239	1S/4W	26H26	403 28th St	Oakland	Chrysler Realty Corporati	2/24/1998	122264962	37816675	1	1S/4W 26H	0	0	OAK	5/94	0	29	0	2	MON
94239	1S/4W	26H27	403 28th St	Oakland	Chrysler Realty Corporati	2/24/1998	122264962	37816675	1	1S/4W 26H	0	0	OAK	5/94	0	29	0	2	MON
	1S/4W	26H 6	2915 Broadway	Oakland	European Motors	6/21/1990	122262457	37818081	0	1S/4W 26H	322	0	OAK	2/90	45	30	12	2	MON
	1S/4W	26H 7	2915 Broadway	Oakland	European Motors	6/21/1990	122262457	37818081	0	1S/4W 26H	323	0	OAK	2/90	44	30	11	2	MON
	1S/4W	26H 8	2915 Broadway	Oakland	European Motors	6/21/1990	122262457	37818081	0	1S/4W 26H	324	0	OAK	2/90	44	30	10	2	MON
	1S/4W	26H12	294 27th St	Oakland	MR & RB Partnership MW-1	4/8/1993	122262219	37815026	1	1S/4W 26H	8380	0	OAK	2/93	0	18	8	2	MON
	1S/4W	26H13	294 27th St	Oakland	MR & RB Partnership MW-2	4/8/1993	122262219	37815026	1	1S/4W 26H	8381	0	OAK	2/93	0	17	7	2	MON
93581	1S/4W	26H22	2735 Broadway	Oakland	Ravizza Comm. Real Estate	11/3/1997	122263611	37816268	1	1S/4W 26H	0	0	OAK	Oct-93	0	38	27	4	MON
93581	1S/4W	26H23	2735 Broadway	Oakland	Ravizza Comm. Real Estate	11/3/1997	122263611	37816268	1	1S/4W 26H	0	0	OAK	Oct-93	0	25	19	4	MON
93581	1S/4W	26H24	2735 Broadway	Oakland	Ravizza Comm. Real Estate	11/3/1997	122263611	37816268	1	1S/4W 26H	0	0	OAK	Oct-93	0	30	20	4	MON
93581	1S/4W	26H25	2735 Broadway	Oakland	Ravizza Comm. Real Estate	11/3/1997	122263611	37816268	1	1S/4W 26H	0	0	OAK	Oct-93	0	30	16	4	MON
	1S/4W	26H10	2740 Broadway	Oakland	Vorelco, Inc.	8/3/1992	122263401	37816191	1	1S/4W 26H	7533	0	OAK	Oct-91	0	30	8	4	MON
	1S/4W	26H11	2740 Broadway	Oakland	Vorelco, Inc.	8/3/1992	122263401	37816191	1	1S/4W 26H	7534	0	OAK	Oct-91	0	27	11	4	MON
	1S/4W	26J11	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	Dec-95	0	30	21	2	MON
	1S/4W	26J12	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	7	2	MON
	1S/4W	26J13	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	23	2	MON
	1S/4W	26J14	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	20	2	MON
	1S/4W	26J15	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	22	2	MON
	1S/4W	26J16	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	20	2	MON
	1S/4W	26J17	2330 Webster St	Oakland	Labor Temple	9/17/1997	122264578	37812846	1	1S/4W 26J	0	0	OAK	1/96	0	31	20	2	MON
	1S/4W	26J 4	2302 VALDEZ ST.	Oakland	MORRISON & FORESTER	11/6/1989	122263640	37812297	0	1S/4W 26J	2469	0	OAK	Aug-89	0	27	0	4	MON
	1S/4W	26J 5	2302 VALDEZ ST.	Oakland	MORRISON & FORESTER	11/6/1989	122263640	37812297	0	1S/4W 26J	2470	0	OAK	Aug-89	0	27	0	4	MON
	1S/4W	26J 6	2302 VALDEZ ST.	Oakland	MORRISON & FORESTER	11/6/1989	122263640	37812297	0	1S/4W 26J	2471	0	OAK	Aug-89	0	27	0	4	MON
	1S/4W	26J 7	2302 VALDEZ ST.	Oakland	MORRISON & FORESTER	11/6/1989	122263640	37812297	0	1S/4W 26J	2472	0	OAK	Aug-89	0	27	0	4	MON
	1S/4W	26J10	2345 Broadway	Oakland	Negherbon Auto Center	6/17/1993	122265564	37813116	1	1S/4W 26J	0	0	OAK	6/92	0	29	22	2	MON
	1S/4W	26J 8	Valdez St.and 23rd Street	Oakland	Oakland Tribune	7/27/1990	122263800	37812100	3	1S/4W 26J	722	0	OAK	May-90	0	27	0	4	MON
	1S/4W	26J 9	Valdez St.and 23rd Street	Oakland	Oakland Tribune	7/29/1990	122263800	37812100	3	1S/4W 26J	723	0	OAK	May-90	0	25	0	4	MON
	1S/4W	26J 1	23RD & VALDEZ	Oakland	OAKLAND TRIBUNE	6/15/1989	122263653	37812144	8	1S/4W 26J	2466	0	OAK	Aug-88	0	31	18	3	MON
	1S/4W	26J 2	23RD & VALDEZ	Oakland	OAKLAND TRIBUNE	6/15/1989	122263653	37812144	8	1S/4W 26J	2467	0	OAK	Aug-88	0	31	18	3	MON
	1S/4W	26J 3	23RD & VALDEZ	Oakland	OAKLAND TRIBUNE	6/15/1989	122263653	37812144	8	1S/4W 26J	2468	0	OAK	Aug-88	0	26	15	3	MON
	1S/4W	26K 8	2225 TELEGRAPH AV.	Oakland	TEXACO	6/15/1989	122268454	37812090	8	1S/4W 26K	2477	0	OAK	Dec-88	100	22	14	4	MON
	1S/4W	26K 9	2225 TELEGRAPH AV.	Oakland	TEXACO	6/15/1989	122268454	37812090	8	1S/4W 26K	2478	0	OAK	Dec-88	98	21	12	4	MON
	1S/4W	26K10	2225 TELEGRAPH AV.	Oakland	TEXACO	6/15/1989	122268454	37812090	8	1S/4W 26K	2479	0	OAK	Dec-88	98	21	13	4	MON
	1S/4W	26K 7	2225 TELEGRAPH AV.	Oakland	TEXACO	6/15/1989	122268454	37812090	8	1S/4W 26K	6552	0	OAK	Dec-88	100	22	14	4	MON
	1S/4W	26K 3	2225 TELEGRAPH AVE	Oakland	TEXACO STA #62488000195	12/20/1988	122268454	37812090	8	1S/4W 26K	2474	0	OAK	Jul-88	0	21	13	2	MON
	1S/4W	26K 4	2225 TELEGRAPH AVE	Oakland	TEXACO STA #62488000195	12/20/1988	122268454	37812090	8	1S/4W 26K	2475	0	OAK	Jul-88	0	19	14	2	MON
	1S/4W	26K 5	2225 TELEGRAPH AVE	Oakland	TEXACO STA #62488000195	12/20/1988	122268454	37812090	8	1S/4W 26K	2476	0	OAK	Jul-88	0	20	14	2	MON
	1S/4W	26K 1	2250 Telegraph Av	Oakland		7/24/1997	122268257	37812378	1	1S/4W 26K	0	0	OAK	3/94	0	19	11	2	MON
	1S/4W	26K 2	2250 Telegraph Av	Oakland		7/24/1997	122268257	37812378	1	1S/4W 26K	0	0	OAK	3/94	0	19	9	2	MON
	1S/4W	26K 3	2250 Telegraph Av	Oakland		7/24/1997	122268257	37812378	1	1S/4W 26K	0	0	OAK	3/94	0	19	10	2	MON
	1S/4W	26K 4	2250 Telegraph Av	Oakland		7/24/1997	122268257	37812378	1	1S/4W 26K	0	0	OAK	3/94	0	19	10	2	MON
	1S/4W	26K 2					0	0	9	1S/4W 26K	6903	0		Jul-88	0	21	14	2	MON
	1S/4W	26K 3					0	0	9	1S/4W 26K	6904	0		Jul-88	0	21	13	2	MON
	1S/4W	26K 8					0	0	9	1S/4W 26K	6905	0		Dec-88	99	20	12	4	MON
	1S/4W	26L 1	774 W. GRAND AVE	Oakland	DAVID FYNE	6/9/1988	122274728	37813547	0	1S/4W 26L	2480	0	OAK	Apr-88	0	40	13	2	MON
	1S/4W	26L 3	2103 San Pablo Ave	Oakland	Greyhound ES-1	9/30/1992	122273297	37811847	1	1S/4W 26L	7357	0	OAK	Nov-91	0	31	19	4	MON
	1S/4W	26L 4	2103 San Pablo Ave	Oakland	Greyhound ES-2	9/30/1992	122273297	37811847	1	1S/4W 26L	7358	0	OAK	Nov-91	0	31	20	4	MON
	1S/4W	26L 5	2103 San Pablo Ave	Oakland	Greyhound ES-3	3/9/1992	122273297	37811847	1	1S/4W 26L	7359	0	OAK	Nov-91	0	35	20	4	MON
	1S/4W	26L 6	2103 San Pablo Ave	Oakland	Greyhound ES-4	3/9/1992	122273297	37811847	1	1S/4W 26L	7360	0	OAK	Nov-91	0	31	19	4	MON
	1S/4W	26L 7	2103 San Pablo Ave	Oakland	Greyhound ES-5	9/30/1992	122273297	37811847	1	1S/4W 26L	7361	0	OAK	Nov-91	0	32	19	4	MON
	1S/4W	26L 2	577 W. GRAND AV.	Oakland	U.S. POSTAL SVC.	6/15/1989	122269840	37812351	0	1S/4W 26L	2481	0	OAK	Dec-88	0	30	0	2	MON
95389	1S/4W	26M16	850 W. Grand Av	Oakland	Chevron	2/17/1998	122277060	37814417	1	1S/4W 26M	0	0	OAK	8/95	0	27	13	2	MON
95389	1S/4W	26M17	850 W. Grand Av	Oakland	Chevron	2/17/1998	122277060	37814417	1	1S/4W 26M	0	0	OAK	8/95	0	27	13	2	MON
	1S/4W	26M 8	850 W. Grand Ave.	Oakland	Chevron	3/8/1991	122277075	37814422	0	1S/4W 26M	1160	0	OAK	Dec-90	18	24	19	4	MON
	1S/4W	26M 1	850 W GRAND AV & ISABELLA	Oakland	CHEVRON - USA	11/26/1984	122277075	37814422	0	1S/4W 26M	2482	8322698	OAK	Oct-84	91	30	15	8	MON
	1S/4W	26M 2	850 W GRAND AV & ISABELLA	Oakland	CHEVRON - USA	11/26/1984	122277075	37814422	0	1S/4W 26M	2483	8322698	OAK	Oct-84	90	25	14	8	MON
	1S/4W	26M 3	850 W GRAND AV & ISABELLA	Oakland	CHEVRON - USA	11/26/1984	122277075	37814422	0	1S/4W 26M	2484	8322698	OAK	Oct-84	91	24	15	8	MON
	1S/4W	26M 9	850 W GRAND AV & ISABELLA	Oakland	CHEVRON - USA MW-7	4/16/1993	122277075	37814414	1	1S/4W 26M	0	0	OAK	Oct-92	13	24	13	2	MON
	1S/4W	26M 5	850 W. GRAND AVE.	Oakland	CHEVRON U.S.A.	9/1/1989	122277075	37814422	0	1S/4W 26M	2486	0	OAK	Apr-89	0	25	13	11	MON
	1S/4W	26M 4	850 W. GRAND AVE.	Oakland	CHEVRON U.S.A. INC.	9/1/1989	122277075	37814422	0	1S/4W 26M	2485	0	OAK	Apr-89	0	25	13	11	MON
	1S/4W	26M 6	Isabella/W.Grand	Oakland	Chevron USA	8/31/1990	122277600	37814600	8	1S/4W 26M	839	0	OAK	Jul-90	0	27	13	2	MON
	1S/4W	26M 7	Isabella/W.Grand	Oakland	Chevron USA	8/31/1990	122277600	37814600	8	1S/4W 26M	840	0	OAK	Jul-90	9	25	13	2	MON
	1S/4W	26M10	850 W Grand Av	Oakland	Chevron USA Inc	9/17/1997	122277058	37814422	1	1S/4W 26M	0	0	OAK	6/93	0	15	14	2	MON
	1S/4W	26M11	850 W Grand Av	Oakland	Chevron USA Inc	9/17/1997	122277058	37814422	1	1S/4W 26M	0	0	OAK	6/93	0	15	14	2	MON
	1S/4W	26M12	850 W Grand Av	Oakland	Chevron USA Inc	9/17/1997	122277058	37814422	1	1S/4W 26M	0	0	OAK	6/93	0	15	14	2	MON
	1S/4W	26M13	769 22nd St	Oakland	Greg Keller	9/19/1997	122274968	37812770	1	1S/4W 26M	0	0	OAK	9/94	0	22	13	2	MON
	1S/4W	26M14	769 22nd St	Oakland	Greg Keller	9/19/1997	122274968	37812770	1	1S/4W 26M	0	0	OAK	9/94	0	22	13	2	MON
	1S/4W	26M15	769 22nd St	Oakland	Greg Keller	9/19/1997	122274968	37812770	1	1S/4W 26M	0	0	OAK	9/94	0	22	13	2	MON
	1S/4W	26P 6	CRN OF 18TH & JEFFERSON	Oakland	BLUE PRINT SERVICE CO	12/20/1988	122272600	37808700	8	1S/4W 26P	2492	0	OAK	Oct-88	0	41	20	2	MON

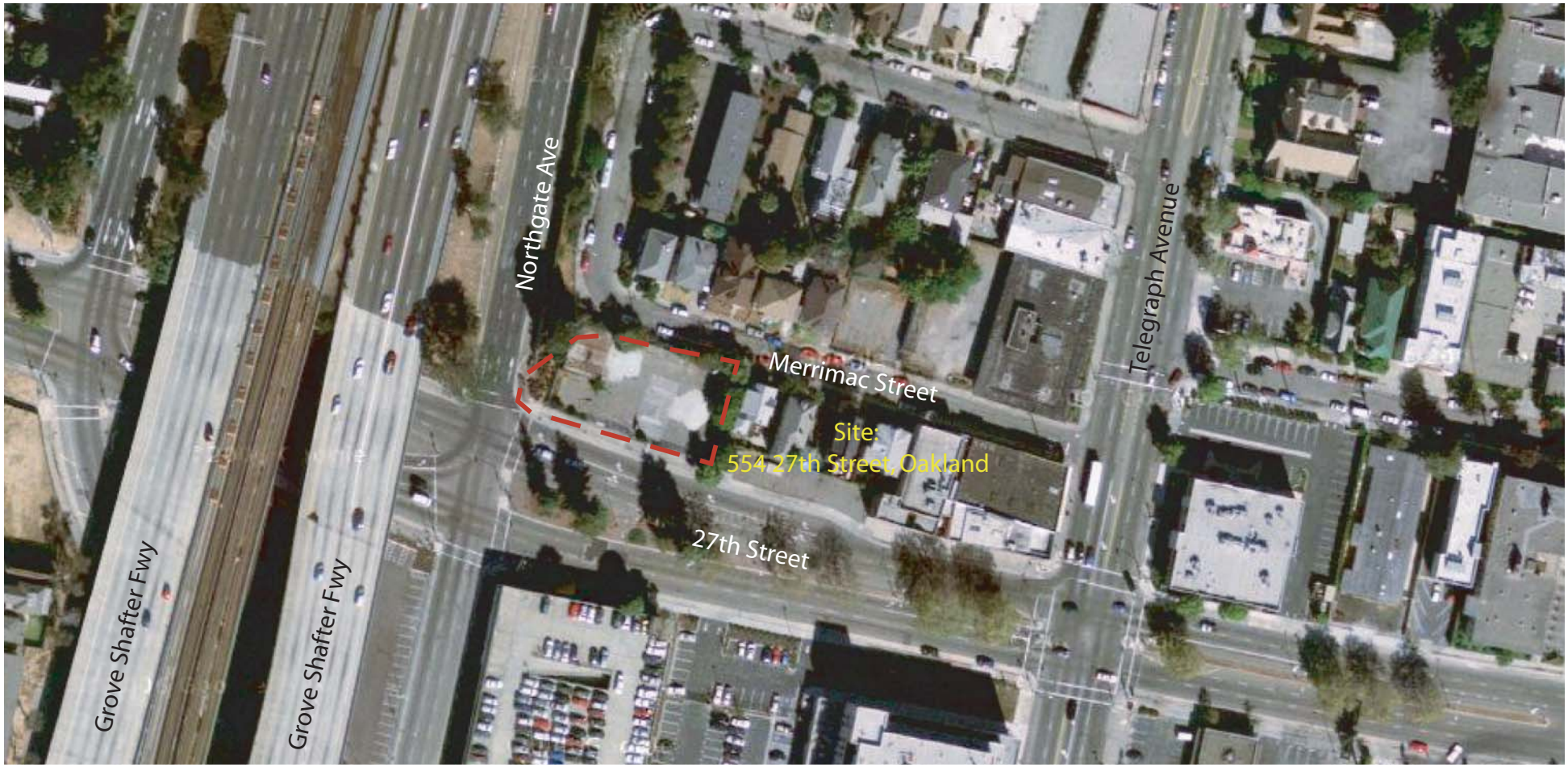
Table 4: Sensitive Receptor Survey Data

Permit	Tr	Section	Address	Longcity	Owner	Update	Xcoord	Ycoord	Matchlevel	Tsrqq	Rec_code	Phone	City	Drilldate	Elevation	Totaldepth	Waterdepth	Diameter	Use
	1S/4W	26P 1	1700 JEFFERSON (@17th)	Oakland	BLUE PRINT SERVICES	2/23/1988	122272770	37808224	2	1S/4W 26P	2487	0	OAK	6/87	32	34	25	4	MON
	1S/4W	26P 3	1700 JEFFERSON (@17th)	Oakland	BLUE PRINT SERVICES	2/23/1988	122272770	37808224	2	1S/4W 26P	2489	0	OAK	6/87	31	32	25	4	MON
	1S/4W	26P 4	1700 JEFFERSON (@17th)	Oakland	BLUE PRINT SERVICES	2/23/1988	122272770	37808224	2	1S/4W 26P	2490	0	OAK	1/88	31	33	25	4	MON
	1S/4W	26P 5	1700 JEFFERSON (@17th)	Oakland	BLUE PRINT SERVICES	2/23/1988	122272770	37808224	2	1S/4W 26P	2491	0	OAK	1/88	32	34	26	4	MON
	1S/4W	26P 7	537 18th Street	Oakland	City of Oakland Redvlpmnt	6/12/1991	122271233	37808300	0	1S/4W 26P	1689	0	OAK	1/91	98	63	54	2	MON
	1S/4W	26P 6					0	0	9	1S/4W 26P	6908	0		Oct-88	0	41	20	2	MON
	1S/4W	26Q 4	21ST & BROADWAY	Oakland	BANK OF AMERICA	6/15/1989	122267100	37810600	8	1S/4W 26Q	2496	0	OAK	Nov-88	0	30	20	2	MON
	1S/4W	26Q11	1911 Telegraph Av	Oakland	Carter Hawley Hale	8/13/1997	122269321	37809130	1	1S/4W 26Q	0	0	OAK	6/93	24	25	15	4	MON
	1S/4W	26Q12	1911 Telegraph Av	Oakland	Carter Hawley Hale	8/13/1997	122269321	37809130	1	1S/4W 26Q	0	0	OAK	6/93	26	30	19	4	MON
	1S/4W	26Q13	1911 Telegraph Av	Oakland	Carter Hawley Hale	8/13/1997	122269321	37809130	1	1S/4W 26Q	0	0	OAK	6/93	23	24	15	4	MON
	1S/4W	26Q14	2025 Telegraph Av	Oakland	Goodyear Tire & Rubber Co	9/11/1997	122269015	37810451	1	1S/4W 26Q	0	0	OAK	5/93	0	24	15	4	MON
	1S/4W	26Q15	2025 Telegraph Av	Oakland	Goodyear Tire & Rubber Co	9/11/1997	122269015	37810451	1	1S/4W 26Q	0	0	OAK	5/93	0	21	15	4	MON
	1S/4W	26Q16	2025 Telegraph Av	Oakland	Goodyear Tire & Rubber Co	9/11/1997	122269015	37810451	1	1S/4W 26Q	0	0	OAK	5/93	0	21	15	4	MON
	1S/4W	23R 5	3300 WEBSTER ST	Oakland	PAUL FABERMAN & CO	1/22/1990	122262011	37821412	0	1S/4W 23R	2402	0	OAK	Mar-89	89	28	25	2	MON
	1S/4W	23R 3	3300 WEBSTER ST	Oakland	PAUL FABERMAN & CO.	1/10/1990	122262011	37821412	0	1S/4W 23R	2400	0	OAK	Mar-89	91	35	22	2	MON
	1S/4W	23R 4	3300 WEBSTER ST	Oakland	PAUL FABERMAN & CO.	1/22/1990	122262011	37821412	0	1S/4W 23R	2401	0	OAK	Mar-89	99	32	28	2	MON
	1S/4W	23R 7	350 Hawthorne Ave	Oakland	Summit Medical Center MW1	9/22/1992	122263410	37822068	1	1S/4W 23R	7934	0	OAK	4/92	0	40	23	0	MON
	1S/4W	23R 6					0	0	9	1S/4W 23R	6895	0		May-89	0	30	22	2	MON
	1S/4W	25D 3	3093 Broadway	Oakland	Connell Oldsmobile B-10	7/23/1993	122260708	37820808	1	1S/4W 25D	0	0	OAK	Oct-92	0	35	0	6	MON
	1S/4W	25D 1	3093 Broadway	Oakland	Connell Oldsmobile B-8	7/23/1993	122260708	37820808	1	1S/4W 25D	0	0	OAK	Oct-92	0	40	0	6	MON
	1S/4W	25D 2	3093 Broadway	Oakland	Connell Oldsmobile B-9	7/23/1993	122260708	37820808	1	1S/4W 25D	0	0	OAK	Oct-92	0	32	0	2	MON
	1S/4W	25D 6	3080 Broadway	Oakland	Gereld Shirar	9/11/1997	122260795	37820262	1	1S/4W 25D	0	0	OAK	7/94	0	40	26	2	MON
93655	1S/4W	2.60E+18	889 W Grand Ave	Oakland	Arco Products Company	12/4/1997	122277825	37814567	1	1S/4W 26E	0	0	OAK	Dec-93	0	27	13	4	REC
93655	1S/4W	2.60E+19	889 W Grand Ave	Oakland	Arco Products Company	12/4/1997	122277825	37814567	1	1S/4W 26E	0	0	OAK	Dec-93	0	24	13	4	REC
	1S/4W	26P15	1700 Jefferson St	Oakland	Blue Print Services	7/18/1997	122272753	37808224	1	1S/4W 26P	0	0	OAK	4/96	0	36	26	2	TES
	1S/4W	26P 9	19th St & San Pablo Ave	Oakland	City of Oakland Redvlpmnt	6/12/1991	122272100	37809300	0	1S/4W 26P	1691	0	OAK	1/91	0	30	23	2	TES
	1S/4W	26P10	611 20th St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122271359	37810437	0	1S/4W 26P	1692	0	OAK	1/91	0	30	23	2	TES
	1S/4W	26P11	612 Williams St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122271229	37810033	0	1S/4W 26P	1693	0	OAK	1/91	0	25	23	2	TES
	1S/4W	26P12	585 20th St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270904	37810372	0	1S/4W 26P	1694	0	OAK	1/91	0	24	21	2	TES
	1S/4W	26P13	588 - 596 Williams St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270877	37809978	3	1S/4W 26P	1695	0	OAK	1/91	0	28	23	2	TES
	1S/4W	26P14	536 20th St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270106	37810458	0	1S/4W 26P	1696	0	OAK	1/91	0	23	14	2	TES
	1S/4W	26P 6					0	0	9	1S/4W 26P	6821	0		Dec-88	0	40	20	2	TES
	1S/4W	26Q 3	1911 TELEGRAPH AVE	Oakland	CARTER-HAWLEY-HALE	6/1/1988	122269338	37809130	0	1S/4W 26Q	2495	0	OAK	Mar-88	0	25	18	2	TES
	1S/4W	26Q 5	17th St & Broadway	Oakland	City of Oakland Redvlpmnt	6/12/1991	122269200	37807300	0	1S/4W 26Q	1697	0	OAK	1/91	0	27	20	2	TES
	1S/4W	26Q 6	557 19th Street	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270854	37809021	0	1S/4W 26Q	1698	0	OAK	1/91	0	25	16	2	TES
	1S/4W	26Q 7	19th St & Telegraph Ave	Oakland	City of Oakland Redvlpmnt	6/12/1991	122269300	37808900	3	1S/4W 26Q	1699	0	OAK	1/91	0	25	19	2	TES
	1S/4W	26Q 8	552 19th St.	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270742	37809207	0	1S/4W 26Q	1700	0	OAK	1/91	0	24	19	2	TES
	1S/4W	26Q 9	20th St. & Telegraph Ave.	Oakland	City of Oakland Redvlpmnt	6/12/1991	122269000	37810200	0	1S/4W 26Q	1701	0	OAK	1/91	0	28	21	2	TES
	1S/4W	26Q10	513 18th St	Oakland	City of Oakland Redvlpmnt	6/12/1991	122270108	37808183	0	1S/4W 26Q	1702	0	OAK	1/91	0	26	20	2	TES
	1S/4W	26D	958 EAST 28TH STREET	Oakland	ARATEX SERVICES INC.	10/1/1989	122236735	37801086	0	1S/4W 26D	6548	0	OAK	Feb-89	0	17	0	0	BOR
	1S/4W	26H14	2827 Webster St.	Oakland	Alan Rudy B-2	7/13/1993	122263483	37817098	1	1S/4W 26H	0	0	OAK	8/91	0	10	0	0	BOR
	1S/4W	26H	294 27th St.	Oakland	MR & RB Assoc.	7/27/1993	122262216	37815029	1	1S/4W 26H	0	0	OAK	9/92	0	20	8	0	BOR
	1S/4W	26J	2302 VALDEZ ST.	Oakland	MORRISON & FORESTER	11/6/1989	122263640	37812297	0	1S/4W 26J	2465	0	OAK	Aug-89	0	27	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6896	0		Aug-89	0	25	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6897	0		Aug-89	0	22	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6898	0		Aug-89	0	22	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6899	0		Aug-89	0	22	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6900	0		Aug-89	0	24	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6901	0		Aug-89	0	24	0	0	BOR
	1S/4W	26J					0	0	9	1S/4W 26J	6902	0		Aug-89	0	22	0	0	BOR
	1S/4W	26K	Broadway/W Grand Ave	Oakland	Commonwealth Companies	7/27/1990	122266300	37811900	3	1S/4W 26K	739	0	OAK	May-90	0	15	0	0	BOR
	1S/4W	23R	34TH & ELM STS	Oakland	MERITT PERALTA INSTITUTE	8/8/1988	122265800	37822800	8	1S/4W 23R	6543	0	OAK	Jun-88	0	30	14	0	BOR
	1S/4W	23R	3300 WEBSTER ST	Oakland	PAUL FABERMAN & CO	1/22/1990	122262011	37821412	0	1S/4W 23R	6545	0	OAK	May-89	0	24	23	6	BOR
	1S/4W	23R	3300 WEBSTER ST	Oakland	PAUL FABERMAN & CO.	1/10/1990	122262011	37821412	0	1S/4W 23R	6544	0	OAK	May-89	0	24	0	6	BOR
	1S/4W	23R					0	0	9	1S/4W 23R	6893	0		May-89	0	24	23	6	BOR
	1S/4W	25D	3093 Broadway	Oakland	Connell Oldsmobile	7/23/1993	122260708	37820808	1	1S/4W 25D	0	0	OAK	Oct-92	0	35	28	0	BOR
	1S/4W	25D 5	3093 Broadway	Oakland	Connell Oldsmobile B-13	7/23/1993	122260708	37820808	1	1S/4W 25D	0	0	OAK	Oct-92	0	40	36	2	BOR
	1S/4W	26D	958 28th Street	Oakland	Aratex Servisco	6/21/1990	122277660	37819674	0	1S/4W 26D	303	0	OAK	3/90	0	0	0	9	BOR*
	1S/4W	26H	2827 Webster	Oakland	Alan Rudy B-1	8/14/1992	122263492	37817097	1	1S/4W 26H	7679	0	OAK	8/91	0	10	0	2	BOR*
	1S/4W	23R					0	0	9	1S/4W 23R	6894	0		Mar-89	0	0	0	8	BOR*
	1S/4W	23R 2	HAWTHORNE AV	Oakland	MERRITT HOSPITAL	7/31/1984	122261400	37821150	2	1S/4W 23R	2399	0	OAK	4/74	0	345	0	0	GEO
	1S/4W	26A 1	450 30TH	Oakland	PERALTA HOSPITAL	7/31/1984	122265138	37819514	8	1S/4W 26A	2436	0	OAK	?	0	0	0	0	GEO*
	1S/4W	26H 1	28 & VALDEZ ST	Oakland	CHRSTN CHURCH HOME BLDG	7/31/1984	122262100	37816600	8	1S/4W 26H	2460	0	OAK	?	0	0	0	0	GEO*
	1S/4W	26H 2	20TH ST.	Oakland	COMMUNITY CARE BLDG	7/31/1984	122293000	37817250	2	1S/4W 26H	2461	0	OAK	Nov-78	0	0	0	0	GEO*
	1S/4W	26K 1	2ND AND TELEGRAPH	Oakland	21ST AND TELE PARKING	12/12/1984	122268251	37812747	9	1S/4W 26K	2473	0	OAK	Oct-74	0	0	0	0	GEO*
	1S/4W	26K 2	BROADWAY & 22ND ST	Oakland	SANWA BANK	12/12/1984	122266600	37811400	8	1S/4W 26K	6549	0	OAK	9/74	0	0	0	0	GEO*
	1S/4W	26Q 2	BROADWAY & 20 ST	Oakland	BANK AMERICA	12/12/1984	122267700	37809700	8	1S/4W 26Q	2494	0	OAK	Nov-78	0	0	0	0	GEO*
	1S/4W	26Q 1	19 & FRANKLIN ST	Oakland		12/12/1984	122267200	37807900	8	1S/4W 26Q	2493	0	OAK	9/74	0	0	0	0	GEO*
	1S/4W	23R 1	HAWTHORNE AV	Oakland	MERRITT HOSPITAL	7/31/1984	122261400	37821150	2	1S/4W 23R	2398	0	OAK	3/75	0	0	0	0	GEO*
	1S/4W	26C 3	887 30 ST	Oakland	LANE METAL FINISHING	7/31/1984	122273865	37820528	8	1S/4W 26C	2440	0	OAK	/35	0	125	20	0	IND
Listed in DWR only																			
	1S/4W	26	2800 Telegraph Ave	Oakland	Shell Oil Products Company SR-1		NA	NA						10/89	NA	35	NA	6	DES
	1S/4W	26	2800 Telegraph Ave	Oakland	Shell Oil Products Company S-1		NA	NA						4/88	NA	28.5	12	8	DES
	1S/4W	26	2800 Telegraph Ave	Oakland	Shell Oil Products Company S-4		NA	NA						10/88	NA	28.5	11	3	DES
	1S/4W	26	2800 Telegraph Ave	Oakland	Shell Oil Products Company S-5		NA	NA						10/88	NA	24	14	3	DES
	1S/4W	26D	2720 San Pablo Ave	Oakland	Mr. George Nomura MW-1		NA	NA						NA	NA	22.5	NA	2	DES
	1S/4W	26D	2720 San Pablo Ave	Oakland	Mr. George Nomura MW-2		NA	NA						NA	NA	20	NA	2	DES
	1S/4W	26D	2720 San Pablo Ave	Oakland	Mr. George Nomura MW-3		NA	NA						NA	NA	20	NA	2	DES
	1S/4W	2.60E+02	889 W Grand Ave	Oakland	Arco Products Company		NA	NA						NA	NA	NA	NA	8	DES
	1S/4W	26C4	900 High St.	Oakland	OAKLAND SCHOOL DIST.		NA	NA						NA	NA	120	NA	NA	IRR
	1S/4W	26R4	300 Lakeside Dr	Oakland	Kaiser Center Inc.		NA	NA						5/91	NA	280	15	6	IRR
	1S/4W	26K2	2225 Telegraph Ave	Oakland	TEXACO Station MW-6A		NA	NA						6/88	99.4	21.5	13.5	2	MON
	1S/4W	26K6	2225 Telegraph Ave	Oakland	TEXACO Station RW-3		NA	NA						5/90	100.2	25	14.5	4	MON
	1S/4W	26N1		Oakland	Dignity Housing West		NA	NA						5/91	27.9	37	27	2	MON
	1S/4W	26N2		Oakland	Dignity Housing West		NA	NA						5/91	28.4	37	27	2	MON

Table 4: Sensitive Receptor Survey Data

Permit	Tr	Section	Address	Longcity	Owner	Update	Xcoord	Ycoord	Matchlevel	Tsrqq	Rec_code	Phone	City	Drilldate	Elevation	Totaldepth	Waterdepth	Diameter	Use
	1S/4W	26N3		Oakland	Dignity Housing West		NA	NA						5/91	NA	35	28	2	MON
	1S/4W	26R1	300 Lakeside Dr	Oakland	Kaiser Center Inc.		NA	NA						10/90	NA	40	6	2	MON
	1S/4W	26R2	2100 Harrison St.	Oakland	Ahmanson Commercial Development		NA	NA						3/91	NA	27	12.1	4	MON
	1S/4W	26R3	2100 Harrison St.	Oakland	Ahmanson Commercial Development		NA	NA						3/91	NA	30	6.6	4	MON
	1S/4W	26R5	300 Lakeside Dr	Oakland	Kaiser Center Inc.		NA	NA						12/91	NA	31.5	9.01	2	MON
	1S/4W	26R6	21st Harrison St.	Oakland	Ahmanson Commercial Development		NA	NA						3/92	NA	25	7	4	MON
	1S/4W	26R7	1975 Webster St	Oakland	Mobil Oil Corporation		NA	NA						4/92	NA	16	5.56	4	MON
	1S/4W	26R8	1975 Webster St	Oakland	Mobil Oil Corporation		NA	NA						4/92	NA	16	6.7	4	MON
	1S/4W	26R9	1975 Webster St	Oakland	Mobil Oil Corporation		NA	NA						4/92	NA	27.5	5.42	4	MON
	1S/4W	26R10	1975 Webster St	Oakland	Mobil Oil Corporation		NA	NA						4/92	NA	16	6.01	4	MON
	1S/4W	26R11	One Kaiser Plaza	Oakland	JMB Properties		NA	NA						3/92	NA	34	18.43	2	MON
	1S/4W	26R12	One Kaiser Plaza	Oakland	JMB Properties		NA	NA						3/92	NA	32	16.48	2	MON
	1S/4W	26R13	One Kaiser Plaza	Oakland	JMB Properties		NA	NA						3/92	NA	27.5	16.48	2	MON
	1S/4W	26P8	570 18th Street	Oakland	Development agency of City of Oakland		NA	NA						1/91	NA	30	25	2	TES

Figures



N

approximate scale in feet
0 100 200

Figure 1: Site Vicinity Map

SOMA ENVIRONMENTAL ENGINEERING, INC.

approximate groundwater flow direction

N

ON-RAMP TO 980

18" storm drain

15" storm drain

18" storm drain

12" storm drain

15" storm drain

12" storm drain

VACANT BUILDING

MW-1

Excavation

B-8

WOB

SV-4

STKP-4

1

WOB-STKP

1

STKP-3

Concrete Pad

Stockpiles

Former Dispenser Island

B-1

B-2

SV-1

P-2

P-1

P-3

STKP-2

1

2

MW-2

SW-NW

B-3

WF1

Piping

WF2

6,000 gal.

WF3

B-4

8,000 gal.

B-7

SWS

10,000 gal.

SV-2

B-5

Excavation

SV-3

Gasoline Tanks

SWE

MW-3

1

2

3

STKP-1

4

5

B-6

110' to 10" san. sewer line

27th STREET

SIDEWALK

10-12" Sewer Main

6" Water Main

Residential Buildings

Merrimac Street

Property Line

Residential Buildings

Soil and Groundwater Boring

Soil Gas Sampling Location

FORMER MONITORING WELL LOCATION

Note: Stockpiles 2 and 3 contain spoils from the same area. Samples STKP-2, 1 and 2, and STKP-3, 1 were combined to form one lab sample.

approximate scale in feet

0 20 40

Figure 2: Site Map Showing Locations of Utility Conduits, Proposed Residential Development, Former Groundwater Monitoring Wells and Current Borings

ENVIRONMENTAL ENGINEERING, INC.

ON-RAMP TO 980

N

VACANT BUILDING

TRASH CHUTE
S-1 219 S.F.
100

GAS METER
S-2 60 S.F.
108

ELEV.

LOBBY
S-4 1427 S.F.
102

TYPICAL SHAFT ENCLOSURE 2 HR

COMMERCIAL SPACE 2
M 64 1905 S.F.
104

FIRST FLOOR PARKING
S-3 45 8880 S.F.
101

TOTAL AREA OF "M" OCCUPANCY = 2907 S.F.

TOILET 1
M 40 S.F.
106

TOTAL AREA OF S-3 OCCUPANCY = 9922 S.F.

COMMERCIAL SPACE 1
M 34 1009 S.F.
105

TOILET 2
M 40 S.F.
107

SIDEWALK

27th STREET

Merrimac Street

Residential Buildings

MW-1

MW-2

MW-3

Excavation

B-8

WOB

WOB-STKP

SV-4

STKP-4

STKP-3

Stockpiles

STKP-2

STKP-1

Concrete Pad

Former Dispenser Island

B-2

SV-1

P-2

P-1

SW-NW

B-3

Piping

WF2

WF3

6,000 gal.

8,000 gal.

10,000 gal.

B-7

B-4

B-5

B-6

RAMP UP 2'–0"
7.9% SLOPE

10'–0"

SV-2

SWS

DN SLOPE
10%

DN SLOPE
20%

Excavation

SV-3

Former Gasoline Tanks

SWE

Property Line

Residential Buildings

Soil and Groundwater Boring

Soil Gas Sampling Location

FORMER MONITORING WELL LOCATION

Note: Stockpiles 2 and 3 contain spoils from the same area. Samples STKP-2, 1 and 2, and STKP-3, 1 were combined to form one lab sample.

approximate scale in feet

0 20 40

Figure 2A: Site Map Showing the Footprint of the Proposed Residential Building

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

ON-RAMP TO 980

VACANT BUILDING

A'

MW-1

Excavation

B-8

STKP-4

1

WOB

WOB-STKP

SV-4

1

STKP-3

Concrete Pad

Stockpiles

Former Dispenser Island

B-1

B-2

SV-1

P-2

P-1

P-3

STKP-2

1

2

MW-2

SW-NW

B-3

WF1

Piping

B

WF2

6,000 gal.

WF3

8,000 gal.

B-4

B-7

1

2

3

STKP-1

4

B'

10,000 gal.

SWS

SV-2

B-5

B-6

Excavation

A

SV-3

MW-3

Gasoline Tanks

SWE

5

Property Line

27th STREET

SIDEWALK

Merrimac Street

Residential Buildings

Residential Buildings

Soil and Groundwater Boring

Soil Gas Sampling Location

FORMER MONITORING WELL LOCATION

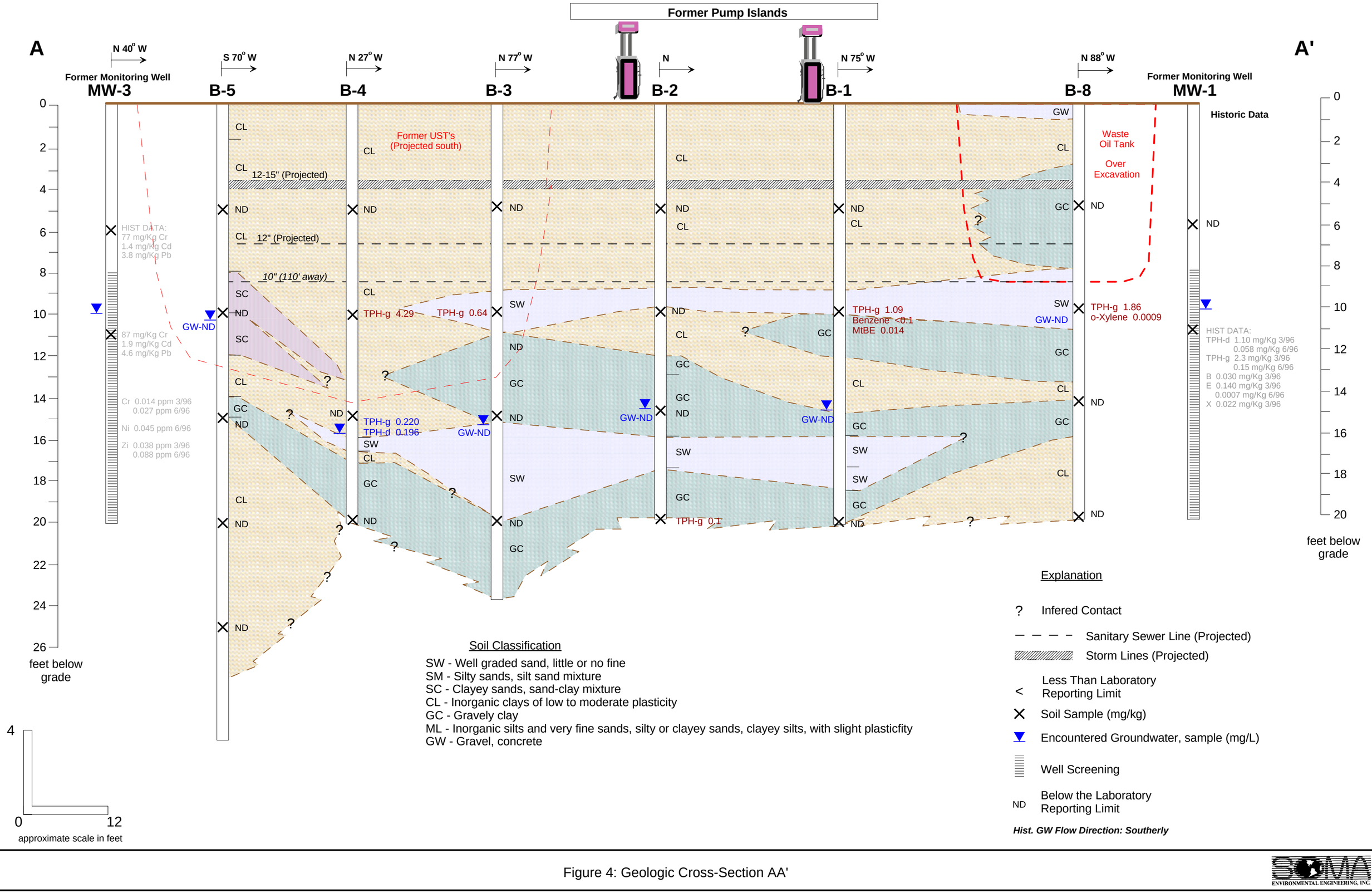
Note: Stockpiles 2 and 3 contain spoils from the same area. Samples STKP-2, 1 and 2, and STKP-3, 1 were combined to form one lab sample.

approximate scale in feet

0 20 40

Figure 3: Site Map Showing Locations of Geologic Cross-Sections AA' and BB'

SOMA ENVIRONMENTAL ENGINEERING, INC.



Soil Classification

SW - Well graded sand, little or no fine
SM - Silty sands, silt sand mixture
SC - Clayey sands, sand-clay mixture
CL - Inorganic clays of low to moderate plasticity
GC - Gravely clay
ML - Inorganic silts and very fine sands, silty or clayey sands, clayey silts, with slight plasticfity
GW - Gravel, concrete

Explanation

? Infered Contact

Sanitary Sewer Line (Projected)

Storm Lines (Projected)

< Less Than Laboratory Reporting Limit

Soil Sample (mg/kg)

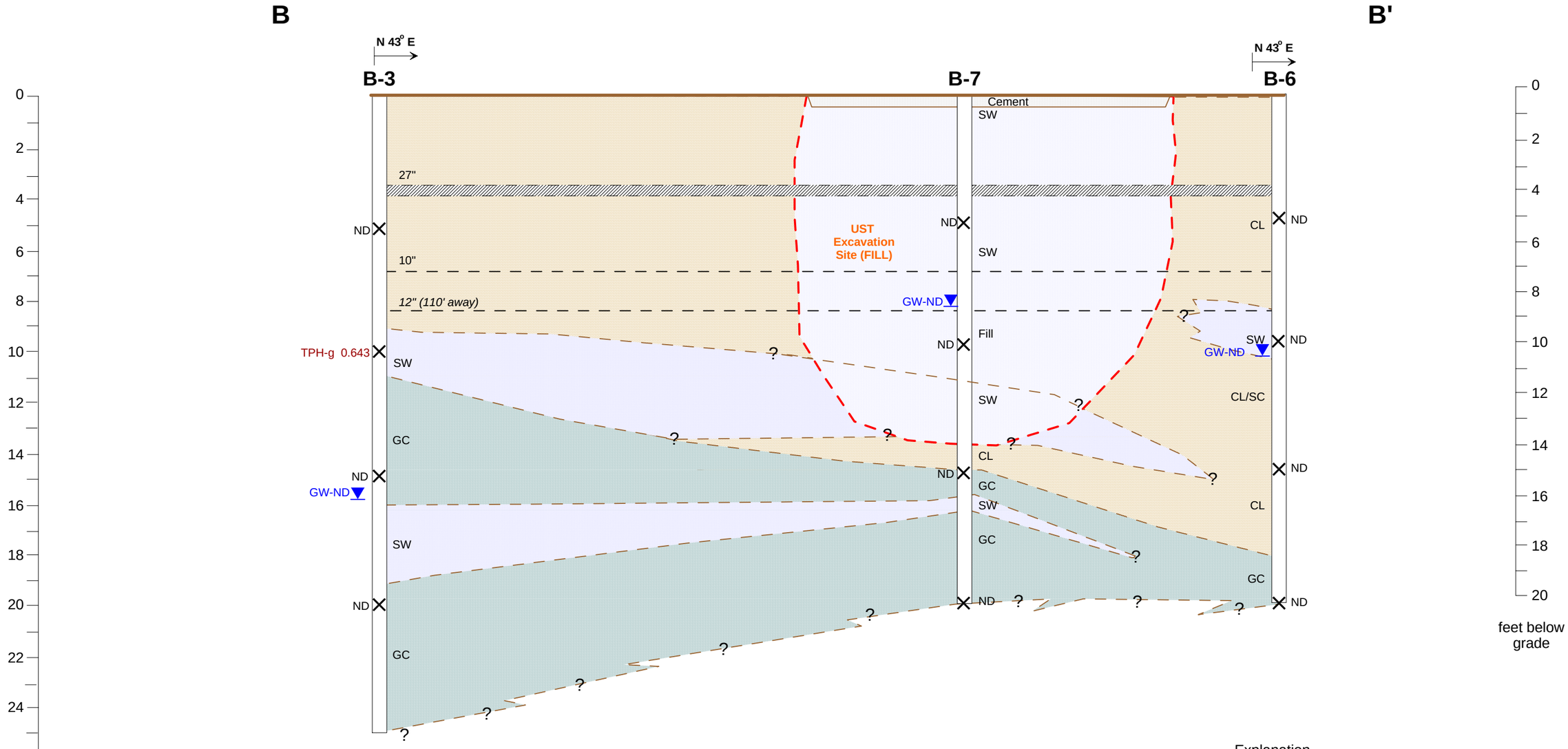
Encountered Groundwater, sample (mg/L)

Well Screening

ND Below the Laboratory Reporting Limit

Hist. GW Flow Direction: Southerly

Figure 4: Geologic Cross-Section AA'



Soil Classification

SW - Well graded sand, little to no fines
CL - Inorganic clays of low to moderate plasticity
sandy clays, silty clays, clean clays
SC - Clayey sands, sand-clay mixture
GC - Gravely clay

Explanation

? Infered Contact

Sanitary Sewer Line (Projected)

Storm Lines (Projected)

< Less Than Laboratory Reporting Limit

Soil Sample (mg/kg)

Encountered Groundwater, sample (mg/L)

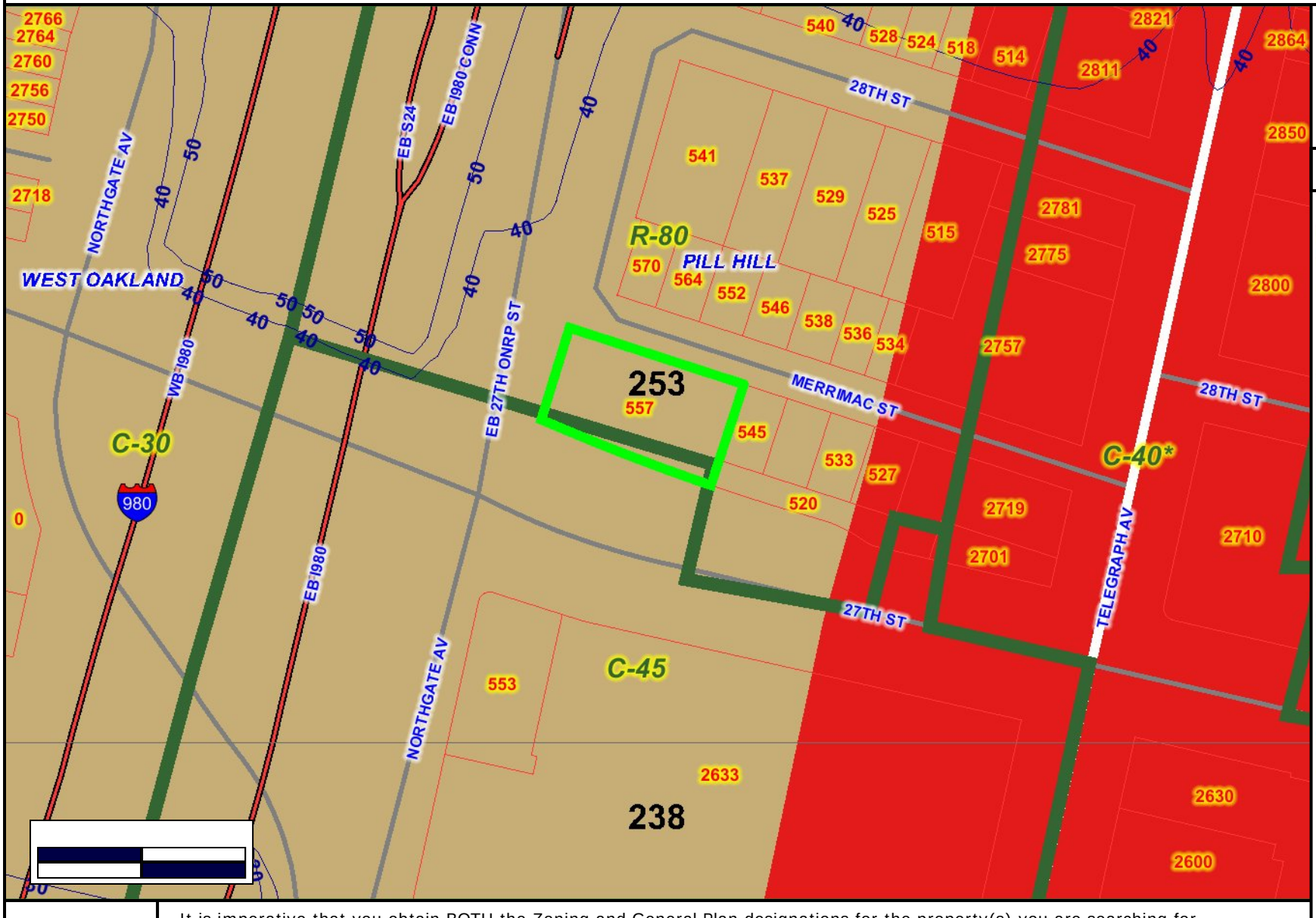
ND Below the Laboratory Reporting Limit

Hist. GW Flow Direction: Southerly

Figure 5: Geologic Cross-Section BB'

SOMA ENVIRONMENTAL ENGINEERING, INC.

Figure 6: Zoning Map



Legend

- Selected Features
- Contours
- City Facilities Footprint
- City Limits
- Zoning
- Sewer Grid
- Parcels
- Freeways
- MajorSts
- Streets
- Hayward Fault
- Hayward Fault Zone
- Water

General Plan

- Business Mix
- Central Business District
- Community Commercial
- Detached Unit Residential
- Estuary Plan Area
- General Industrial/Transp
- Hillside Residential
- Housing and Business Mix
- Institutional
- Mixed Housing Type
- Neighborhood Center
- Regional

N W E S

It is imperative that you obtain BOTH the Zoning and General Plan designations for the property(s) you are searching for.

Questions? Contact a planner at (510)238-3911.

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City of Oakland

Appendix A
Drilling Permits

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 01/31/2008 By jamesy

Permit Numbers: W2008-0052
Permits Valid from 02/14/2008 to 02/18/2008

Application Id: 1201642762663
City of Project Site: Oakland
Site Location: 557 Merrimac Ave
Oakland, CA
Project Start Date: 02/14/2008
Completion Date: 02/18/2008
Applicant: SOMA Environmental Engineering - Elena Manzo
6620 Owens Drive, Suite A, Pleasanton, CA 94588
Phone: 925-734-6400
Property Owner: Noel Yi
2756 Alvarado Street #A-B, San Leandro, CA 94577
Phone: --
Client: ** same as Property Owner **

	Total Due:	$200.00
Receipt Number: WR2008-0038	**Total Amount Paid:**	$200.00
Payer Name : Mansour Sepehr	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 12 Boreholes
Driller: Fisch Drilling - Lic #: 683865 - Method: DP

Work Total: $200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0052	01/31/2008	05/14/2008	12	2.00 in.	25.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Alameda County Public Works Agency - Water Resources Well Permit

5. Applicant shall contact James Yoo for an inspection time at 510-670-6633 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

8. Note: County Holiday Feb 12 and Feb 18

PROGRAMS AND SERVICES

Well Standards Program

The Alameda County Public Works Agency, Water Resources is located at:
399 Elmhurst Street
Hayward, CA 94544
For Driving Directions or General Info, Please Contact 510-670-5480 or wells@acpwa.org
For Drilling Permit information and process contact James Yoo at
Phone: 510-670-6633
FAX: 510-782-1939
Email: Jamesy@acpwa.org

Alameda County Public Works is the administering agency of General Ordinance Code, Chapter 6.88 . The purpose of this chapter is to provide for the regulation of groundwater wells and exploratory holes as required by California Water Code. The provisions of these laws are administered and enforced by Alameda County Public Works Agency through its Well Standards Program.

Drilling Permit Jurisdictions in Alameda County: There are four jurisdictions in Alameda County.

Location: Agency with Jurisdiction Contact Number

Berkeley City of Berkeley Ph: 510-981-7460
Fax: 510-540-5672

Fremont, Newark, Union City Alameda County Water District Ph: 510-668-4460
Fax: 510-651-1760

Pleasanton, Dublin, Livermore, Sunol Zone 7 Water Agency Ph: 925-454-5000
Fax: 510-454-5728

The Alameda County Public Works Agency, Water Resources has the responsibility and authority to issue drilling permits and to enforce the County Water Well Ordinance 73-68. This jurisdiction covers the western Alameda County area of **Oakland, Alameda,Piedmont, Emeryville, Albany, San Leandro, San Lorenzo, Castro Valley,** and **Hayward** . The purpose of the drilling permits are to ensure that any new well or the destruction of wells, including geotechnical investigations and environmental sampling within the above jurisdiction and within Alameda County will not cause pollution or contamination of ground water or otherwise jeopardize the health, safety or welfare of the people of Alameda County.

Permits are required for all work pertaining to wells and exploratory holes at any depth within the jurisdiction of the Well Standards Program. A completed permit application *(30 Kb)** , along with a site map, should be submitted at least **ten (10) working days prior to the planned start of work.** Submittals should be sent to the address or fax number provided on the application form. When submitting an application via fax, please use a high resolution scan to retain legibility.

Fees
Beginning April 11, 2005 , the following fees shall apply:

A permit to construct, rehabilitate, or destroy wells, including cathodic protection wells, but excluding dewatering wells (*Horizontal hillside dewatering and dewatering for construction period only), shall cost $300.00 per well.

A permit to bore exploratory holes, including temporary test wells, shall cost $200 per site. A site includes the project parcel as well as any adjoining parcels.

Please make checks payable to: **Treasurer, County of Alameda**

Permit Fees are exempt to State & Federal Projects
Applicants shall submit a letter from the agency requesting the fee exemption.

Scheduling Work/Inspections:
Alameda County Public Works Agency (ACPWA), Water Resources Section requires scheduling and inspection of permitted work. All drilling activities must be scheduled in advance. Availability of inspections will vary from week to week and will come on a first come, first served bases. To ensure inspection availability on your desired or driller scheduled date, the following procedures are required:

Please contact **James Yoo at 510-670-6633** to schedule the inspection date and time (You must have drilling permit approved prior to scheduling).

Schedule the work as far in advance as possible (at least 5 days in advance); and confirm the scheduled drilling date(s) at least 24 hours prior to drilling.

Once the work has been scheduled, an ACPWA Inspector will coordinate the inspection requirements as well as how the Inspector can be reached if they are not at the site when Inspection is required. Expect for special circumstances given, all work will require the inspection to be conducted during the working hours of 8:30am to 2:30pm., Monday to Friday, excluding holidays.

Request for Permit Extension:
Permits are only valid from the start date to the completion date as stated on the drilling permit application and Conditions of Approval. To request an extension of a drilling permit application, applicants must request in writing prior to the completion date as set forth in the Conditions of Approval of the drilling permit application. Please send fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. There are no additional fees for permit extensions or for re-scheduling inspection dates. You may not extend your drilling permit dates beyond 90 days from the approval date of the permit application. **NO refunds** shall be given back after 90 days and the permit shall be deemed voided.

Cancel a Drilling Permit:
Applicants may cancel a drilling permit only in writing by mail, fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. If you do not cancel your drilling permit application before the drilling completion date or notify in writing within 90 days, Alameda County Public Works Agency, Water Resources Section may void the permit and No refunds may be given back.

Refunds/Service Charge:
A service charge of $25.00 dollars for the first check returned and $35.00 dollars for each subsequent check returned.

Applicants who cancel a drilling permit application **before** we issue the approved permit(s), will receive a **FULL** refund (at any amount) and will be mailed back within two weeks.

Applicants who cancel a drilling permit application **after** a permit has been issued will then be charged a service fee of $50.00 (fifty Dollars).

To collect the remaining funds will be determined by the amount of the refund to be refunded (see process below).

Board of Supervisors Minute Order, File No. 9763, dated January 9, 1996, gives blanket authority to the Auditor-Controller to process claims, from all County departments for the refund of fees which do not exceed $500 (Five Hundred Dollars)(with the exception of the County Clerk whose limit is $1,500).

Refunds over the amounts must be authorized by the Board of Supervisors Minute Order, File No. 9763 require specific approval by the Board of Supervisors. The forms to request for refunds under $500.00 (Five Hundred Dollars) are available at this office or any County Offices. If the amount is exceeded, a Board letter and Minute Order must accompany the claim. Applicant shall fill out the request form and the County Fiscal department will process the request.

Enforcement
Penalty. Any person who does any work for which a permit is required by this chapter and who fails to obtain a permit shall be guilty of a misdemeanor punishable by fine not exceeding Five Hundred Dollars ($500.00) or by imprisonment not exceeding six months, or by both such fine and imprisonment, and such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such

violation is committed, continued, or permitted, and shall be subject to the same punishment as for the original offense. (Prior gen. code §3-160.6)

Enforcement actions will be determined by this office on a case-by-case basis
Drilling without a permit shall be the cost of the permit(s) and a fine of $500.00 (Five Hundred Dollars).

Well Completion Reports (State DWR-188 forms) must be filed with the Well Standards Program within 60 days of completing work. Staff will review the report, assign a state well number, and then forward it to the California Department of Water Resources (DWR). Drillers should not send completed reports to DWR directly. Failure to file a Well Completion Report or deliberate falsification of the information is a misdemeanor; it is also grounds for disciplinary action by the Contractors' State License Board. Also note that filed Well Completion Reports are considered private record protected by state law and can only be released to the well owner or those specifically authorized by government agencies.

See our website (www.acgov.org/pwa/wells/index.shtml) for links to additional forms.

Appendix B

Boring Logs and Schematic of the Vapor Probe Sampling System

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-1

Project: 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Direct Push
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: L. Hightower

Date Drilled: February 14, 2008
Casing Elevation: NA
Depth to Groundwater: 6.4 ft
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				3 1/2" concrete, 1" sand fill.			
2.5			CL	CLAY: Dark gray, firm, moist, some fine-grained gravel			
	5		CL	SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, some fine-grained gravel. Becomes wet @ 5ft.		x	
4.5			CL	SILTY CLAY: Light brown, hard, dry, with medium to coarse-grained gravel			
			CL	SANDY CLAY: Olive gray, hard, dry, fine to medium-grained gravel, with some fine-grained gravel			
	10		SW	SAND: Olive gray, firm, wet, fine to coarse-grained sand with some fine-grained gravel		x	
				SAND: Light brown, wet, firm, fine to medium-grained sand			
0				GRAVELLY CLAY: Light brown, hard, dry, fine to coarse-grained gravel			
				SANDY CLAY: Light brown, stiff moist, medium-grained sand, with some fine gravel. NO PHC			
	15			GRAVELLY CLAY: Light brown,hard,moist, fine to coarse-grained gravel. No PHC			
				SAND: Light brown, loose, saturated, fine to medium-grained, NO PHC			
0.7				GRAVELLY SAND: Light brown, loose, saturated, fine-grained gravel, medium-grained sand, NO PHC			
				GRAVELLY CLAY: Light brown, hard, dry, fine-grained gravel, NO PHC			
	20					x	
	25						

COMMENTS:
Continuous Borings-Log 4ft sections
All except B5 (28') temporary well screens 1"PVC, 5' Screen, 20'-15', 15' blank
x Soil samples Sample liner cut & sealed with Teflon end caps
No soil 15' saturated

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-2

Project: 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: R. McKinney

Date Drilled: February 15, 2008
Casing Elevation: NA
Depth to Groundwater: 11'2"
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION Direct push soil & grab GW sample	SAMPLED split spoon / Core	WELL DIAGRAM
				Upper 2' dark gray, firm-very firm.		
1.2				CLAY: Dark gray, firm, moist, some fine-grained gravel. No PHC odor		
	5			SILTY CLAY: 3-4' clay, hard, gray/brown. firm, moist, some fine-grained gravel No PHC odor	x	
0.8						
				Gray, wet sand, silty, soft with silt/clay		
	10			Wet sand/gravel, red brown- SW/GW with silty clay, soft, No PHC	x	
0.5				SANDY CLAY: Light brown, stiff moist, medium-grained sand, with some fine gravel, hard		
				GRAVELLY CLAY: Light brown,hard,moist, fine to coarse-grained gravel.		
	15			GRAVELLY CLAY: Light brown,hard,moist, fine to coarse-grained gravel. Clayey gravel and gravelly clay sand, CSE gas	x	
				GRAVELLY SAND: Brown, loose, saturated, fine-grained gravel, medium-grained sand, moist		
0.8				GRAVELLY CLAY: Light brown,hard,dry, fine to coarse-grained gravel. Cse gravelly clay. No PHC		
				GRAVELLY CLAY: Brown, hard- very hard gravelly clay, dry, fine-grained gravel, NO PHC		
	20			Stop @ 20'	x	
				Low production Left well screen in place		
	25					

COMMENTS: Continuous core-4ft sections
x Soil samples Sample liner cut & sealed with Teflon end caps

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-3

Project: 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: Rich McKinney

Date Drilled: February 15, 2008
Casing Elevation: NA
Depth to Groundwater: 11.01 ft
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				See borings B-1,2 for soil description			
				3 1/2" asphalt & gravel			
			CL	CLAY: Dark gray, dry, hard, some fine-grained gravel, No PHC			
2.2				SILTY CLAY: Light brown with yellowish orange mottling, firm-hard, dry, some fine-grained gravel No PHC			
	5					x	
2.0			CL	SILTY CLAY: Molding clay,light brown with yellowish orange mottling, firm, increase gravel			
				SANDY CLAY: Olive gray, hard, dry, fine to medium-grained gravel, with some fine-grained gravel			
	10			Sand: Gray, wet, firm to medium grained sand, SP, soft. m- PHC		x	
1.0				GRAVELLY CLAY: Greenish-gray, hard, dry, fine to coarse-grained gravel			
	15					x	
				GRAVELLY SAND: Light brown, loose, saturated, fine-grained gravel, medium-grained sand			
0.0			SW	Wet SW, brown, gravel Silt/Clay loose ~ 1 Foot thick zone No PHC			
	20		CL	GRAVELLY CLAY: Light brown, very hard, dry, fine-grained gravel.		x	
				GW sample ~ 11.0 ft bgs			
	25						

COMMENTS: Continuous Core 4ft lengths
x Soil samples Sample liner cut & sealed with Teflon end caps

SOMA ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-4

Project: 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: L. Hightower

Date Drilled: February 14, 2008
Casing Elevation: NA
Depth to Groundwater: 7.91 ft
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				2" asphalt			
				SILTY CLAY: Dark brown, hard, dry, some coarse-grained gravel			
3.1							
	5			SILTY CLAY: Light brown, stiff, moist, no gravel		X	1539
				SILTY CLAY: Light brown with yellowish orange mottling, hard, moist, medium-grained sand, no gravel			
11.1				SILTY CLAY: Greenish brown, hard, dry, with medium-grained gravel, PHC odor			
	10					X	1549
6.3				SILTY CLAY: Light brown with gray mottling, hard, dry, medium to coarse-grained gravel			
				SILTY CLAY: Light brown, hard, dry, with medium to coarse grained gravel			
	15					X	1603
				SILTY CLAY: Light brown, hard, dry, no gravel			
5.3				GRAVELLY SAND: Light brown, loose, saturated, fine-grained gravel, medium-grained			
				SILTY CLAY: Light brown, hard, dry, no gravel			
				GRAVELLY CLAY: Light brown, hard, dry, fine-grained gravel.			
4.0	20					X	1624
	25						

COMMENTS: Continuous Coring, 4ft sections
X Soil samples Sample liner cut & sealed with Teflon end caps

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-5

Project : 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: L. Hightower

Date Drilled: February 14, 2008
Casing Elevation: NA
Depth to Groundwater: See notes
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				2" Asphalt			
				CLAY: Dark gray, hard, moist, some fine-grained gravel			
				SILTY CLAY: Light brown with yellowish orange mottling, hard, moist, some fine-grained gravel			
1.8							
	5			SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, some fine-grained gravel		x	
				SILTY CLAY: Light brown, soft, moist, no gravel			
2.4							
				SANDY CLAY: Olive gray, hard, dry, fine to medium-grained gravel, with some fine-grained gravel			
	10			SANDY CLAY: Greenish gray, very stiff, moist, has green mottling, with fine gravel, becomes brown @ 11.5'. PHC odor		x	
3.1				SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, some fine-grained gravel			
				GRAVELLY CLAY: Light brown, hard, dry, fine-grained gravel.			
	15			SILTY CLAY: Light brown,hard,dry, medium to coarse-grained gravel, medium-grained sand		x	
				SILTY CLAY: Light brown with yellowish orange mottling, hard, dry, some fine-grained gravel			
1.9	20			SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, some fine-grained gravel		x	
				SILTY CLAY: Light brown, hard, moist, medium to coarse-grained gravel			
				SILTY CLAY: Light brown, hard, dry, no gravel			
1.4	25						

COMMENTS: Continuous Core, 4ft sections
x Soil samples Sample liner cut & sealed with Teflon end caps

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-5

Project : 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: L. Hightower

Date Drilled: February 14, 2008
Casing Elevation: NA
Depth to Groundwater: See Notes
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				SILTY CLAY: Light brown, hard, dry, no gravel			
0.8							
	30			Stop @ 28 ft. Tried to find GW- moist at ~ 24 - left well screen sit ~ 2 hrs,~ 2 ft bw in screen - enough to sample. Source may be shallow ~ 9ft-10ft sand lense or deeper-not sure			
				B5 near former MW-3, South corner of site, GW reported 2007 @ 9-10 ft bgs			

COMMENTS: Continuous Core, 4ft sections
5' of 1" PVC well screen set at ~28 ft - 23'-blank to surface

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-6

Project: 3022
Site Location: 557 Merrimac St.
Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: R. McKinney

Date Drilled: February 15, 2008
Casing Elevation: NA
Depth to Groundwater: 8.2 ft
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				Appx. 6" concrete asphalt sand			
				CLAY: Dark gray, firm, moist, TR gravel			
0.0				SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, TR gravel			
	5					x	
				SILTY CLAY: Light brown with yellowish orange mottling, firm, moist, some fine-grained gravel			
0.0				SILTY CLAY: Light brown, hard, dry, medium to coarse-grained gravel			
				SAND: Light brown, wet, firm, fine to medium-grained sand, ~ 9ft, ~1.5 ft silty			
	10					x	
				SANDY CLAY: Light brown, stiff moist, medium-grained sand, with some fine gravel.			
				SANDY CLAY: Light brown, stiff moist, medium-grained sand, with some fine gravel.			
0.4				SANDY CLAY: Light brown, stiff moist, medium-grained sand, cse gravel, silt, clay.			
	15			SILTY CLAY: Light brown, hard, dry,medium to coarse-grained gravel		x	
				GRAVELLY CLAY: Light brown, very hard, dry, with gravel,			
0.2	20			Stop 1000		x	
				Bore B6 2-15-08 Fri			
	25						

COMMENTS: Continuous core to 20 ft per scope
x Soil samples Sample liner cut & sealed with Teflon end caps

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-7

Project: 3022
Site Location: 557 Merrimac St. Oakland
Drilling Method: Direct Push
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: L. Hightower

Date Drilled: February 14, 2008
Casing Elevation: NA
Depth to Groundwater: 7.7 ft
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED: split spoon	SAMPLED: Core	WELL DIAGRAM
				3 1/2" Cement			
				SANDY GRAVEL: Light brown, firm, wet, medium to coarse-grained sand			
				SAND: Light brown, dry, loose, fine to coarse-grained sand, with some fine gravel			
				SANDY GRAVEL: Light brown, loose dry, medium to coarse-grained sand, fine-grained gravel			
0.03	5			SAND: Light brown, wet, firm, fine to medium-grained sand 1" lense of dark gray sand and gravel @ 5.5'		x	
				Fill(from UST tank) : Light gray, loose dry, fine to coarse-grained gravel with fine to medium-grained sand			
				Fill(from UST tank) : Light gray, loose, fine to coarse-grained gravel with fine to medium-grained sand, saturated			
0.09	10					x	
0.07				SAND: Light brown, wet, firm, fine to medium-grained sand, saturated Becomes dark gray@11.5'. PHC odor			
				SAND: Olive, gray, firm, wet, fine to coarse-grained sand, some fine-grained gravel with bits of shell			
				SANDY CLAY: Light brown, stiff moist, medium-grained sand with some fine gravel. No PHC			
	15			GRAVELLY CLAY: Light brown,hard,dry, fine-grained gravel.		x	
				SAND: Olive gray, firm, wet, fine to coarse-grained sand with some fine-grained gravel			
3.2				GRAVELLY CLAY: Light brown,hard, fine-grained gravel. Wet from 16.5' to 17'			
	20					x	
	25						

COMMENTS: TD 20 ft.
Continuous Core, 4ft sections
x Soil samples Sample liner cut & sealed with Teflon end caps

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE B-8

Project: 3022
Site Location: 557 Merrimac St. Oakland
Drilling Method: Geoprobe
Driller: Fisch Environmental
Boring Diameter: 2"
Logged By: R. McKinney

Date Drilled: February 15, 2008
Casing Elevation: NA
Depth to Groundwater:
T.O.C. To Screen: NA
Screen Length: NA
Approved By: R. McKinney

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED (split spoon / Core)	WELL DIAGRAM
				6" concrete asphalt gravel		
				SILTY CLAY: Light brown, hard, dry, with medium to coarse-grained gravel		
0.5				Poor recovery 4'-8' - 1Ft of fill Coarse gravel and clay - reddish brown		
	5				X	
250						
			SW	Gray, soft, moist, m PHC odor		
	10				X	
				GRAVELLY CLAY: Light brown, hard, dry, fine to coarse-grained gravel. No PHC		
2.5				SILTY CLAY: Light brown, very hard, dry, with medium to coarse-grained gravel		
	15			GRAVELLY CLAY: Light brown, hard, dry, fine to coarse-grained gravel, increase gravel to 16'	X	
0.0				SILTY CLAY: Light brown, firm, <10% dry, fine to coarse-grained gravel No PHC		
0.0				SILTY CLAY: Light brown with yellowish orange mottling, hard, moist, some fine-grained gravel. No PHC		
	20			Stop 20' per scope	X	
				Dry - Set 1" PVC Screen		
				Left screen in place over weekend		
	25					

COMMENTS: Continuous core, 4ft sections
X Soil samples Sample liner cut & sealed with Teflon end caps

SOMA ENVIRONMENTAL ENGINEERING, INC.	DIAGRAM: SV-1	PAGE 1 OF 1

PROJECT: 3022

SITE LOCATION: 557 Merrimac Street
Oakland

DRILLING COMPANY: Fisch Environmental

DRILLING METHOD: Direct Push

NOTES: Lithology is extrapolated from B-2 (2/15/08)

DATE DRILLED: 02/15/08

CASING ELEVATION: NA

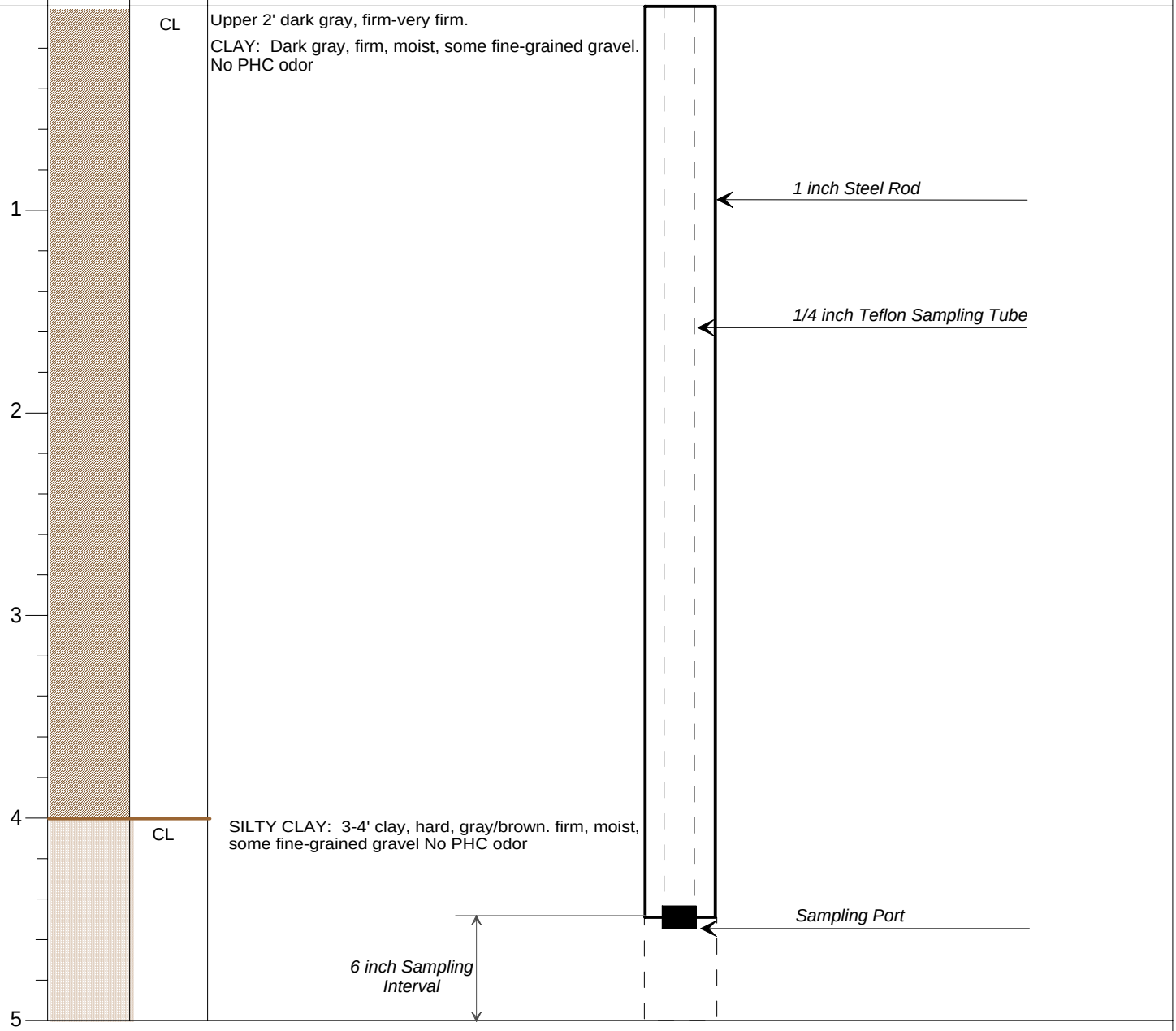
DEPTH TO GW: NA

T.O.C. TO SCREEN: NA

SCREEN LENGTH: NA

APPROVED BY: M. Sepehr. Ph. D., P.E.

SV-1 SOIL PROBE DIAGRAM



SOMA ENVIRONMENTAL ENGINEERING, INC.	DIAGRAM: SV-2	PAGE 1 OF 1

PROJECT: 3022

SITE LOCATION: 557 Merrimac Street
Oakland

DRILLING COMPANY: Fisch Environmental

DRILLING METHOD: Direct Push

NOTES: Lithology is extrapolated from B-5 (2/15/08)

DATE DRILLED: 02/15/08

CASING ELEVATION: NA

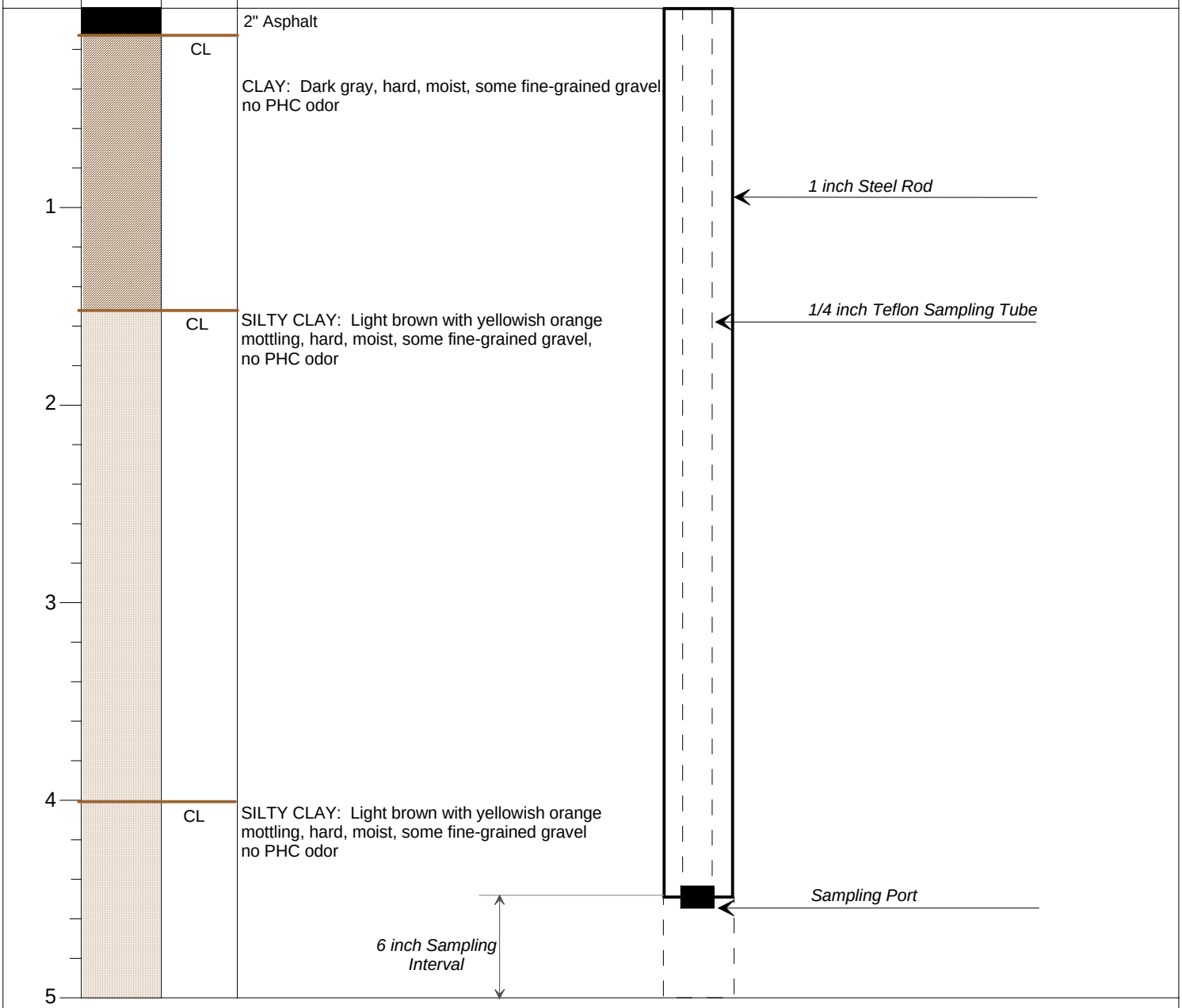
DEPTH TO GW: NA

T.O.C. TO SCREEN: NA

SCREEN LENGTH: NA

APPROVED BY: M. Sepehr. Ph. D., P.E.

SV-2 SOIL PROBE DIAGRAM



SOMA ENVIRONMENTAL ENGINEERING, INC.	DIAGRAM: SV-3	PAGE 1 OF 1

PROJECT: 3022

SITE LOCATION: 557 Merrimac Street
Oakland

DRILLING COMPANY: Fisch Environmental

DRILLING METHOD: Direct Push

NOTES: Lithology is extrapolated from B-5 (2/15/08)

DATE DRILLED: 02/15/08

CASING ELEVATION: NA

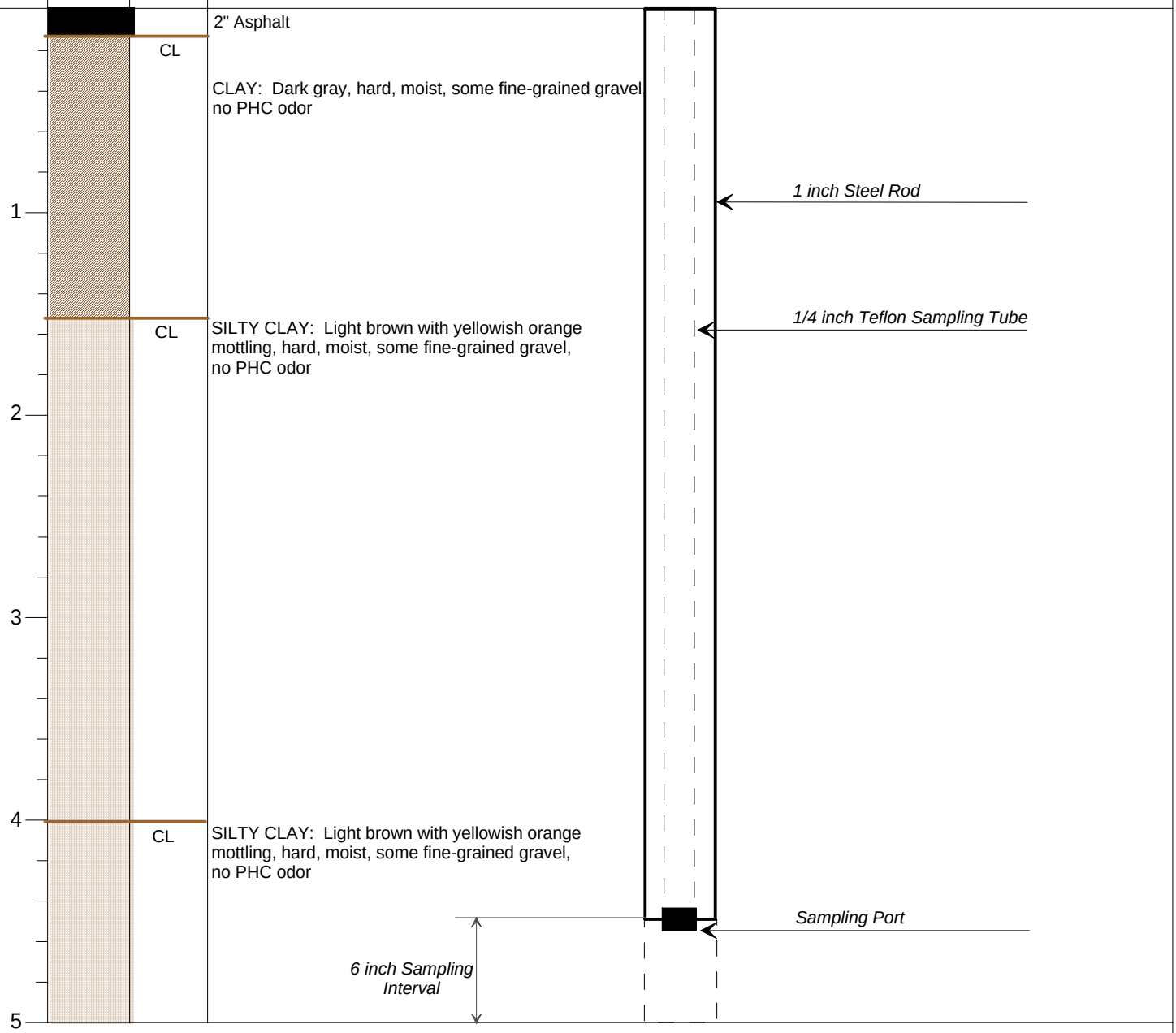
DEPTH TO GW: NA

T.O.C. TO SCREEN: NA

SCREEN LENGTH: NA

APPROVED BY: M. Sepehr. Ph. D., P.E.

SV-3 SOIL PROBE DIAGRAM



SOMA ENVIRONMENTAL ENGINEERING, INC.	DIAGRAM: SV-4	PAGE 1 OF 1

PROJECT: 3022

SITE LOCATION: 557 Merrimac Street
Oakland

DRILLING COMPANY: Fisch Environmental

DRILLING METHOD: Direct Push

NOTES: Lithology is extrapolated from B-8 (2/15/08)

DATE DRILLED: 02/15/08

CASING ELEVATION: NA

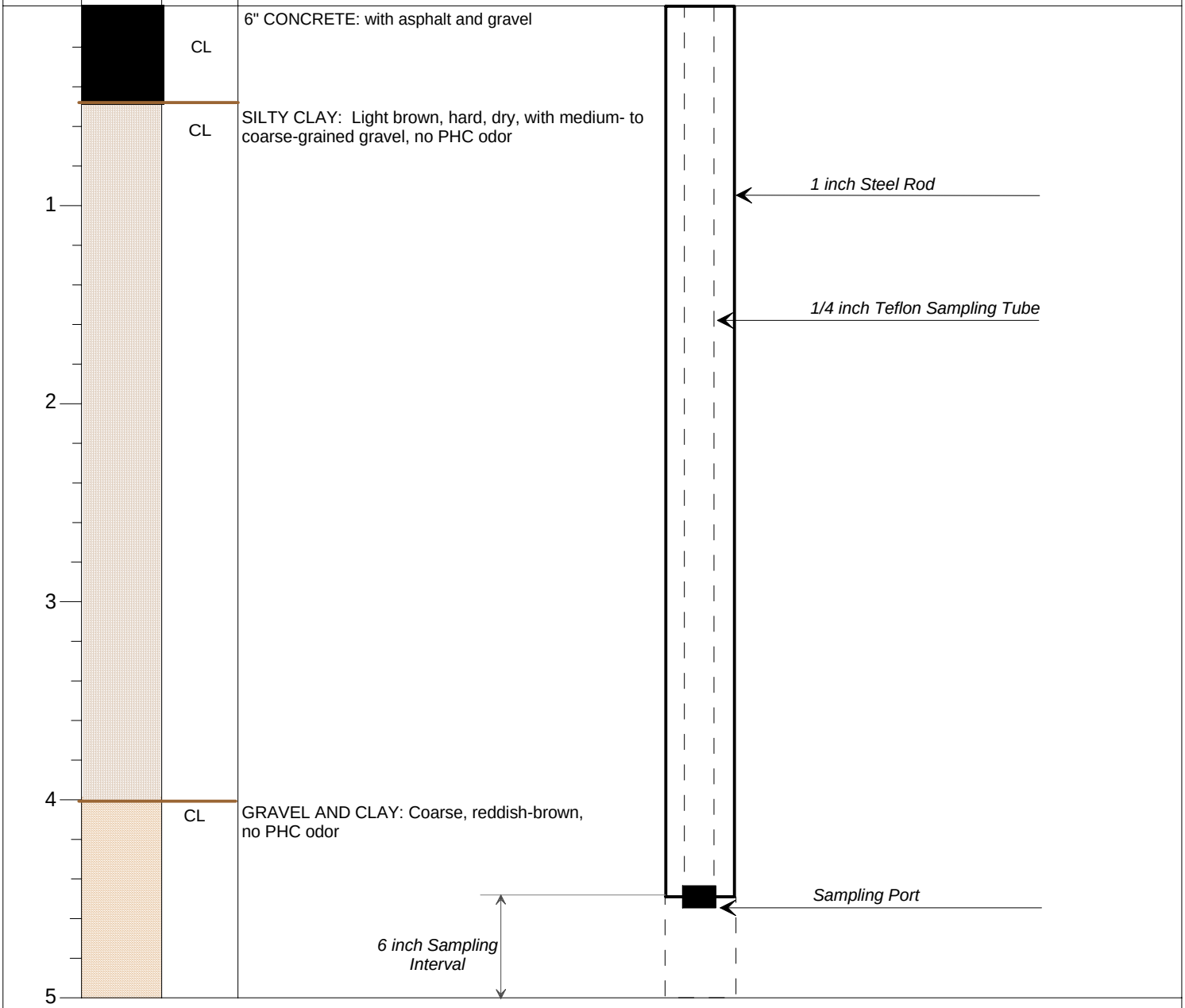
DEPTH TO GW: NA

T.O.C. TO SCREEN: NA

SCREEN LENGTH: NA

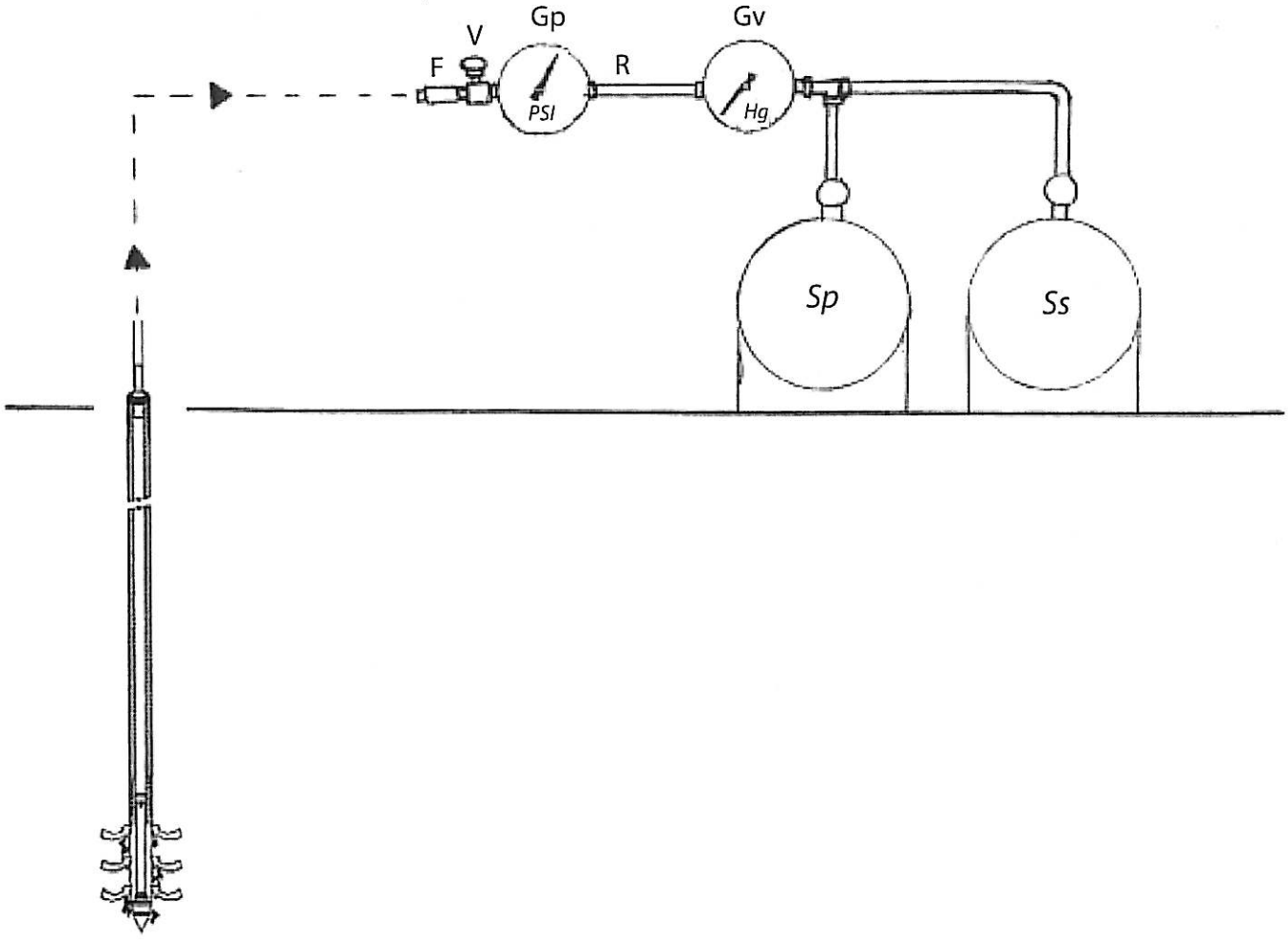
APPROVED BY: M. Sepehr. Ph. D., P.E.

SV-4 SOIL PROBE DIAGRAM



Schematic of Soil Gas Sampling Manifold

F= Filter
V= Valve
Gp= Pressure Gauge
R= Flow Regulator
Gv= Vacuum Gauge
Sp= Purge Summa Canister
Ss= Sample Summa Canister



ENVIRONMENTAL ENGINEERING, INC.

Plate 1: 6-Liter Summa Canisters.

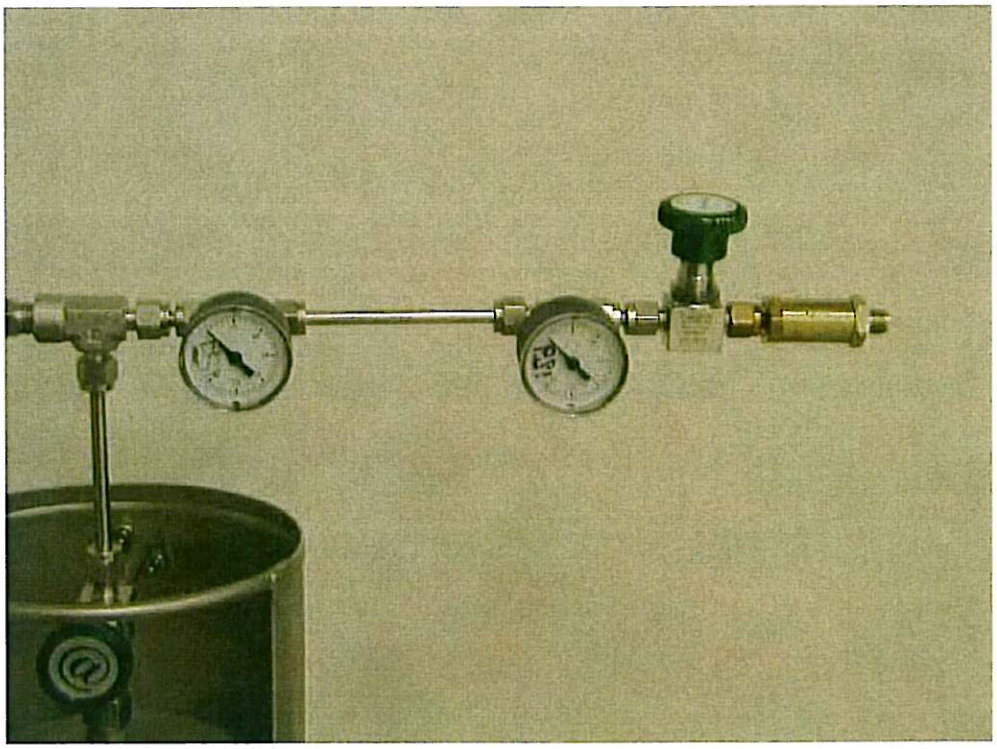


Plate 2: Flow regulator with built-in vacuum gauge connected to the tee fitting.

Appendix C
Soil, Groundwater, and Soil Vapor Analytical Report

Torrent
LABORATORY, INC.

February 29, 2008

Joyce Bobek
Soma Environmnental Engineering, Inc.
6620 Owens Dr. Suite A
Pleasanton, CA 94588

TEL: (925) 734-6400
FAX (925) 734-6401

RE:

Order No.: 0802102

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 5 samples on 2/20/2008 for the analyses presented in the following report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.
Reported data is applicable for only the samples received as part of the order number referenced above.

Torrent Laboratory, Inc, is certified by the State of California, ELAP #1991. If you have any questions regarding these tests results, please feel free to contact the Project Management Team at (408)263-5258;ext: 204.

Sincerely,

Laboratory Director

2/29/08
Date

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road * Milpitas, CA * Phone: (408) 2635258 * Fax: (408) 263-8293
Visit us ar www.torrentlab.com email: analysis@torrentlab.com

Report Prepaired For: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Summary Report

SV1 **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-001A**

Parameter	Preped	Analyzed	Result	RL	Unit
Acetone	2/29/2008	2/29/2008	9.9	9.5	µg/m³
Toluene	2/29/2008	2/29/2008	2.0	1.9	µg/m³

SV1-DUP **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-002A**

Parameter	Preped	Analyzed	Result	RL	Unit
2-Butanone (MEK)	2/29/2008	2/29/2008	8.7	2.3	µg/m³
Acetone	2/29/2008	2/29/2008	48	15	µg/m³

SV2 **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-003A**

Parameter	Preped	Analyzed	Result	RL	Unit
1,2,4-Trimethylbenzene	2/29/2008	2/29/2008	53	4.3	µg/m³
1,3,5-Trimethylbenzene	2/29/2008	2/29/2008	13	4.3	µg/m³
2-Butanone (MEK)	2/29/2008	2/29/2008	410	2.6	µg/m³
2-Hexanone	2/29/2008	2/29/2008	73	3.6	µg/m³
4-Ethyl Toluene	2/29/2008	2/29/2008	42	4.3	µg/m³
Acetone	2/29/2008	2/29/2008	600	17	µg/m³
Benzene	2/29/2008	2/29/2008	12	2.8	µg/m³
Carbon Disulfide	2/29/2008	2/29/2008	14	2.7	µg/m³
Chloroethane	2/29/2008	2/29/2008	99	2.3	µg/m³
Ethyl Benzene	2/29/2008	2/29/2008	16	3.8	µg/m³
Isopropanol	2/29/2008	2/29/2008	76	29	µg/m³
m,p-Xylene	2/29/2008	2/29/2008	80	3.6	µg/m³
o-xylene	2/29/2008	2/29/2008	27	3.8	µg/m³
Toluene	2/29/2008	2/29/2008	62	3.3	µg/m³
trans-1,2-Dichloroethene	2/29/2008	2/29/2008	11	3.5	µg/m³

SV2 **TO-3 (Mod)Air Analysis w/Gasoline** **Lab ID: 0802102-003A**

Parameter	Preped	Analyzed	Result	RL	Unit
Gasoline	2/28/2008	2/29/2008	1900	630	µg/m³

SV3 **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-004A**

Parameter	Preped	Analyzed	Result	RL	Unit
Acetone	2/29/2008	2/29/2008	17	13	µg/m³

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road * Milpitas, CA * Phone: (408) 2635258 * Fax: (408) 263-8293
Visit us ar www.torrentlab.com email: analysis@torrentlab.com

Report Prepaired For: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Summary Report

SV3 **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-004A**

Parameter	Preped	Analyzed	Result	RL	Unit
Toluene	2/29/2008	2/29/2008	2.8	2.6	µg/m³

SV3 **TO-3 (Mod)Air Analysis w/Gasoline** **Lab ID: 0802102-004A**

Parameter	Preped	Analyzed	Result	RL	Unit
Gasoline	2/28/2008	2/29/2008	1900	490	µg/m³

SV4 **Toxic Organics in Air by EPA TO-15** **Lab ID: 0802102-005A**

Parameter	Preped	Analyzed	Result	RL	Unit
Acetone	2/29/2008	2/29/2008	42	23	µg/m³
m,p-Xylene	2/29/2008	2/29/2008	14	5.0	µg/m³
Toluene	2/29/2008	2/29/2008	12	4.6	µg/m³

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV1
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 2/15/2008 12:35:00 PM

Lab Sample ID: 0802102-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	2/29/2008	1.99	1	2.0	ND	µg/m³	R15529
1,1,1,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1	3.4	ND	µg/m³	R15529
1,1,1-Trichloroethane	TO-15	2/29/2008	2.73	1	2.7	ND	µg/m³	R15529
1,1,2,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1	3.4	ND	µg/m³	R15529
1,1,2-Trichloroethane	TO-15	2/29/2008	2.73	1	2.7	ND	µg/m³	R15529
1,1-Dichloroethane	TO-15	2/29/2008	2.03	1	2.0	ND	µg/m³	R15529
1,2,4-Trichlorobenzene	TO-15	2/29/2008	3.56	1	3.6	ND	µg/m³	R15529
1,2,4-Trimethylbenzene	TO-15	2/29/2008	2.46	1	2.5	ND	µg/m³	R15529
1,2-Dibromoethane(Ethylene dibromide)	TO-15	2/29/2008	3.84	1	3.8	ND	µg/m³	R15529
1,2-Dichlorobenzene	TO-15	2/29/2008	3.01	1	3.0	ND	µg/m³	R15529
1,2-Dichloroethane	TO-15	2/29/2008	2.03	1	2.0	ND	µg/m³	R15529
1,2-Dichloropropane	TO-15	2/29/2008	2.31	1	2.3	ND	µg/m³	R15529
1,2-dichlorotetrafluoroethane(F114)	TO-15	2/29/2008	3.13	1	3.1	ND	µg/m³	R15529
1,3,5-Trimethylbenzene	TO-15	2/29/2008	2.46	1	2.5	ND	µg/m³	R15529
1,3-Butadiene	TO-15	2/29/2008	1.11	1	1.1	ND	µg/m³	R15529
1,3-Dichlorobenzene	TO-15	2/29/2008	3.01	1	3.0	ND	µg/m³	R15529
1,4-Dichlorobenzene	TO-15	2/29/2008	3.01	1	3.0	ND	µg/m³	R15529
1,4-Dioxane	TO-15	2/29/2008	1.8	1	1.8	ND	µg/m³	R15529
2-Butanone (MEK)	TO-15	2/29/2008	1.48	1	1.5	ND	µg/m³	R15529
2-Hexanone	TO-15	2/29/2008	2.05	1	2.0	ND	µg/m³	R15529
4-Ethyl Toluene	TO-15	2/29/2008	2.46	1	2.5	ND	µg/m³	R15529
4-Methyl-2-Pentanone (MIBK)	TO-15	2/29/2008	2.05	1	2.0	ND	µg/m³	R15529
Acetone	TO-15	2/29/2008	9.52	1	9.5	9.9	µg/m³	R15529
Benzene	TO-15	2/29/2008	1.6	1	1.6	ND	µg/m³	R15529
Benzyl Chloride	TO-15	2/29/2008	2.88	1	2.9	ND	µg/m³	R15529
Bromodichloromethane	TO-15	2/29/2008	3.35	1	3.4	ND	µg/m³	R15529
Bromoform	TO-15	2/29/2008	5.17	1	5.2	ND	µg/m³	R15529
Bromomethane	TO-15	2/29/2008	1.94	1	1.9	ND	µg/m³	R15529
Carbon Disulfide	TO-15	2/29/2008	1.56	1	1.6	ND	µg/m³	R15529
Carbon Tetrachloride	TO-15	2/29/2008	3.15	1	3.2	ND	µg/m³	R15529
Chlorobenzene	TO-15	2/29/2008	2.3	1	2.3	ND	µg/m³	R15529
Chloroethane	TO-15	2/29/2008	1.32	1	1.3	ND	µg/m³	R15529
Chloroform	TO-15	2/29/2008	2.44	1	2.4	ND	µg/m³	R15529
Chloromethane	TO-15	2/29/2008	1.04	1	1.0	ND	µg/m³	R15529
cis-1,2-dichloroethene	TO-15	2/29/2008	1.98	1	2.0	ND	µg/m³	R15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV1
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 2/15/2008 12:35:00 PM

Lab Sample ID: 0802102-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
cis-1,3-Dichloropropene	TO-15	2/29/2008	2.27	1	2.3	ND	µg/m³	R15529
Dibromochloromethane	TO-15	2/29/2008	4.26	1	4.3	ND	µg/m³	R15529
Dichlorodifluoromethane	TO-15	2/29/2008	2.48	1	2.5	ND	µg/m³	R15529
Ethyl Acetate	TO-15	2/29/2008	1.8	1	1.8	ND	µg/m³	R15529
Ethyl Benzene	TO-15	2/29/2008	2.17	1	2.2	ND	µg/m³	R15529
Freon 113	TO-15	2/29/2008	3.83	1	3.8	ND	µg/m³	R15529
Hexachlorobutadiene	TO-15	2/29/2008	5.34	1	5.3	ND	µg/m³	R15529
Hexane	TO-15	2/29/2008	3.52	1	3.5	ND	µg/m³	R15529
Isopropanol	TO-15	2/29/2008	16.4	1	16	ND	µg/m³	R15529
m,p-Xylene	TO-15	2/29/2008	2.05	1	2.0	ND	µg/m³	R15529
Methylene Chloride	TO-15	2/29/2008	3.61	1	3.6	ND	µg/m³	R15529
MTBE	TO-15	2/29/2008	1.81	1	1.8	ND	µg/m³	R15529
Naphthalene	TO-15	2/29/2008	2.62	1	2.6	ND	µg/m³	R15529
o-xylene	TO-15	2/29/2008	2.17	1	2.2	ND	µg/m³	R15529
Styrene	TO-15	2/29/2008	2.13	1	2.1	ND	µg/m³	R15529
Tetrachloroethene	TO-15	2/29/2008	3.39	1	3.4	ND	µg/m³	R15529
Tetrahydrofuran	TO-15	2/29/2008	1.48	1	1.5	ND	µg/m³	R15529
Toluene	TO-15	2/29/2008	1.89	1	1.9	2.0	µg/m³	R15529
trans-1,2-Dichloroethene	TO-15	2/29/2008	1.98	1	2.0	ND	µg/m³	R15529
Trichloroethene	TO-15	2/29/2008	2.69	1	2.7	ND	µg/m³	R15529
Trichlorofluoromethane	TO-15	2/29/2008	2.48	1	2.5	ND	µg/m³	R15529
Vinyl Acetate	TO-15	2/29/2008	1.76	1	1.8	ND	µg/m³	R15529
Vinyl Chloride	TO-15	2/29/2008	1.28	1	1.3	ND	µg/m³	R15529
Surr: 4-Bromofluorobenzene	TO-15	2/29/2008	0	1	65-135	86.2	%REC	R15529
Gasoline	TO-3(MOD)	2/28/2008	352	1	350	ND	µg/m³	G15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV1-DUP
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 1:15:00 PM

Lab Sample ID: 0802102-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	2/29/2008	1.99	1.54	3.1	ND	µg/m³	R15529
1,1,1,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.54	5.3	ND	µg/m³	R15529
1,1,1-Trichloroethane	TO-15	2/29/2008	2.73	1.54	4.2	ND	µg/m³	R15529
1,1,2,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.54	5.3	ND	µg/m³	R15529
1,1,2-Trichloroethane	TO-15	2/29/2008	2.73	1.54	4.2	ND	µg/m³	R15529
1,1-Dichloroethane	TO-15	2/29/2008	2.03	1.54	3.1	ND	µg/m³	R15529
1,2,4-Trichlorobenzene	TO-15	2/29/2008	3.56	1.54	5.5	ND	µg/m³	R15529
1,2,4-Trimethylbenzene	TO-15	2/29/2008	2.46	1.54	3.8	ND	µg/m³	R15529
1,2-Dibromoethane(Ethylene dibromide)	TO-15	2/29/2008	3.84	1.54	5.9	ND	µg/m³	R15529
1,2-Dichlorobenzene	TO-15	2/29/2008	3.01	1.54	4.6	ND	µg/m³	R15529
1,2-Dichloroethane	TO-15	2/29/2008	2.03	1.54	3.1	ND	µg/m³	R15529
1,2-Dichloropropane	TO-15	2/29/2008	2.31	1.54	3.6	ND	µg/m³	R15529
1,2-dichlorotetrafluoroethane(F114)	TO-15	2/29/2008	3.13	1.54	4.8	ND	µg/m³	R15529
1,3,5-Trimethylbenzene	TO-15	2/29/2008	2.46	1.54	3.8	ND	µg/m³	R15529
1,3-Butadiene	TO-15	2/29/2008	1.11	1.54	1.7	ND	µg/m³	R15529
1,3-Dichlorobenzene	TO-15	2/29/2008	3.01	1.54	4.6	ND	µg/m³	R15529
1,4-Dichlorobenzene	TO-15	2/29/2008	3.01	1.54	4.6	ND	µg/m³	R15529
1,4-Dioxane	TO-15	2/29/2008	1.8	1.54	2.8	ND	µg/m³	R15529
2-Butanone (MEK)	TO-15	2/29/2008	1.48	1.54	2.3	8.7	µg/m³	R15529
2-Hexanone	TO-15	2/29/2008	2.05	1.54	3.2	ND	µg/m³	R15529
4-Ethyl Toluene	TO-15	2/29/2008	2.46	1.54	3.8	ND	µg/m³	R15529
4-Methyl-2-Pentanone (MIBK)	TO-15	2/29/2008	2.05	1.54	3.2	ND	µg/m³	R15529
Acetone	TO-15	2/29/2008	9.52	1.54	15	48	µg/m³	R15529
Benzene	TO-15	2/29/2008	1.6	1.54	2.5	ND	µg/m³	R15529
Benzyl Chloride	TO-15	2/29/2008	2.88	1.54	4.4	ND	µg/m³	R15529
Bromodichloromethane	TO-15	2/29/2008	3.35	1.54	5.2	ND	µg/m³	R15529
Bromoform	TO-15	2/29/2008	5.17	1.54	8.0	ND	µg/m³	R15529
Bromomethane	TO-15	2/29/2008	1.94	1.54	3.0	ND	µg/m³	R15529
Carbon Disulfide	TO-15	2/29/2008	1.56	1.54	2.4	ND	µg/m³	R15529
Carbon Tetrachloride	TO-15	2/29/2008	3.15	1.54	4.9	ND	µg/m³	R15529
Chlorobenzene	TO-15	2/29/2008	2.3	1.54	3.5	ND	µg/m³	R15529
Chloroethane	TO-15	2/29/2008	1.32	1.54	2.0	ND	µg/m³	R15529
Chloroform	TO-15	2/29/2008	2.44	1.54	3.8	ND	µg/m³	R15529
Chloromethane	TO-15	2/29/2008	1.04	1.54	1.6	ND	µg/m³	R15529
cis-1,2-dichloroethene	TO-15	2/29/2008	1.98	1.54	3.0	ND	µg/m³	R15529
cis-1,3-Dichloropropene	TO-15	2/29/2008	2.27	1.54	3.5	ND	µg/m³	R15529
Dibromochloromethane	TO-15	2/29/2008	4.26	1.54	6.6	ND	µg/m³	R15529
Dichlorodifluoromethane	TO-15	2/29/2008	2.48	1.54	3.8	ND	µg/m³	R15529
Ethyl Acetate	TO-15	2/29/2008	1.8	1.54	2.8	ND	µg/m³	R15529
Ethyl Benzene	TO-15	2/29/2008	2.17	1.54	3.3	ND	µg/m³	R15529
Freon 113	TO-15	2/29/2008	3.83	1.54	5.9	ND	µg/m³	R15529
Hexachlorobutadiene	TO-15	2/29/2008	5.34	1.54	8.2	ND	µg/m³	R15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV1-DUP
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 1:15:00 PM

Lab Sample ID: 0802102-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	2/29/2008	3.52	1.54	5.4	ND	µg/m³	R15529
Isopropanol	TO-15	2/29/2008	16.4	1.54	25	ND	µg/m³	R15529
m,p-Xylene	TO-15	2/29/2008	2.05	1.54	3.2	ND	µg/m³	R15529
Methylene Chloride	TO-15	2/29/2008	3.61	1.54	5.6	ND	µg/m³	R15529
MTBE	TO-15	2/29/2008	1.81	1.54	2.8	ND	µg/m³	R15529
Naphthalene	TO-15	2/29/2008	2.62	1.54	4.0	ND	µg/m³	R15529
o-xylene	TO-15	2/29/2008	2.17	1.54	3.3	ND	µg/m³	R15529
Styrene	TO-15	2/29/2008	2.13	1.54	3.3	ND	µg/m³	R15529
Tetrachloroethene	TO-15	2/29/2008	3.39	1.54	5.2	ND	µg/m³	R15529
Tetrahydrofuran	TO-15	2/29/2008	1.48	1.54	2.3	ND	µg/m³	R15529
Toluene	TO-15	2/29/2008	1.89	1.54	2.9	2.5J	µg/m³	R15529
trans-1,2-Dichloroethene	TO-15	2/29/2008	1.98	1.54	3.0	ND	µg/m³	R15529
Trichloroethene	TO-15	2/29/2008	2.69	1.54	4.1	ND	µg/m³	R15529
Trichlorofluoromethane	TO-15	2/29/2008	2.48	1.54	3.8	ND	µg/m³	R15529
Vinyl Acetate	TO-15	2/29/2008	1.76	1.54	2.7	ND	µg/m³	R15529
Vinyl Chloride	TO-15	2/29/2008	1.28	1.54	2.0	ND	µg/m³	R15529
Surr: 4-Bromofluorobenzene	TO-15	2/29/2008	0	1.54	65-135	90.3	%REC	R15529

Note: Reporting limit increased due to low initial pressure in a canister. J - Estimated result between MDL and PQL.

Gasoline	TO-3(MOD)	2/28/2008	352	1.54	540	ND	µg/m³	G15529

Note: Reporting limit increased due to low initial pressure in a canister.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV2
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 10:32:00 AM

Lab Sample ID: 0802102-003
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	2/29/2008	1.99	1.76	3.5	ND	µg/m³	R15529
1,1,1,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.76	6.1	ND	µg/m³	R15529
1,1,1-Trichloroethane	TO-15	2/29/2008	2.73	1.76	4.8	ND	µg/m³	R15529
1,1,2,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.76	6.1	ND	µg/m³	R15529
1,1,2-Trichloroethane	TO-15	2/29/2008	2.73	1.76	4.8	ND	µg/m³	R15529
1,1-Dichloroethane	TO-15	2/29/2008	2.03	1.76	3.6	ND	µg/m³	R15529
1,2,4-Trichlorobenzene	TO-15	2/29/2008	3.56	1.76	6.3	ND	µg/m³	R15529
1,2,4-Trimethylbenzene	TO-15	2/29/2008	2.46	1.76	4.3	53	µg/m³	R15529
1,2-Dibromoethane(Ethylene dibromide)	TO-15	2/29/2008	3.84	1.76	6.8	ND	µg/m³	R15529
1,2-Dichlorobenzene	TO-15	2/29/2008	3.01	1.76	5.3	ND	µg/m³	R15529
1,2-Dichloroethane	TO-15	2/29/2008	2.03	1.76	3.6	ND	µg/m³	R15529
1,2-Dichloropropane	TO-15	2/29/2008	2.31	1.76	4.1	ND	µg/m³	R15529
1,2-dichlorotetrafluoroethane(F114)	TO-15	2/29/2008	3.13	1.76	5.5	ND	µg/m³	R15529
1,3,5-Trimethylbenzene	TO-15	2/29/2008	2.46	1.76	4.3	13	µg/m³	R15529
1,3-Butadiene	TO-15	2/29/2008	1.11	1.76	2.0	ND	µg/m³	R15529
1,3-Dichlorobenzene	TO-15	2/29/2008	3.01	1.76	5.3	ND	µg/m³	R15529
1,4-Dichlorobenzene	TO-15	2/29/2008	3.01	1.76	5.3	ND	µg/m³	R15529
1,4-Dioxane	TO-15	2/29/2008	1.8	1.76	3.2	ND	µg/m³	R15529
2-Butanone (MEK)	TO-15	2/29/2008	1.48	1.76	2.6	410	µg/m³	R15529
2-Hexanone	TO-15	2/29/2008	2.05	1.76	3.6	73	µg/m³	R15529
4-Ethyl Toluene	TO-15	2/29/2008	2.46	1.76	4.3	42	µg/m³	R15529
4-Methyl-2-Pentanone (MIBK)	TO-15	2/29/2008	2.05	1.76	3.6	ND	µg/m³	R15529
Acetone	TO-15	2/29/2008	9.52	1.76	17	601E	µg/m³	R15529
Benzene	TO-15	2/29/2008	1.6	1.76	2.8	12	µg/m³	R15529
Benzyl Chloride	TO-15	2/29/2008	2.88	1.76	5.1	ND	µg/m³	R15529
Bromodichloromethane	TO-15	2/29/2008	3.35	1.76	5.9	ND	µg/m³	R15529
Bromoform	TO-15	2/29/2008	5.17	1.76	9.1	ND	µg/m³	R15529
Bromomethane	TO-15	2/29/2008	1.94	1.76	3.4	ND	µg/m³	R15529
Carbon Disulfide	TO-15	2/29/2008	1.56	1.76	2.7	14	µg/m³	R15529
Carbon Tetrachloride	TO-15	2/29/2008	3.15	1.76	5.5	ND	µg/m³	R15529
Chlorobenzene	TO-15	2/29/2008	2.3	1.76	4.0	ND	µg/m³	R15529
Chloroethane	TO-15	2/29/2008	1.32	1.76	2.3	99	µg/m³	R15529
Chloroform	TO-15	2/29/2008	2.44	1.76	4.3	ND	µg/m³	R15529
Chloromethane	TO-15	2/29/2008	1.04	1.76	1.8	ND	µg/m³	R15529
cis-1,2-dichloroethene	TO-15	2/29/2008	1.98	1.76	3.5	ND	µg/m³	R15529
cis-1,3-Dichloropropene	TO-15	2/29/2008	2.27	1.76	4.0	ND	µg/m³	R15529
Dibromochloromethane	TO-15	2/29/2008	4.26	1.76	7.5	ND	µg/m³	R15529
Dichlorodifluoromethane	TO-15	2/29/2008	2.48	1.76	4.4	ND	µg/m³	R15529
Ethyl Acetate	TO-15	2/29/2008	1.8	1.76	3.2	ND	µg/m³	R15529
Ethyl Benzene	TO-15	2/29/2008	2.17	1.76	3.8	16	µg/m³	R15529
Freon 113	TO-15	2/29/2008	3.83	1.76	6.7	ND	µg/m³	R15529
Hexachlorobutadiene	TO-15	2/29/2008	5.34	1.76	9.4	ND	µg/m³	R15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV2
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 10:32:00 AM

Lab Sample ID: 0802102-003
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	2/29/2008	3.52	1.76	6.2	ND	µg/m³	R15529
Isopropanol	TO-15	2/29/2008	16.4	1.76	29	76	µg/m³	R15529
m,p-Xylene	TO-15	2/29/2008	2.05	1.76	3.6	80	µg/m³	R15529
Methylene Chloride	TO-15	2/29/2008	3.61	1.76	6.4	ND	µg/m³	R15529
MTBE	TO-15	2/29/2008	1.81	1.76	3.2	ND	µg/m³	R15529
Naphthalene	TO-15	2/29/2008	2.62	1.76	4.6	ND	µg/m³	R15529
o-xylene	TO-15	2/29/2008	2.17	1.76	3.8	27	µg/m³	R15529
Styrene	TO-15	2/29/2008	2.13	1.76	3.7	ND	µg/m³	R15529
Tetrachloroethene	TO-15	2/29/2008	3.39	1.76	6.0	ND	µg/m³	R15529
Tetrahydrofuran	TO-15	2/29/2008	1.48	1.76	2.6	ND	µg/m³	R15529
Toluene	TO-15	2/29/2008	1.89	1.76	3.3	62	µg/m³	R15529
trans-1,2-Dichloroethene	TO-15	2/29/2008	1.98	1.76	3.5	11	µg/m³	R15529
Trichloroethene	TO-15	2/29/2008	2.69	1.76	4.7	ND	µg/m³	R15529
Trichlorofluoromethane	TO-15	2/29/2008	2.48	1.76	4.4	ND	µg/m³	R15529
Vinyl Acetate	TO-15	2/29/2008	1.76	1.76	3.1	ND	µg/m³	R15529
Vinyl Chloride	TO-15	2/29/2008	1.28	1.76	2.3	ND	µg/m³	R15529
Surr: 4-Bromofluorobenzene	TO-15	2/29/2008	0	1.76	65-135	89.8	%REC	R15529

Note: E - Estimated value. The amount exceeds the linear calibration range of the instrument.

Gasoline	TO-3(MOD)	2/29/2008	352	1.78	630	1910x	µg/m³	G15529

Note: x- Not a typical gasoline. Reported value is the result of discrete peak (light end) of non-gasoline compounds within range of C5-C12 quantified as Gasoline.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV3
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 10:10:00 AM

Lab Sample ID: 0802102-004
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	2/29/2008	1.99	1.39	2.8	ND	µg/m³	R15529
1,1,1,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.39	4.8	ND	µg/m³	R15529
1,1,1-Trichloroethane	TO-15	2/29/2008	2.73	1.39	3.8	ND	µg/m³	R15529
1,1,2,2-Tetrachloroethane	TO-15	2/29/2008	3.44	1.39	4.8	ND	µg/m³	R15529
1,1,2-Trichloroethane	TO-15	2/29/2008	2.73	1.39	3.8	ND	µg/m³	R15529
1,1-Dichloroethane	TO-15	2/29/2008	2.03	1.39	2.8	ND	µg/m³	R15529
1,2,4-Trichlorobenzene	TO-15	2/29/2008	3.56	1.39	4.9	ND	µg/m³	R15529
1,2,4-Trimethylbenzene	TO-15	2/29/2008	2.46	1.39	3.4	ND	µg/m³	R15529
1,2-Dibromoethane(Ethylene dibromide)	TO-15	2/29/2008	3.84	1.39	5.3	ND	µg/m³	R15529
1,2-Dichlorobenzene	TO-15	2/29/2008	3.01	1.39	4.2	ND	µg/m³	R15529
1,2-Dichloroethane	TO-15	2/29/2008	2.03	1.39	2.8	ND	µg/m³	R15529
1,2-Dichloropropane	TO-15	2/29/2008	2.31	1.39	3.2	ND	µg/m³	R15529
1,2-dichlorotetrafluoroethane(F114)	TO-15	2/29/2008	3.13	1.39	4.4	ND	µg/m³	R15529
1,3,5-Trimethylbenzene	TO-15	2/29/2008	2.46	1.39	3.4	ND	µg/m³	R15529
1,3-Butadiene	TO-15	2/29/2008	1.11	1.39	1.5	ND	µg/m³	R15529
1,3-Dichlorobenzene	TO-15	2/29/2008	3.01	1.39	4.2	ND	µg/m³	R15529
1,4-Dichlorobenzene	TO-15	2/29/2008	3.01	1.39	4.2	ND	µg/m³	R15529
1,4-Dioxane	TO-15	2/29/2008	1.8	1.39	2.5	ND	µg/m³	R15529
2-Butanone (MEK)	TO-15	2/29/2008	1.48	1.39	2.1	ND	µg/m³	R15529
2-Hexanone	TO-15	2/29/2008	2.05	1.39	2.8	ND	µg/m³	R15529
4-Ethyl Toluene	TO-15	2/29/2008	2.46	1.39	3.4	ND	µg/m³	R15529
4-Methyl-2-Pentanone (MIBK)	TO-15	2/29/2008	2.05	1.39	2.8	ND	µg/m³	R15529
Acetone	TO-15	2/29/2008	9.52	1.39	13	17	µg/m³	R15529
Benzene	TO-15	2/29/2008	1.6	1.39	2.2	ND	µg/m³	R15529
Benzyl Chloride	TO-15	2/29/2008	2.88	1.39	4.0	ND	µg/m³	R15529
Bromodichloromethane	TO-15	2/29/2008	3.35	1.39	4.7	ND	µg/m³	R15529
Bromoform	TO-15	2/29/2008	5.17	1.39	7.2	ND	µg/m³	R15529
Bromomethane	TO-15	2/29/2008	1.94	1.39	2.7	ND	µg/m³	R15529
Carbon Disulfide	TO-15	2/29/2008	1.56	1.39	2.2	ND	µg/m³	R15529
Carbon Tetrachloride	TO-15	2/29/2008	3.15	1.39	4.4	ND	µg/m³	R15529
Chlorobenzene	TO-15	2/29/2008	2.3	1.39	3.2	ND	µg/m³	R15529
Chloroethane	TO-15	2/29/2008	1.32	1.39	1.8	ND	µg/m³	R15529
Chloroform	TO-15	2/29/2008	2.44	1.39	3.4	ND	µg/m³	R15529
Chloromethane	TO-15	2/29/2008	1.04	1.39	1.4	ND	µg/m³	R15529
cis-1,2-dichloroethene	TO-15	2/29/2008	1.98	1.39	2.8	ND	µg/m³	R15529
cis-1,3-Dichloropropene	TO-15	2/29/2008	2.27	1.39	3.2	ND	µg/m³	R15529
Dibromochloromethane	TO-15	2/29/2008	4.26	1.39	5.9	ND	µg/m³	R15529
Dichlorodifluoromethane	TO-15	2/29/2008	2.48	1.39	3.4	ND	µg/m³	R15529
Ethyl Acetate	TO-15	2/29/2008	1.8	1.39	2.5	ND	µg/m³	R15529
Ethyl Benzene	TO-15	2/29/2008	2.17	1.39	3.0	ND	µg/m³	R15529
Freon 113	TO-15	2/29/2008	3.83	1.39	5.3	ND	µg/m³	R15529
Hexachlorobutadiene	TO-15	2/29/2008	5.34	1.39	7.4	ND	µg/m³	R15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV3
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 10:10:00 AM

Lab Sample ID: 0802102-004
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	2/29/2008	3.52	1.39	4.9	ND	µg/m³	R15529
Isopropanol	TO-15	2/29/2008	16.4	1.39	23	ND	µg/m³	R15529
m,p-Xylene	TO-15	2/29/2008	2.05	1.39	2.8	ND	µg/m³	R15529
Methylene Chloride	TO-15	2/29/2008	3.61	1.39	5.0	ND	µg/m³	R15529
MTBE	TO-15	2/29/2008	1.81	1.39	2.5	ND	µg/m³	R15529
Naphthalene	TO-15	2/29/2008	2.62	1.39	3.6	ND	µg/m³	R15529
o-xylene	TO-15	2/29/2008	2.17	1.39	3.0	ND	µg/m³	R15529
Styrene	TO-15	2/29/2008	2.13	1.39	3.0	ND	µg/m³	R15529
Tetrachloroethene	TO-15	2/29/2008	3.39	1.39	4.7	ND	µg/m³	R15529
Tetrahydrofuran	TO-15	2/29/2008	1.48	1.39	2.1	ND	µg/m³	R15529
Toluene	TO-15	2/29/2008	1.89	1.39	2.6	2.8	µg/m³	R15529
trans-1,2-Dichloroethene	TO-15	2/29/2008	1.98	1.39	2.8	ND	µg/m³	R15529
Trichloroethene	TO-15	2/29/2008	2.69	1.39	3.7	ND	µg/m³	R15529
Trichlorofluoromethane	TO-15	2/29/2008	2.48	1.39	3.4	ND	µg/m³	R15529
Vinyl Acetate	TO-15	2/29/2008	1.76	1.39	2.4	ND	µg/m³	R15529
Vinyl Chloride	TO-15	2/29/2008	1.28	1.39	1.8	ND	µg/m³	R15529
Surr: 4-Bromofluorobenzene	TO-15	2/29/2008	0	1.39	65-135	89.1	%REC	R15529

Note: Reporting limit increased due to low initial pressure in a canister.

Gasoline	TO-3(MOD)	2/29/2008	352	1.39	490	1940x	µg/m³	G15529

Note: x- Not a typical gasoline. Reported value is the result of discrete peak (light end) of non-gasoline compounds within range of C5-C12 quantified as Gasoline.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV4
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 2:20:00 PM

Lab Sample ID: 0802102-005
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	2/29/2008	1.99	2.45	4.9	ND	µg/m³	R15529
1,1,1,2-Tetrachloroethane	TO-15	2/29/2008	3.44	2.45	8.4	ND	µg/m³	R15529
1,1,1-Trichloroethane	TO-15	2/29/2008	2.73	2.45	6.7	ND	µg/m³	R15529
1,1,2,2-Tetrachloroethane	TO-15	2/29/2008	3.44	2.45	8.4	ND	µg/m³	R15529
1,1,2-Trichloroethane	TO-15	2/29/2008	2.73	2.45	6.7	ND	µg/m³	R15529
1,1-Dichloroethane	TO-15	2/29/2008	2.03	2.45	5.0	ND	µg/m³	R15529
1,2,4-Trichlorobenzene	TO-15	2/29/2008	3.56	2.45	8.7	ND	µg/m³	R15529
1,2,4-Trimethylbenzene	TO-15	2/29/2008	2.46	2.45	6.0	3.6 J	µg/m³	R15529
1,2-Dibromoethane(Ethylene dibromide)	TO-15	2/29/2008	3.84	2.45	9.4	ND	µg/m³	R15529
1,2-Dichlorobenzene	TO-15	2/29/2008	3.01	2.45	7.4	ND	µg/m³	R15529
1,2-Dichloroethane	TO-15	2/29/2008	2.03	2.45	5.0	ND	µg/m³	R15529
1,2-Dichloropropane	TO-15	2/29/2008	2.31	2.45	5.7	ND	µg/m³	R15529
1,2-dichlorotetrafluoroethane(F114)	TO-15	2/29/2008	3.13	2.45	7.7	ND	µg/m³	R15529
1,3,5-Trimethylbenzene	TO-15	2/29/2008	2.46	2.45	6.0	ND	µg/m³	R15529
1,3-Butadiene	TO-15	2/29/2008	1.11	2.45	2.7	ND	µg/m³	R15529
1,3-Dichlorobenzene	TO-15	2/29/2008	3.01	2.45	7.4	ND	µg/m³	R15529
1,4-Dichlorobenzene	TO-15	2/29/2008	3.01	2.45	7.4	ND	µg/m³	R15529
1,4-Dioxane	TO-15	2/29/2008	1.8	2.45	4.4	ND	µg/m³	R15529
2-Butanone (MEK)	TO-15	2/29/2008	1.48	2.45	3.6	ND	µg/m³	R15529
2-Hexanone	TO-15	2/29/2008	2.05	2.45	5.0	ND	µg/m³	R15529
4-Ethyl Toluene	TO-15	2/29/2008	2.46	2.45	6.0	3.1 J	µg/m³	R15529
4-Methyl-2-Pentanone (MIBK)	TO-15	2/29/2008	2.05	2.45	5.0	ND	µg/m³	R15529
Acetone	TO-15	2/29/2008	9.52	2.45	23	42	µg/m³	R15529
Benzene	TO-15	2/29/2008	1.6	2.45	3.9	2.8 J	µg/m³	R15529
Benzyl Chloride	TO-15	2/29/2008	2.88	2.45	7.1	ND	µg/m³	R15529
Bromodichloromethane	TO-15	2/29/2008	3.35	2.45	8.2	ND	µg/m³	R15529
Bromoform	TO-15	2/29/2008	5.17	2.45	13	ND	µg/m³	R15529
Bromomethane	TO-15	2/29/2008	1.94	2.45	4.8	ND	µg/m³	R15529
Carbon Disulfide	TO-15	2/29/2008	1.56	2.45	3.8	ND	µg/m³	R15529
Carbon Tetrachloride	TO-15	2/29/2008	3.15	2.45	7.7	ND	µg/m³	R15529
Chlorobenzene	TO-15	2/29/2008	2.3	2.45	5.6	ND	µg/m³	R15529
Chloroethane	TO-15	2/29/2008	1.32	2.45	3.2	ND	µg/m³	R15529
Chloroform	TO-15	2/29/2008	2.44	2.45	6.0	ND	µg/m³	R15529
Chloromethane	TO-15	2/29/2008	1.04	2.45	2.5	ND	µg/m³	R15529
cis-1,2-dichloroethene	TO-15	2/29/2008	1.98	2.45	4.9	ND	µg/m³	R15529
cis-1,3-Dichloropropene	TO-15	2/29/2008	2.27	2.45	5.6	ND	µg/m³	R15529
Dibromochloromethane	TO-15	2/29/2008	4.26	2.45	10	ND	µg/m³	R15529
Dichlorodifluoromethane	TO-15	2/29/2008	2.48	2.45	6.1	ND	µg/m³	R15529
Ethyl Acetate	TO-15	2/29/2008	1.8	2.45	4.4	ND	µg/m³	R15529
Ethyl Benzene	TO-15	2/29/2008	2.17	2.45	5.3	2.1 J	µg/m³	R15529
Freon 113	TO-15	2/29/2008	3.83	2.45	9.4	ND	µg/m³	R15529
Hexachlorobutadiene	TO-15	2/29/2008	5.34	2.45	13	ND	µg/m³	R15529

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Joyce Bobek
Soma Environmnental Engineering, Inc.

Date Received: 2/20/2008
Date Reported: 2/29/2008

Client Sample ID: SV4
Sample Location: 557 Merrimac St,Oakland
Sample Matrix: AIR
Date/Time Sampled 12/15/2008 2:20:00 PM

Lab Sample ID: 0802102-005
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	2/29/2008	3.52	2.45	8.6	ND	µg/m³	R15529
Isopropanol	TO-15	2/29/2008	16.4	2.45	40	ND	µg/m³	R15529
m,p-Xylene	TO-15	2/29/2008	2.05	2.45	5.0	14	µg/m³	R15529
Methylene Chloride	TO-15	2/29/2008	3.61	2.45	8.8	ND	µg/m³	R15529
MTBE	TO-15	2/29/2008	1.81	2.45	4.4	ND	µg/m³	R15529
Naphthalene	TO-15	2/29/2008	2.62	2.45	6.4	ND	µg/m³	R15529
o-xylene	TO-15	2/29/2008	2.17	2.45	5.3	ND	µg/m³	R15529
Styrene	TO-15	2/29/2008	2.13	2.45	5.2	ND	µg/m³	R15529
Tetrachloroethene	TO-15	2/29/2008	3.39	2.45	8.3	ND	µg/m³	R15529
Tetrahydrofuran	TO-15	2/29/2008	1.48	2.45	3.6	ND	µg/m³	R15529
Toluene	TO-15	2/29/2008	1.89	2.45	4.6	12	µg/m³	R15529
trans-1,2-Dichloroethene	TO-15	2/29/2008	1.98	2.45	4.9	ND	µg/m³	R15529
Trichloroethene	TO-15	2/29/2008	2.69	2.45	6.6	ND	µg/m³	R15529
Trichlorofluoromethane	TO-15	2/29/2008	2.48	2.45	6.1	ND	µg/m³	R15529
Vinyl Acetate	TO-15	2/29/2008	1.76	2.45	4.3	ND	µg/m³	R15529
Vinyl Chloride	TO-15	2/29/2008	1.28	2.45	3.1	ND	µg/m³	R15529
Surr: 4-Bromofluorobenzene	TO-15	2/29/2008	0	2.45	65-135	89.8	%REC	R15529

Note: Reporting limit increased due to low initial pressure in a canister. J - Estimated result between MDL and PQL.

Gasoline	TO-3(MOD)	2/29/2008	352	2.45	860	ND	µg/m³	G15529

Note: Reporting limit increased due to low initial pressure in a canister.

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: G15529

Sample ID **MB-G**	SampType: **MBLK**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **2/28/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **G15529**	TestNo: **TO-3(MOD)**		Analysis Date: **2/28/2008**	SeqNo: **223177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									

Sample ID **LCS-G**	SampType: **LCS**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **2/28/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **G15529**	TestNo: **TO-3(MOD)**		Analysis Date: **2/28/2008**	SeqNo: **223178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	1012	100	1000	0	101	50	150				

Sample ID **LCSD-G**	SampType: **LCSD**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **2/28/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **G15529**	TestNo: **TO-3(MOD)**		Analysis Date: **2/29/2008**	SeqNo: **223179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	1007	100	1000	0	101	50	150	1012	0.525	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Benzyl Chloride	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	1.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	17.13	0	20	0	85.7	65	135				

Sample ID **LCS**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **LCS**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	24.48	0.50	20	0	122	65	135				
1,1,1,2-Tetrachloroethane	21.65	0.50	20	0	108	65	135				
1,1,1-Trichloroethane	20.06	0.50	20	0	100	65	135				
1,1,2,2-Tetrachloroethane	23.14	0.50	20	0	116	65	135				
1,1,2-Trichloroethane	23.54	0.50	20	0	118	65	135				
1,1-Dichloroethane	23.62	0.50	20	0	118	65	135				
1,2,4-Trichlorobenzene	21.13	0.50	20	0	106	65	135				
1,2,4-Trimethylbenzene	22.09	0.50	20	0	110	65	135				
1,2-Dibromoethane(Ethylene dibromide	22.22	0.50	20	0	111	65	135				
1,2-Dichlorobenzene	23.09	0.50	20	0	115	65	135				
1,2-Dichloroethane	23.61	0.50	20	0	118	65	135				
1,2-Dichloropropane	23.52	0.50	20	0	118	65	135				
1,3,5-Trimethylbenzene	21.74	0.50	20	0	109	65	135				
1,3-Butadiene	25.57	0.50	20	0	128	65	135				
1,3-Dichlorobenzene	23.13	0.50	20	0	116	65	135				
1,4-Dichlorobenzene	23.16	0.50	20	0	116	65	135				
1,4-Dioxane	23.79	0.50	20	0	119	65	135				
2-Butanone (MEK)	20.25	0.50	20	0	101	65	135				
2-Hexanone	23.36	0.50	20	0	117	65	135				
4-Ethyl Toluene	21.67	0.50	20	0	108	65	135				
4-Methyl-2-Pentanone (MIBK)	22.38	0.50	20	0	112	65	135				
Acetone	24.35	4.0	20	0	122	65	135				
Benzene	20.81	0.50	20	0	104	65	135				
Benzyl Chloride	22.35	0.50	20	0	112	65	135				
Bromodichloromethane	22.37	0.50	20	0	112	65	135				
Bromoform	22.33	0.50	20	0	112	65	135				
Bromomethane	23.58	0.50	20	0	118	65	135				
Carbon Disulfide	23.28	0.50	20	0	116	65	135				
Carbon Tetrachloride	20.29	0.50	20	0	101	65	135				
Chlorobenzene	22.02	0.50	20	0	110	65	135				
Chloroethane	18.18	0.50	20	0	90.9	65	135				

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **LCS**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	22.84	0.50	20	0	114	65	135				
Chloromethane	14.92	0.50	20	0	74.6	65	135				
cis-1,2-dichloroethene	23.42	0.50	20	0	117	65	135				
cis-1,3-Dichloropropene	22.47	0.50	20	0	112	65	135				
Dibromochloromethane	21.86	0.50	20	0	109	65	135				
Dichlorodifluoromethane	21.37	0.50	20	0	107	65	135				
Ethyl Acetate	20.57	0.50	20	0	103	65	135				
Ethyl Benzene	20.23	0.50	20	0	101	65	135				
Freon 113	21.36	0.50	20	0	107	65	135				
Hexachlorobutadiene	20.66	0.50	20	0	103	65	135				
Hexane	21.12	1.0	20	0.72	102	65	135				
Isopropanol	26.31	4.0	20	0	132	65	135				
m,p-Xylene	42.02	0.50	40	0	105	65	135				
Methylene Chloride	22.51	1.0	20	0	113	65	135				
MTBE	22.38	0.50	20	0	112	65	135				
Naphthalene	22.48	5.0	20	0	112	65	135				
o-xylene	22.35	0.50	20	0	112	65	135				
Styrene	21.58	0.50	20	0	108	65	135				
Tetrachloroethene	20.85	0.50	20	0	104	65	135				
Toluene	21.59	0.50	20	0	108	65	135				
trans-1,2-Dichloroethene	23.44	0.50	20	0	117	65	135				
Trichloroethene	22.15	0.50	20	0	111	65	135				
Trichlorofluoromethane	24.35	0.50	20	0	122	65	135				
Vinyl Acetate	21.11	0.50	20	0	106	65	135				
Vinyl Chloride	26.44	0.50	20	0	132	65	135				
Surr: 4-Bromofluorobenzene	20.00	0	20	0	100	65	135				

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	24.64	0.50	20	0	123	65	135	24.48	0.651	30	
1,1,1,2-Tetrachloroethane	21.72	0.50	20	0	109	65	135	21.65	0.323	30	
1,1,1-Trichloroethane	21.10	0.50	20	0	106	65	135	20.06	5.05	30	
1,1,2,2-Tetrachloroethane	23.05	0.50	20	0	115	65	135	23.14	0.390	30	
1,1,2-Trichloroethane	23.76	0.50	20	0	119	65	135	23.54	0.930	30	
1,1-Dichloroethane	24.15	0.50	20	0	121	65	135	23.62	2.22	30	
1,2,4-Trichlorobenzene	20.98	0.50	20	0	105	65	135	21.13	0.712	30	
1,2,4-Trimethylbenzene	21.88	0.50	20	0	109	65	135	22.09	0.955	30	
1,2-Dibromoethane(Ethylene dibromide	22.22	0.50	20	0	111	65	135	22.22	0	30	
1,2-Dichlorobenzene	23.05	0.50	20	0	115	65	135	23.09	0.173	30	
1,2-Dichloroethane	22.33	0.50	20	0	112	65	135	23.61	5.57	30	
1,2-Dichloropropane	22.59	0.50	20	0	113	65	135	23.52	4.03	30	
1,3,5-Trimethylbenzene	21.52	0.50	20	0	108	65	135	21.74	1.02	30	
1,3-Butadiene	25.78	0.50	20	0	129	65	135	25.57	0.818	30	
1,3-Dichlorobenzene	23.14	0.50	20	0	116	65	135	23.13	0.0432	30	
1,4-Dichlorobenzene	22.67	0.50	20	0	113	65	135	23.16	2.14	30	
1,4-Dioxane	23.51	0.50	20	0	118	65	135	23.79	1.18	30	
2-Butanone (MEK)	21.02	0.50	20	0	105	65	135	20.25	3.73	30	
2-Hexanone	23.67	0.50	20	0	118	65	135	23.36	1.32	30	
4-Ethyl Toluene	21.34	0.50	20	0	107	65	135	21.67	1.53	30	
4-Methyl-2-Pentanone (MIBK)	22.75	0.50	20	0	114	65	135	22.38	1.64	30	
Acetone	23.00	4.0	20	0	115	65	135	24.35	5.70	30	
Benzene	22.35	0.50	20	0	112	65	135	20.81	7.14	30	
Benzyl Chloride	22.40	0.50	20	0	112	65	135	22.35	0.223	30	
Bromodichloromethane	21.95	0.50	20	0	110	65	135	22.37	1.90	30	
Bromoform	22.23	0.50	20	0	111	65	135	22.33	0.449	30	
Bromomethane	25.66	0.50	20	0	128	65	135	23.58	8.45	30	
Carbon Disulfide	23.85	0.50	20	0	119	65	135	23.28	2.42	30	
Carbon Tetrachloride	21.32	0.50	20	0	107	65	135	20.29	4.95	30	
Chlorobenzene	21.37	0.50	20	0	107	65	135	22.02	3.00	30	
Chloroethane	19.84	0.50	20	0	99.2	65	135	18.18	8.73	30	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0802102
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R15529

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **2/29/2008**	RunNo: **15529**
Client ID: **ZZZZZ**	Batch ID: **R15529**	TestNo: **TO-15**		Analysis Date: **2/29/2008**	SeqNo: **223096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	23.13	0.50	20	0	116	65	135	22.84	1.26	30	
Chloromethane	18.90	0.50	20	0	94.5	65	135	14.92	23.5	30	
cis-1,2-dichloroethene	23.98	0.50	20	0	120	65	135	23.42	2.36	30	
cis-1,3-Dichloropropene	23.15	0.50	20	0	116	65	135	22.47	2.98	30	
Dibromochloromethane	22.34	0.50	20	0	112	65	135	21.86	2.17	30	
Dichlorodifluoromethane	22.37	0.50	20	0	112	65	135	21.37	4.57	30	
Ethyl Acetate	22.19	0.50	20	0	111	65	135	20.57	7.58	30	
Ethyl Benzene	20.52	0.50	20	0	103	65	135	20.23	1.42	30	
Freon 113	21.82	0.50	20	0	109	65	135	21.36	2.13	30	
Hexachlorobutadiene	20.73	0.50	20	0	104	65	135	20.66	0.338	30	
Hexane	22.67	1.0	20	0.72	110	65	135	21.12	7.08	30	
Isopropanol	22.05	4.0	20	0	110	65	135	26.31	17.6	30	
m,p-Xylene	42.34	0.50	40	0	106	65	135	42.02	0.759	30	
Methylene Chloride	23.98	1.0	20	0	120	65	135	22.51	6.32	30	
MTBE	23.25	0.50	20	0	116	65	135	22.38	3.81	30	
Naphthalene	22.52	5.0	20	0	113	65	135	22.48	0.178	30	
o-xylene	21.90	0.50	20	0	110	65	135	22.35	2.03	30	
Styrene	21.09	0.50	20	0	105	65	135	21.58	2.30	30	
Tetrachloroethene	21.12	0.50	20	0	106	65	135	20.85	1.29	30	
Toluene	21.72	0.50	20	0	109	65	135	21.59	0.600	30	
trans-1,2-Dichloroethene	24.01	0.50	20	0	120	65	135	23.44	2.40	30	
Vinyl Acetate	20.86	0.50	20	0	104	65	135	21.11	1.19	30	
Vinyl Chloride	25.70	0.50	20	0	128	65	135	26.44	2.84	30	
Surr: 4-Bromofluorobenzene	19.73	0	20	0	98.6	65	135	0	0	30	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

Torrent LABORATORY, INC.

483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

RESET

CHAIN OF CUSTODY

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY

LAB WORK ORDER NO: 0802102

Company Name: SOMA ENVIRONMENTAL	Location of Sampling: 557 Merrimac St., Oakland
Address: 6620 OWENS DR, SUITE A, PLEASANTON	Purpose: Soil Vapor
City: PLEASANTON State: CA Zip Code: 94588	Special Instructions / Comments: please email preliminary results to Joyce J
Telephone: (925) 734-6400 FAX: (925) 734-6401	
REPORT TO: JOYCE BOBEK SAMPLER: LIZZIE HIGHTOWER, RICH MCKINNEY	P.O. #: 3022 EMAIL: jbobek@somaenv.com

TURNAROUND TIME:
- ☐ 10 Work Days
- ☐ 3 Work Days
- ☐ Noon - Nxt Day
- ☑ 7 Work Days
- ☐ 2 Work Days
- ☐ 2 - 8 Hours
- ☐ 5 Work Days
- ☐ 1 Work Day
- ☐ Other

SAMPLE TYPE:
- ☐ Storm Water
- ☐ Air
- ☐ Waste Water
- ☑ Other (Soil Vapor)
- ☐ Ground Water
- ☐ Soil

REPORT FORMAT:
- ☐ QC Level IV
- ☑ EDF
- ☐ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-3	TO-15	REMARKS
001A	SV 1	12/15/08 1235	GAS	1	SUMMA	x	x	
002A	SV 1 - DUP	1315		1		x	x	
003A	SV2	1032		1		x	x	
004A	SV3	1010		1		x	x	
005A	SV4	1420		1		x	x	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Ruchi Mathur	RUCHI MATHUR	2/19/08	15:47	C Moore	C Moore	2.19	15:47
2	C Moore	C Moore	2/19	9:18	[redacted]	[redacted]	2/20/08	9:20 am

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrange -ments are made.

Page _____ of _____

Log In By: [redacted] Date: [redacted] Log In Reviewed By: [redacted] Date: [redacted]

CHAIN OF CUSTODY

Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

PAL LOGIN # 3020021

Sampler: Lizzie Hightower/Rich McKinney

Project No: 3022

Report To: Joyce Bobek

Project Name: 557 Merrimac Street, Oakland CA

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

EMAIL RESULTS JBOBEK@SOMAENV.COM

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPHg TPHd 8015	BTEX, MtBE 8260B
01	B1-5	2/14/08 11:08	X			6" Sleeve				X	X	X
02	B1-10	11:25	X			6" Sleeve				X	X	X
03	B1-20	11:40	X			6" Sleeve				X	X	X
04	B1-W	11:52		X		3 VOAs 1-L Amber	X			X	X	X
05	B7-5	12:05	X			6" Sleeve				X	X	X
06	B7-10	12:18	X			6" Sleeve				X	X	X
07	B7-15	12:32	X			6" Sleeve				X	X	X
08	B7-20	12:40	X			6" Sleeve				X	X	X
09	B7-W	12:55		X		3 VOAs 1-L Amber	X			X	X	X
10	B5-5	13:08	X			6" Sleeve				X	X	X
11	B5-10	13:22	X			6" Sleeve				X	X	X

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
2-20-08 1430 DATE/TIME	2.20.08 14:36 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

CHAIN OF CUSTODY

Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

PAL LOGIN # 802002 1

Sampler: Lizzie Hightower/Rich McKinney

Project No: 3022

Report To: Joyce Bobek

Project Name: 557 Merrimac Street, Oakland CA

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPHg TPHd 8015	BTEX, MtBE 8260B	
12	B5-15	2/14/08 1336	X			6" Sleeve				X	X	X	
13	B5-20	1342	X			6" Sleeve				X	X	X	
14	B5-25	1350	X			6" Sleeve				X	X	X	HOLD
15	B4-5	1539	X			6" Sleeve				X	X	X	
16	B4-10	1549	X			6" Sleeve				X	X	X	
17	B4-15	1608	X			6" Sleeve				X	X	X	
18	B4-20	1624	X			6" Sleeve				X	X	X	
19	B5-W	1622		X		3 VOAs 1-L Amber	X			X	X	X	
20	B4-W	1635		X		3 VOAs 1-L Amber	X			X	X	X	

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
Rich McKinney 2-20-08 1430 DATE/TIME	MyNAL 2.20.08 14:36 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

CHAIN OF CUSTODY

Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

PAL LOGIN # 802002\

Sampler: Lizzie Hightower/Rich McKinney

Project No: 3022 | **Report To:** Joyce Bobek

Project Name: 557 Merrimac Street, Oakland CA | **Company :** SOMA Environmental

Turnaround Time: Standard | **Telephone:** 925-734-6400

Fax: 925-734-6401

E-mail RESULTS JBOBEK@SOMAENV.COM

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPHg TPHd 8015	BTEX, MtBE 8260B
21	B2-5	2/15/08 1050	X			1				X	X	X
22	B2-20	1110	X			1				X	X	X
23	B2-W	1320		X		3 VOA 1-LITER	X			X	X	X
24	B8-5	1300	X			1				X	X	X
25	B8-15	1315	X			1				X	X	X
26	B8-20	1325	X			1				X	X	X
27	B3-5	1210	X			1				X	X	X
28	B3-15	1225	X			1				X	X	X
29	B3-20	1232	X			1				X	X	X
31	B3-W	1240		X		3 VOA 1-LITER	X			X	X	X

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:

Rich McKinney 2-20-08 1430 DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:

Myriam 2.20.08 14:35 DATE/TIME

DATE/TIME

DATE/TIME

CHAIN OF CUSTODY

Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 phone
510-864-0365 fax

PAL LOGIN # 8020021

Sampler: Lizzie Hightower/Rich McKinney

Project No: 3022

Report To: Joyce Bobek

Project Name: 557 Merrimac Street, Oakland CA

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date	Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPHg TPHd 8015	BTEX, MtBE 8260B
31	B6-5	2/15/08	0940	X			1				X	X	X
32	B6-15	2/15/08	1000	X			1				X	X	X
33	B6-20	2/15/08	1012	X			1				X	X	X
34	B6-W	2/15/08	1015		X		3 VOAs 1L Amber	X			X	X	X
35	B6-10	2/15/08	0950	X			2 VOAs				X	X	X
36	B2-10	2/15/08	1058	X			1				X	X	X
37	B2-15	2/15/08	1100	X			2 VOAs				X	X	X
38	B3-10	2/15/08	1218	X			↓				X	X	X
39	B8-10	2/15/08	1308	X			↓				X	X	X
40	B8-W	2/19/08	1155		X		1 L Amber 3 VOAs	X			X	X	X

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
2-20-08 1430 DATE/TIME	2.20.08 14:35 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

PAL Pacific Analytical Laboratory
851 West Midway Ave. Suite 201
Alameda, CA 94501
Phone (510) 864-0364

03 March 2008

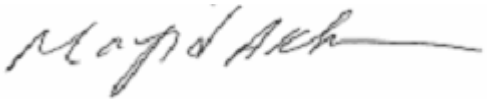
Mansour Sepehr
SOMA Environmental Engineering Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94588

RE: 557 Merrimac Street, Oakland CA

Work Order Number: 8020021

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,



Maiid Akhavan
Laboratory Director

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-5	8020021-01	Soil	14-Feb-08 11:08	20-Feb-08 17:11
B1-10	8020021-02	Soil	14-Feb-08 11:25	20-Feb-08 17:11
B1-20	8020021-03	Soil	14-Feb-08 11:40	20-Feb-08 17:11
B1-W	8020021-04	Water	14-Feb-08 11:52	20-Feb-08 17:11
B7-5	8020021-05	Soil	14-Feb-08 12:05	20-Feb-08 17:11
B7-10	8020021-06	Soil	14-Feb-08 12:18	20-Feb-08 17:11
B7-15	8020021-07	Soil	14-Feb-08 12:32	20-Feb-08 17:11
B7-20	8020021-08	Soil	14-Feb-08 12:40	20-Feb-08 17:11
B7-W	8020021-09	Water	14-Feb-08 12:55	20-Feb-08 17:11
B5-5	8020021-10	Soil	14-Feb-08 13:08	20-Feb-08 17:11
B5-10	8020021-11	Soil	14-Feb-08 13:22	20-Feb-08 17:11
B5-15	8020021-12	Soil	14-Feb-08 13:36	20-Feb-08 17:11
B5-20	8020021-13	Soil	14-Feb-08 13:42	20-Feb-08 17:11
B4-5	8020021-15	Soil	14-Feb-08 15:39	20-Feb-08 17:11
B4-10	8020021-16	Soil	14-Feb-08 15:49	20-Feb-08 17:11
B4-15	8020021-17	Soil	14-Feb-08 16:08	20-Feb-08 17:11
B4-20	8020021-18	Soil	14-Feb-08 16:24	20-Feb-08 17:11
B5-W	8020021-19	Water	14-Feb-08 16:22	20-Feb-08 17:11
B4-W	8020021-20	Water	14-Feb-08 16:35	20-Feb-08 17:11
B2-5	8020021-21	Soil	15-Feb-08 10:50	20-Feb-08 17:11
B2-20	8020021-22	Soil	15-Feb-08 11:10	20-Feb-08 17:11
B2-W	8020021-23	Water	15-Feb-08 13:20	20-Feb-08 17:11
B8-5	8020021-24	Soil	15-Feb-08 13:00	20-Feb-08 17:11
B8-15	8020021-25	Soil	15-Feb-08 13:15	20-Feb-08 17:11
B8-20	8020021-26	Soil	15-Feb-08 13:25	20-Feb-08 17:11
B3-5	8020021-27	Soil	15-Feb-08 12:10	20-Feb-08 17:11

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B3-15	8020021-28	Soil	15-Feb-08 12:25	20-Feb-08 17:11
B3-20	8020021-29	Soil	15-Feb-08 12:32	20-Feb-08 17:11
B3-W	8020021-30	Water	15-Feb-08 12:40	20-Feb-08 17:11
B6-5	8020021-31	Soil	15-Feb-08 09:40	20-Feb-08 17:11
B6-15	8020021-32	Soil	15-Feb-08 10:00	20-Feb-08 17:11
B6-20	8020021-33	Soil	15-Feb-08 10:12	20-Feb-08 17:11
B6-W	8020021-34	Water	15-Feb-08 10:15	20-Feb-08 17:11
B6-10	8020021-35	Soil	15-Feb-08 09:50	20-Feb-08 17:11
B2-10	8020021-36	Soil	15-Feb-08 10:58	20-Feb-08 17:11
B2-15	8020021-37	Soil	15-Feb-08 11:00	20-Feb-08 17:11
B3-10	8020021-38	Soil	15-Feb-08 12:18	20-Feb-08 17:11
B8-10	8020021-39	Soil	15-Feb-08 13:08	20-Feb-08 17:11
B8-W	8020021-40	Water	19-Feb-08 11:55	20-Feb-08 17:11

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1-5 (8020021-01) Soil Sampled: 14-Feb-08 11:08 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*86.8 %*	*70-130*		"	"	"	"	
B1-10 (8020021-02) Soil Sampled: 14-Feb-08 11:25 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.6 %*	*70-130*		"	"	"	"	
B1-20 (8020021-03) Soil Sampled: 14-Feb-08 11:40 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*78.2 %*	*70-130*		"	"	"	"	
B1-W (8020021-04) Water Sampled: 14-Feb-08 11:52 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*102 %*	*50.4-137*		"	"	"	"	
B7-5 (8020021-05) Soil Sampled: 14-Feb-08 12:05 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*86.8 %*	*70-130*		"	"	"	"	
B7-10 (8020021-06) Soil Sampled: 14-Feb-08 12:18 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*92.6 %*	*70-130*		"	"	"	"	
B7-15 (8020021-07) Soil Sampled: 14-Feb-08 12:32 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*82.8 %*	*70-130*		"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B7-20 (8020021-08) Soil Sampled: 14-Feb-08 12:40 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*80.0 %*	*70-130*		"	"	"	"	
B7-W (8020021-09) Water Sampled: 14-Feb-08 12:55 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*106 %*	*50.4-137*		"	"	"	"	
B5-5 (8020021-10) Soil Sampled: 14-Feb-08 13:08 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*83.6 %*	*70-130*		"	"	"	"	
B5-10 (8020021-11) Soil Sampled: 14-Feb-08 13:22 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*87.4 %*	*70-130*		"	"	"	"	
B5-15 (8020021-12) Soil Sampled: 14-Feb-08 13:36 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.4 %*	*70-130*		"	"	"	"	
B5-20 (8020021-13) Soil Sampled: 14-Feb-08 13:42 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	24-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*89.4 %*	*70-130*		"	"	"	"	
B4-5 (8020021-15) Soil Sampled: 14-Feb-08 15:39 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*178 %*	*70-130*		"	"	"	"	*A-01*

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Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4-10 (8020021-16) Soil Sampled: 14-Feb-08 15:49 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.2 %*	*70-130*		"	"	"	"	
B4-15 (8020021-17) Soil Sampled: 14-Feb-08 16:08 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*87.6 %*	*70-130*		"	"	"	"	
B4-20 (8020021-18) Soil Sampled: 14-Feb-08 16:24 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*90.4 %*	*70-130*		"	"	"	"	
B5-W (8020021-19) Water Sampled: 14-Feb-08 16:22 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*109 %*	*50.4-137*		"	"	"	"	
B4-W (8020021-20) Water Sampled: 14-Feb-08 16:35 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	**196**	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	D-06, D-30
Surrogate: Pentacosane		*118 %*	*50.4-137*		"	"	"	"	
B2-5 (8020021-21) Soil Sampled: 15-Feb-08 10:50 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*88.8 %*	*70-130*		"	"	"	"	
B2-20 (8020021-22) Soil Sampled: 15-Feb-08 11:10 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*85.0 %*	*70-130*		"	"	"	"	

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Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B2-W (8020021-23) Water Sampled: 15-Feb-08 13:20 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*112 %*	*50.4-137*		"	"	"	"	
B8-5 (8020021-24) Soil Sampled: 15-Feb-08 13:00 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*93.0 %*	*70-130*		"	"	"	"	
B8-15 (8020021-25) Soil Sampled: 15-Feb-08 13:15 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*89.4 %*	*70-130*		"	"	"	"	
B8-20 (8020021-26) Soil Sampled: 15-Feb-08 13:25 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*94.4 %*	*70-130*		"	"	"	"	
B3-5 (8020021-27) Soil Sampled: 15-Feb-08 12:10 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*102 %*	*70-130*		"	"	"	"	
B3-15 (8020021-28) Soil Sampled: 15-Feb-08 12:25 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*87.6 %*	*70-130*		"	"	"	"	
B3-20 (8020021-29) Soil Sampled: 15-Feb-08 12:32 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*87.4 %*	*70-130*		"	"	"	"	

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Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3-W (8020021-30) Water Sampled: 15-Feb-08 12:40 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*98.8 %*	*50.4-137*		"	"	"	"	
B6-5 (8020021-31) Soil Sampled: 15-Feb-08 09:40 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*85.6 %*	*70-130*		"	"	"	"	
B6-15 (8020021-32) Soil Sampled: 15-Feb-08 10:00 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.2 %*	*70-130*		"	"	"	"	
B6-20 (8020021-33) Soil Sampled: 15-Feb-08 10:12 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.0 %*	*70-130*		"	"	"	"	
B6-W (8020021-34) Water Sampled: 15-Feb-08 10:15 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*130 %*	*50.4-137*		"	"	"	"	
B6-10 (8020021-35) Soil Sampled: 15-Feb-08 09:50 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*83.2 %*	*70-130*		"	"	"	"	
B2-10 (8020021-36) Soil Sampled: 15-Feb-08 10:58 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.0 %*	*70-130*		"	"	"	"	

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Extractable Petroleum Hydrocarbons by 8015 DRO

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B2-15 (8020021-37) Soil Sampled: 15-Feb-08 11:00 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*88.4 %*	*70-130*		"	"	"	"	
B3-10 (8020021-38) Soil Sampled: 15-Feb-08 12:18 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*84.6 %*	*70-130*		"	"	"	"	
B8-10 (8020021-39) Soil Sampled: 15-Feb-08 13:08 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	mg/kg	1	BB82401	20-Feb-08	25-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*103 %*	*70-130*		"	"	"	"	
B8-W (8020021-40) Water Sampled: 19-Feb-08 11:55 Received: 20-Feb-08 17:11									
Diesel (C10-C24)	ND	50.0	ug/l	1	BB82801	20-Feb-08	29-Feb-08	EPA 8015M	
Surrogate: Pentacosane		*144 %*	*50.4-137*		"	"	"	"	*A-01*

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Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1-5 (8020021-01) Soil Sampled: 14-Feb-08 11:08 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*68.0 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*98.8 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.4 %*		*70-130*	"	"	"	"	
B1-10 (8020021-02RE2) Soil Sampled: 14-Feb-08 11:25 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**1090**	1000	ug/kg	20	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	10.0	"	"	"	"	"	"	
Ethylbenzene	**19.2**	10.0	"	"	"	"	"	"	
m&p-Xylene	ND	40.0	"	"	"	"	"	"	
o-xylene	**15.0**	10.0	"	"	"	"	"	"	
Toluene	**90.6**	40.0	"	"	"	"	"	"	
MTBE	**14.8**	10.0	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*98.4 %*		*70-130*	"	"	"	"	
B1-20 (8020021-03) Soil Sampled: 14-Feb-08 11:40 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.4 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*122 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.6 %*		*70-130*	"	"	"	"	

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Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1-W (8020021-04) Water Sampled: 14-Feb-08 11:52 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.8 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*113 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*103 %*		*70-130*	"	"	"	"	
B7-5 (8020021-05RE1) Soil Sampled: 14-Feb-08 12:05 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*56.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*100 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*87.2 %*		*70-130*	"	"	"	"	
B7-10 (8020021-06RE1) Soil Sampled: 14-Feb-08 12:18 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*70.6 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.6 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*93.8 %*		*70-130*	"	"	"	"	

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Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B7-15 (8020021-07RE1) Soil Sampled: 14-Feb-08 12:32 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*65.2 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*95.0 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	
B7-20 (8020021-08RE1) Soil Sampled: 14-Feb-08 12:40 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*69.4 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*98.8 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*93.6 %*		*70-130*	"	"	"	"	
B7-W (8020021-09) Water Sampled: 14-Feb-08 12:55 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.6 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*115 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*103 %*		*70-130*	"	"	"	"	

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Volatile Organic Compounds by EPA Method 8260B

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5-5 (8020021-10RE1) Soil Sampled: 14-Feb-08 13:08 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*66.4 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*99.0 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.2 %*		*70-130*	"	"	"	"	
B5-10 (8020021-11RE1) Soil Sampled: 14-Feb-08 13:22 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*64.0 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*96.8 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.2 %*		*70-130*	"	"	"	"	
B5-15 (8020021-12RE1) Soil Sampled: 14-Feb-08 13:36 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*66.4 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*99.2 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.2 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5-20 (8020021-13) Soil Sampled: 14-Feb-08 13:42 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.8 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*130 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.6 %*		*70-130*	"	"	"	"	
B4-5 (8020021-15RE1) Soil Sampled: 14-Feb-08 15:39 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*62.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*99.4 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	
B4-10 (8020021-16) Soil Sampled: 14-Feb-08 15:49 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**4290**	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*119 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*102 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4-15 (8020021-17RE1) Soil Sampled: 14-Feb-08 16:08 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*65.0 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*100 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.2 %*		*70-130*	"	"	"	"	
B4-20 (8020021-18RE1) Soil Sampled: 14-Feb-08 16:24 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*65.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*101 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	
B5-W (8020021-19) Water Sampled: 14-Feb-08 16:22 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.0 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*113 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*101 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4-W (8020021-20) Water Sampled: 14-Feb-08 16:35 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**220**	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*117 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*106 %*		*70-130*	"	"	"	"	
B2-5 (8020021-21) Soil Sampled: 15-Feb-08 10:50 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*70.8 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*145 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*85.8 %*		*70-130*	"	"	"	"	
B2-20 (8020021-22) Soil Sampled: 15-Feb-08 11:10 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**100**	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*52.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*157 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Perdeuterotoluene		*74.6 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B2-W (8020021-23) Water Sampled: 15-Feb-08 13:20 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.2 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*119 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*104 %*		*70-130*	"	"	"	"	
B8-5 (8020021-24) Soil Sampled: 15-Feb-08 13:00 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*67.2 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*142 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Perdeuterotoluene		*88.0 %*		*70-130*	"	"	"	"	
B8-15 (8020021-25) Soil Sampled: 15-Feb-08 13:15 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*75.2 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*126 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B8-20 (8020021-26) Soil Sampled: 15-Feb-08 13:25 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*65.4 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*140 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Perdeuterotoluene		*80.0 %*		*70-130*	"	"	"	"	
B3-5 (8020021-27) Soil Sampled: 15-Feb-08 12:10 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*75.2 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*123 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	
B3-15 (8020021-28) Soil Sampled: 15-Feb-08 12:25 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*75.2 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*129 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.0 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3-20 (8020021-29) Soil Sampled: 15-Feb-08 12:32 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.0 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*133 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Perdeuterotoluene		*95.0 %*		*70-130*	"	"	"	"	
B3-W (8020021-30) Water Sampled: 15-Feb-08 12:40 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*122 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*104 %*		*70-130*	"	"	"	"	
B6-5 (8020021-31) Soil Sampled: 15-Feb-08 09:40 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	29-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*53.6 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*140 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Perdeuterotoluene		*79.2 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
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Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B6-15 (8020021-32RE1) Soil Sampled: 15-Feb-08 10:00 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*66.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*101 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*91.0 %*		*70-130*	"	"	"	"	
B6-20 (8020021-33RE1) Soil Sampled: 15-Feb-08 10:12 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*64.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*103 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.8 %*		*70-130*	"	"	"	"	
B6-W (8020021-34) Water Sampled: 15-Feb-08 10:15 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.8 %*		*70-130*	"	"	"	"	
Surrogate: Dibromofluoromethane		*119 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*101 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B6-10 (8020021-35RE1) Soil Sampled: 15-Feb-08 09:50 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*66.0 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*102 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*93.8 %*		*70-130*	"	"	"	"	
B2-10 (8020021-36RE1) Soil Sampled: 15-Feb-08 10:58 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*64.8 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*101 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.2 %*		*70-130*	"	"	"	"	
B2-15 (8020021-37RE1) Soil Sampled: 15-Feb-08 11:00 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*65.6 %*		*70-130*	"	"	"	"	*S-04*
Surrogate: Dibromofluoromethane		*103 %*		*70-130*	"	"	"	"	
Surrogate: Perdeuterotoluene		*92.0 %*		*70-130*	"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3-10 (8020021-38RE1) Soil Sampled: 15-Feb-08 12:18 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**643**	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*83.2 %*	*70-130*			"	"	"	"	
Surrogate: Dibromofluoromethane	*103 %*	*70-130*			"	"	"	"	
Surrogate: Perdeuterotoluene	*99.4 %*	*70-130*			"	"	"	"	
B8-10 (8020021-39RE1) Soil Sampled: 15-Feb-08 13:08 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	**1860**	50.0	ug/kg	1	BC80301	20-Feb-08	03-Mar-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	**0.860**	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*86.4 %*	*70-130*			"	"	"	"	
Surrogate: Dibromofluoromethane	*93.6 %*	*70-130*			"	"	"	"	
Surrogate: Perdeuterotoluene	*101 %*	*70-130*			"	"	"	"	
B8-W (8020021-40) Water Sampled: 19-Feb-08 11:55 Received: 20-Feb-08 17:11									
Gasoline (C6-C12)	ND	50.0	ug/l	1	BB82702	20-Feb-08	25-Feb-08	EPA 8260B	
Benzene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
m&p-Xylene	ND	2.00	"	"	"	"	"	"	
o-xylene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
MTBE	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	*96.6 %*	*70-130*			"	"	"	"	
Surrogate: Dibromofluoromethane	*120 %*	*70-130*			"	"	"	"	
Surrogate: Perdeuterotoluene	*103 %*	*70-130*			"	"	"	"	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Extractable Petroleum Hydrocarbons by 8015 DRO - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB82401 - EPA 3550A										
Blank (BB82401-BLK1)				Prepared & Analyzed: 26-Feb-08						
Surrogate: Pentacosane	*46.3*		*mg/kg*	*50.0*		*92.6*	*70-130*			
Diesel (C10-C24)	ND	50.0	"							
LCS (BB82401-BS1)				Prepared & Analyzed: 26-Feb-08						
Surrogate: Pentacosane	*54.9*		*mg/kg*	*50.0*		*110*	*70-130*			
Diesel (C10-C24)	765	50.0	"	1000		76.5	50-140			
LCS Dup (BB82401-BSD1)				Prepared & Analyzed: 26-Feb-08						
Surrogate: Pentacosane	*56.9*		*mg/kg*	*50.0*		*114*	*70-130*			
Diesel (C10-C24)	825	50.0	"	1000		82.5	50-140	7.55	40	
Matrix Spike (BB82401-MS1)	**Source: 8020021-01**			Prepared & Analyzed: 26-Feb-08						
Surrogate: Pentacosane	*40.7*		*mg/kg*	*50.0*		*81.4*	*70-130*			
Diesel (C10-C24)	959	50.0	"	1000	ND	95.9	0-200			
Matrix Spike Dup (BB82401-MSD1)	**Source: 8020021-01**			Prepared & Analyzed: 26-Feb-08						
Surrogate: Pentacosane	*40.8*		*mg/kg*	*50.0*		*81.6*	*70-130*			
Diesel (C10-C24)	897	50.0	"	1000	ND	89.7	0-200	6.68	200	
Batch BB82801 - EPA 3510B										
Blank (BB82801-BLK1)				Prepared & Analyzed: 02-Mar-08						
Surrogate: Pentacosane	*46.2*		*ug/l*	*50.0*		*92.4*	*50.4-137*			
Diesel (C10-C24)	ND	50.0	"							
LCS (BB82801-BS1)				Prepared & Analyzed: 02-Mar-08						
Surrogate: Pentacosane	*60.9*		*ug/l*	*50.0*		*122*	*50.4-137*			
Diesel (C10-C24)	817	50.0	"	1000		81.7	70-130			

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Extractable Petroleum Hydrocarbons by 8015 DRO - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB82801 - EPA 3510B										
LCS Dup (BB82801-BSD1)				Prepared & Analyzed: 02-Mar-08						
Surrogate: Pentacosane	*50.6*		*ug/l*	*50.0*		*101*	*50.4-137*			
Diesel (C10-C24)	724	50.0	"	1000		72.4	70-130	12.1	40	

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BB82702 - EPA 5030 Water MS										
Blank (BB82702-BLK1)				Prepared & Analyzed: 27-Feb-08						
Surrogate: 4-Bromofluorobenzene	*46.9*		*ug/l*	*50.0*		*93.8*	*70-130*			
Surrogate: Dibromofluoromethane	*58.9*		*"*	*50.0*		*118*	*70-130*			
Surrogate: Perdeuterotoluene	*49.9*		*"*	*50.0*		*99.8*	*70-130*			
Gasoline (C6-C12)	ND	50.0	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	2.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							
LCS (BB82702-BS1)				Prepared & Analyzed: 27-Feb-08						
Surrogate: 4-Bromofluorobenzene	*52.4*		*ug/l*	*50.0*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*54.9*		*"*	*50.0*		*110*	*70-130*			
Surrogate: Perdeuterotoluene	*50.0*		*"*	*50.0*		*100*	*70-130*			
Gasoline (C6-C12)	1650	50.0	"	2000		82.5	70-130			
Benzene	73.6	0.500	"	100		73.6	70-130			
Toluene	80.5	2.00	"	100		80.5	70-130			
MTBE	73.2	0.500	"	100		73.2	70-130			
LCS Dup (BB82702-BSD1)				Prepared & Analyzed: 27-Feb-08						
Surrogate: 4-Bromofluorobenzene	*56.5*		*ug/l*	*50.0*		*113*	*70-130*			
Surrogate: Dibromofluoromethane	*56.8*		*"*	*50.0*		*114*	*70-130*			
Surrogate: Perdeuterotoluene	*49.7*		*"*	*50.0*		*99.4*	*70-130*			
Gasoline (C6-C12)	1700	50.0	"	2000		85.0	70-130	2.99	20	
Benzene	71.3	0.500	"	100		71.3	70-130	3.17	20	
Toluene	81.7	2.00	"	100		81.7	70-130	1.48	20	
MTBE	117	0.500	"	100		117	70-130	46.1	20	QR-02

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BC80301 - EPA 5030 Soil MS										
Blank (BC80301-BLK1)				Prepared & Analyzed: 03-Mar-08						
Surrogate: 4-Bromofluorobenzene	*41.0*		*ug/kg*	*50.0*		*82.0*	*70-130*			
Surrogate: Dibromofluoromethane	*56.3*		*"*	*50.0*		*113*	*70-130*			
Surrogate: Perdeuterotoluene	*47.0*		*"*	*50.0*		*94.0*	*70-130*			
Gasoline (C6-C12)	ND	50.0	"							
Benzene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
m&p-Xylene	ND	2.00	"							
o-xylene	ND	0.500	"							
Toluene	ND	2.00	"							
MTBE	ND	0.500	"							
LCS (BC80301-BS1)				Prepared & Analyzed: 03-Mar-08						
Surrogate: 4-Bromofluorobenzene	*50.8*		*ug/kg*	*50.0*		*102*	*70-130*			
Surrogate: Dibromofluoromethane	*52.8*		*"*	*50.0*		*106*	*70-130*			
Surrogate: Perdeuterotoluene	*48.9*		*"*	*50.0*		*97.8*	*70-130*			
Gasoline (C6-C12)	2000	50.0	"	2000		100	70-130			
Benzene	78.6	0.500	"	100		78.6	70-130			
Toluene	94.2	2.00	"	100		94.2	70-130			
MTBE	91.0	0.500	"	100		91.0	70-130			
LCS Dup (BC80301-BSD1)				Prepared & Analyzed: 03-Mar-08						
Surrogate: 4-Bromofluorobenzene	*48.4*		*ug/kg*	*50.0*		*96.8*	*70-130*			
Surrogate: Dibromofluoromethane	*57.7*		*"*	*50.0*		*115*	*70-130*			
Surrogate: Perdeuterotoluene	*45.2*		*"*	*50.0*		*90.4*	*70-130*			
Gasoline (C6-C12)	2050	50.0	"	2000		102	70-130	2.47	20	
Benzene	70.3	0.500	"	100		70.3	70-130	11.1	20	
Toluene	80.0	2.00	"	100		80.0	70-130	16.3	20	
MTBE	116	0.500	"	100		116	70-130	24.2	20	QR-02

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

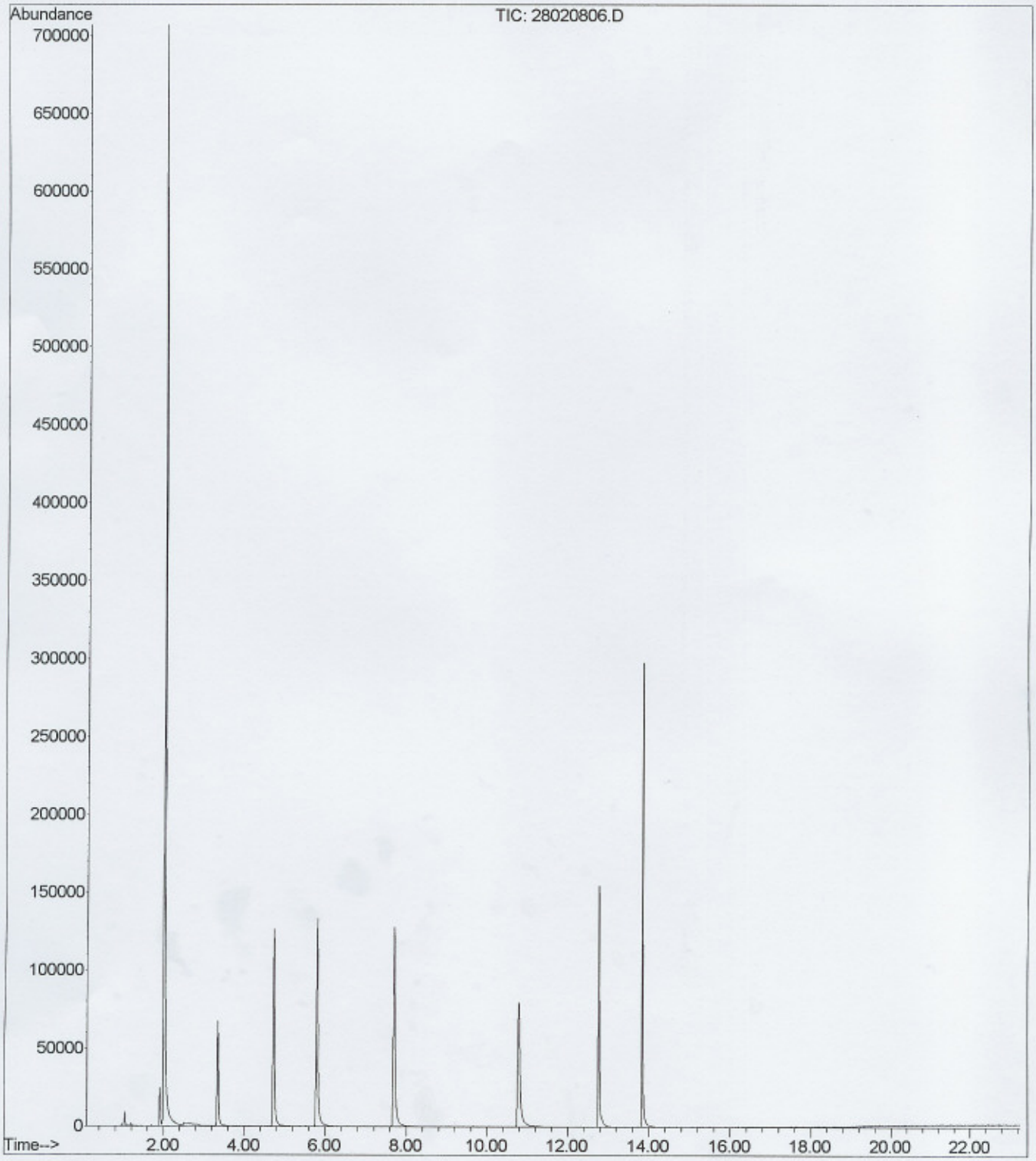
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BC80301 - EPA 5030 Soil MS										
Matrix Spike (BC80301-MS1)	**Source: 8020021-01**			Prepared & Analyzed: 03-Mar-08						
Surrogate: 4-Bromofluorobenzene	*42.2*		*ug/kg*	*50.0*		*84.4*	*70-130*			
Surrogate: Dibromofluoromethane	*54.4*		*"*	*50.0*		*109*	*70-130*			
Surrogate: Perdeuterotoluene	*46.5*		*"*	*50.0*		*93.0*	*70-130*			
Benzene	46.0	0.500	"	100	ND	46.0	70-140			S-GC
Ethylbenzene	59.9	0.500	"	100	ND	59.9	70-130			QM-05
m&p-Xylene	51.9	2.00	"	100	ND	51.9	70-130			QM-05
o-xylene	75.9	0.500	"	100	ND	75.9	70-130			
Toluene	51.1	2.00	"	100	ND	51.1	70-130			QM-05
MTBE	61.8	0.500	"	100	ND	61.8	70-130			QM-05
Matrix Spike Dup (BC80301-MSD1)	**Source: 8020021-01**			Prepared & Analyzed: 03-Mar-08						
Surrogate: 4-Bromofluorobenzene	*42.4*		*ug/kg*	*50.0*		*84.8*	*70-130*			
Surrogate: Dibromofluoromethane	*51.9*		*"*	*50.0*		*104*	*70-130*			
Surrogate: Perdeuterotoluene	*46.3*		*"*	*50.0*		*92.6*	*70-130*			
Benzene	47.9	0.500	"	100	ND	47.9	70-140	4.05	20	QM-05
Ethylbenzene	62.7	0.500	"	100	ND	62.7	70-130	4.57	20	QM-05
m&p-Xylene	54.6	2.00	"	100	ND	54.6	70-130	5.07	20	QM-05
o-xylene	79.6	0.500	"	100	ND	79.6	70-130	4.76	20	
Toluene	53.6	2.00	"	100	ND	53.6	70-130	4.78	20	QM-05
MTBE	67.7	0.500	"	100	ND	67.7	70-130	9.11	20	QM-05

SOMA Environmental Engineering Inc.	Project: 557 Merrimac Street, Oakland CA	
6620 Owens Drive, Suite A	Project Number: 3022	**Reported:**
Pleasanton CA, 94588	Project Manager: Mansour Sepehr	03-Mar-08 21:32

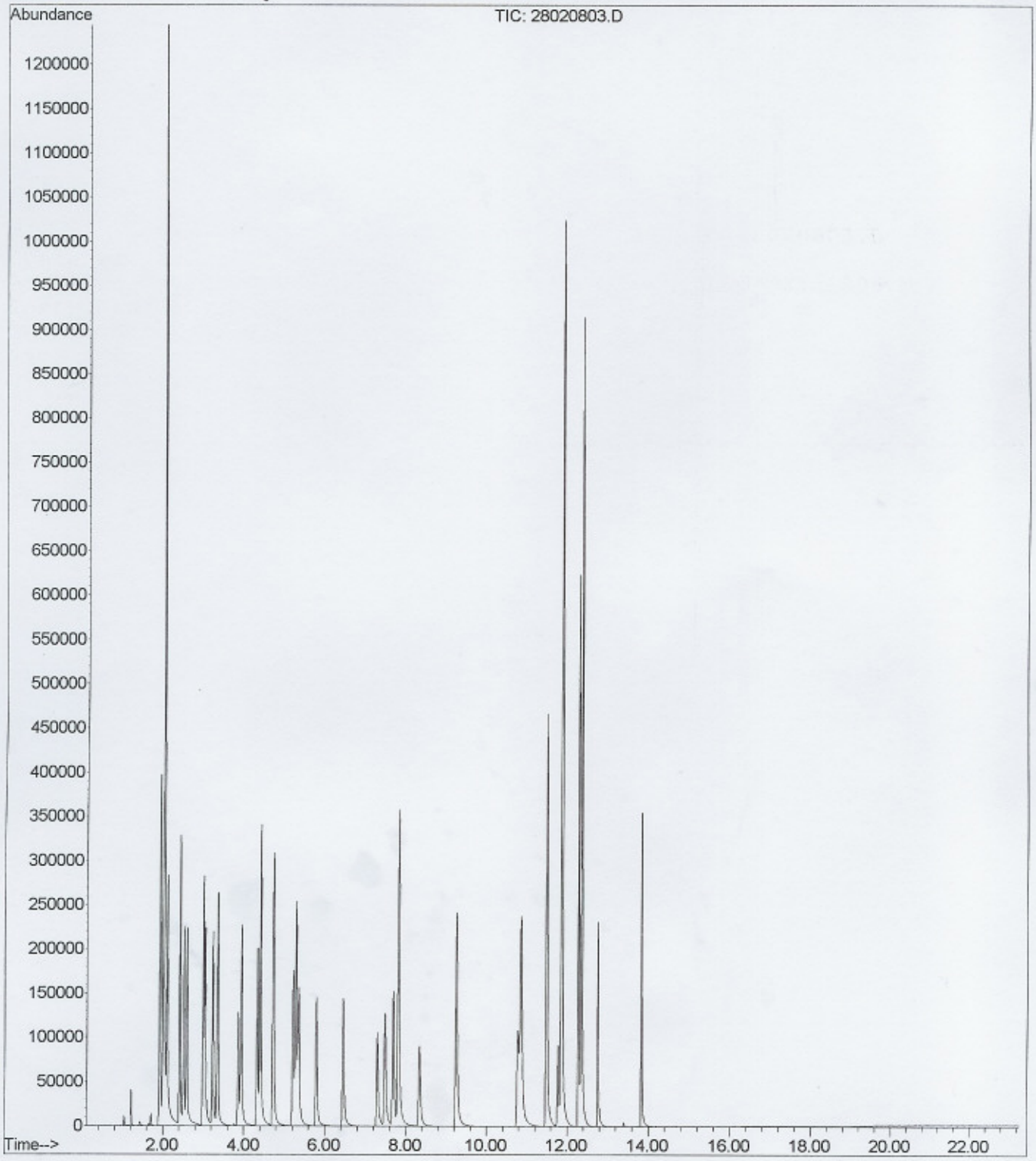
Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
D-30	Unidentified hydrocarbons C9-C16.
D-06	The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
A-01	Sample double-spiked.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

File :C:\MSDChem\1\DATA\2008-Feb-28-2124.b\28020806.D
Operator :
Acquired : 29 Feb 2008 12:18 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BC80301-BLK1
Misc Info :
Vial Number: 6



File : C:\MSDChem\1\DATA\2008-Feb-28-2124.b\28020803.D
Operator :
Acquired : 28 Feb 2008 10:44 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BC80301-BS1@voc
Misc Info :
Vial Number: 3



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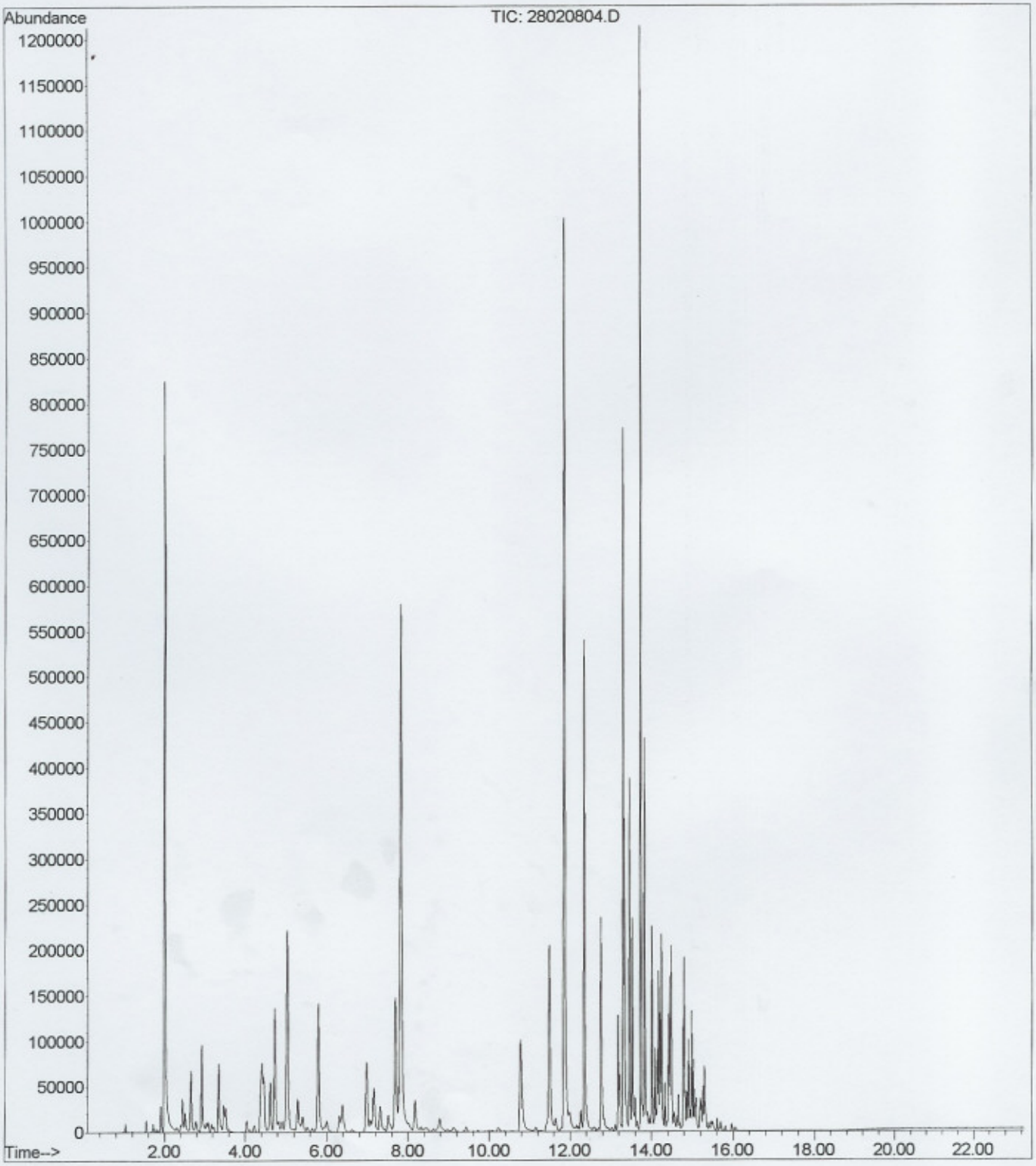
Operator :
Acquired : 28 Feb 2008 11:15 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BC80301-BS1@gas
Misc Info :
Vial Number: 4



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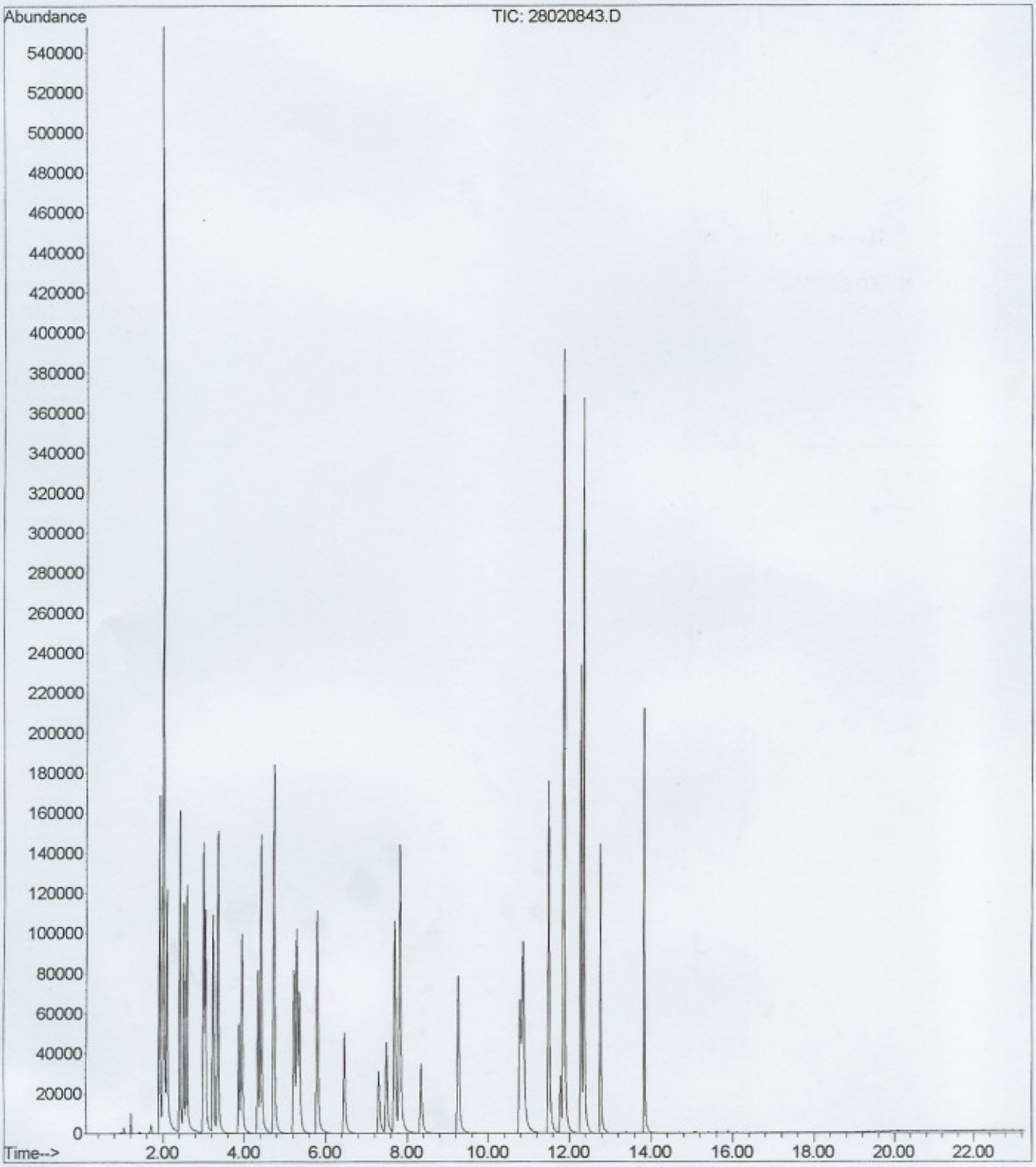
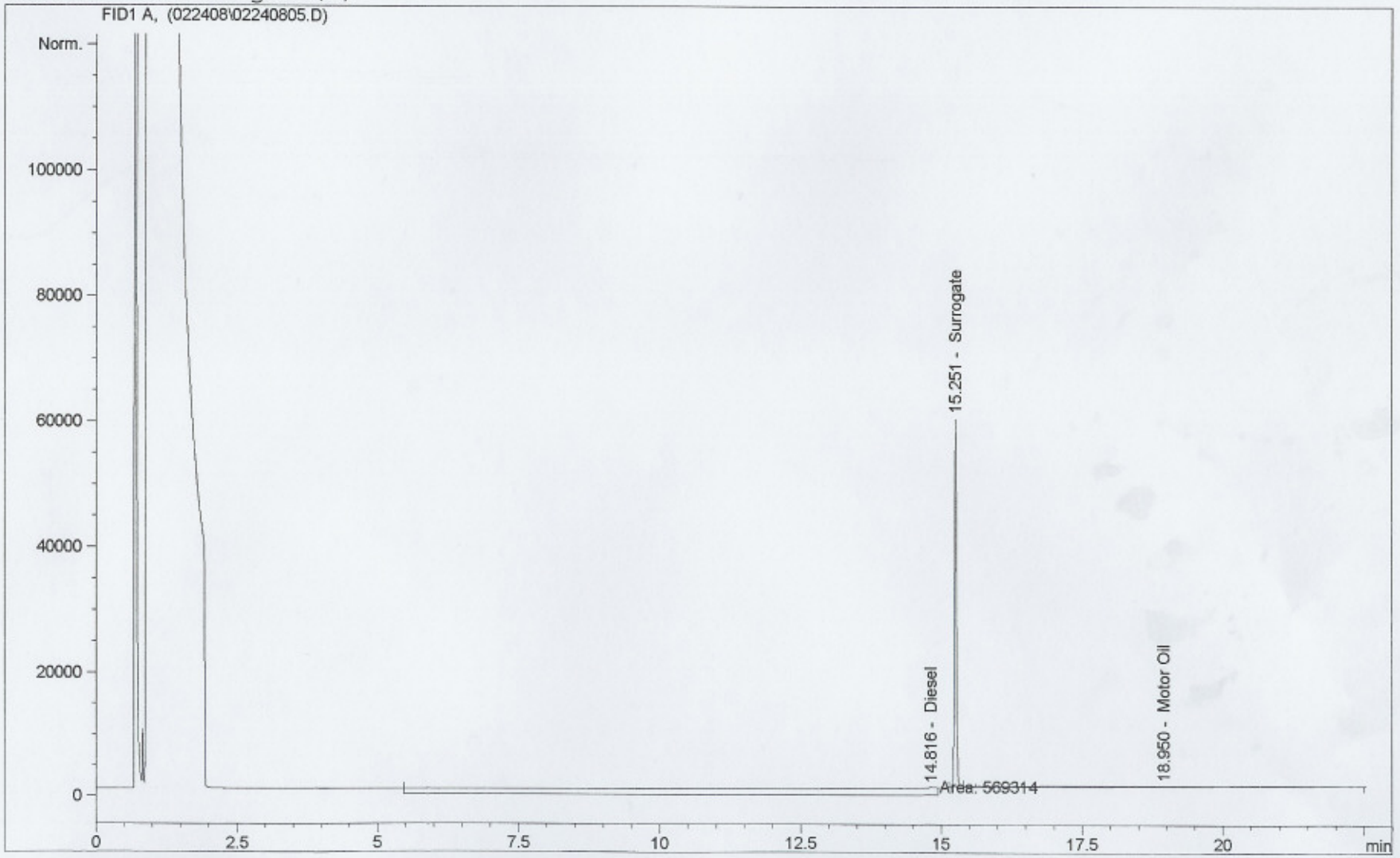
Operator :
Acquired : 29 Feb 2008 7:32 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BC80301-MS1
Misc Info :
Vial Number: 43



Print of window 38: Current Chromatogram(s)

Injection Date	: 2/24/08 4:35:59 PM	Seq. Line	: 4
Sample Name	: BB82401-BLK1	Vial	: 4
Acq. Operator	: jz	Inj	: 1
		Inj Volume	: 2 ul
Acq. Method	: C:\HPCHEM\1\METHODS\GC122607.M		
Last changed	: 2/21/08 8:25:31 PM by jz		
Analysis Method	: C:\HPCHEM\1\METHODS\GC122607.M		
Last changed	: 2/28/08 10:18:08 PM by jz		

Current Chromatogram(s)



Print of Window 38: Current Chromatogram(s)

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Injection Date  : 2/24/08 5:07:15 PM          Seq. Line :   5
Sample Name     : BB82401-BS1                     Vial :   5
Acq. Operator   : jz                              Inj :   1
                                             Inj Volume : 2 ul

Acq. Method     : C:\HPCHEM\1\METHODS\GC122607.M
Last changed    : 2/21/08 8:25:31 PM by jz
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Last changed    : 2/28/08 10:18:08 PM by jz
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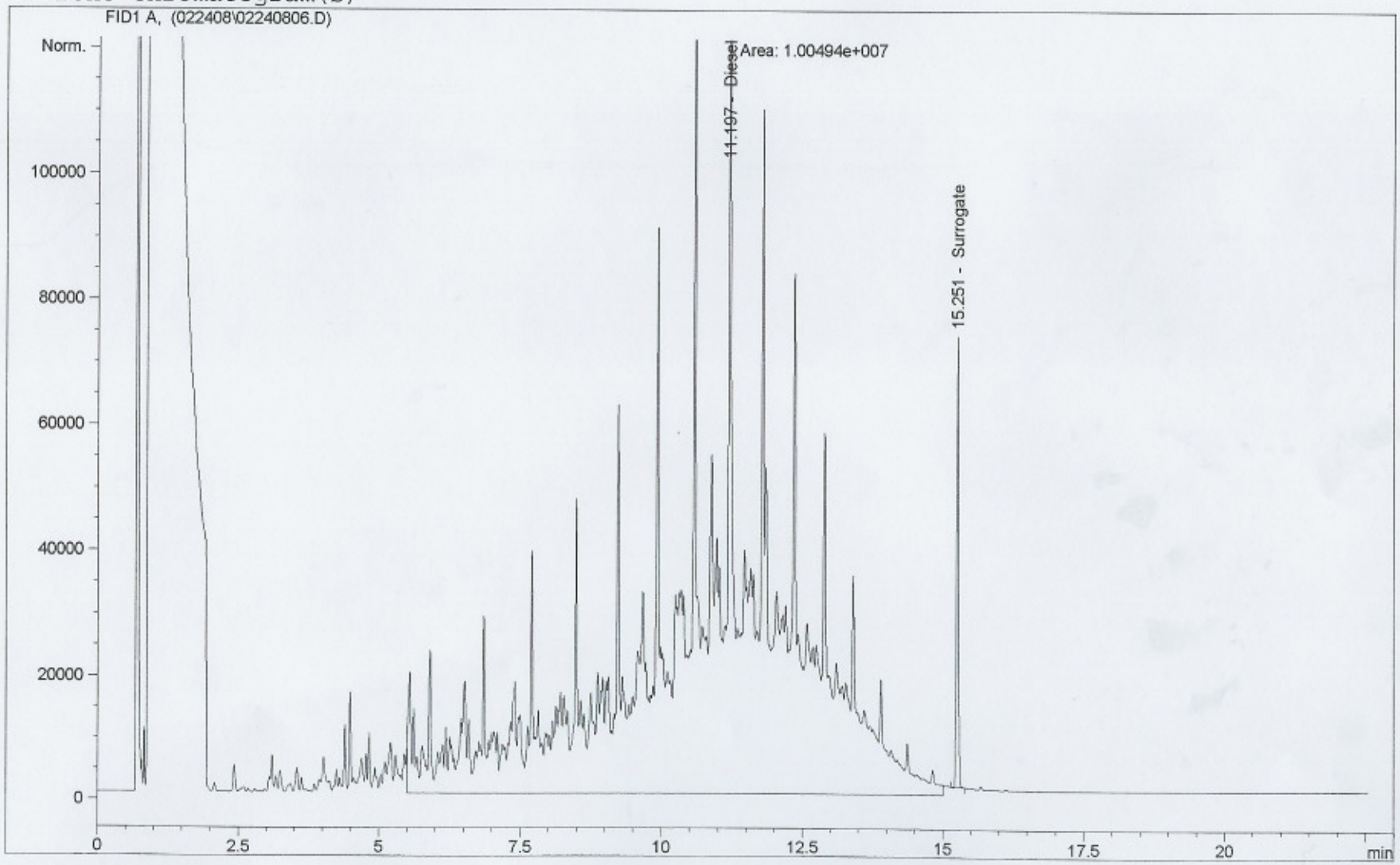
Current Chromatogram(s)



Instrument 1 3/3/08 9:04:35 PM jz

Print of Window 38: Current Chromatogram(s)

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Injection Date  : 2/25/08 10:44:34 AM          Seq. Line :  39
Sample Name     : BB82401-MS1                      Vial :  39
Acq. Operator   : jz                               Inj :   1
                                              Inj Volume : 2 ul

Acq. Method     : C:\HPCHEM\1\METHODS\GC122607.M
Last changed    : 2/21/08 8:25:31 PM by jz
Analysis Method : C:\HPCHEM\1\METHODS\GC122607.M
Last changed    : 2/28/08 10:18:08 PM by jz
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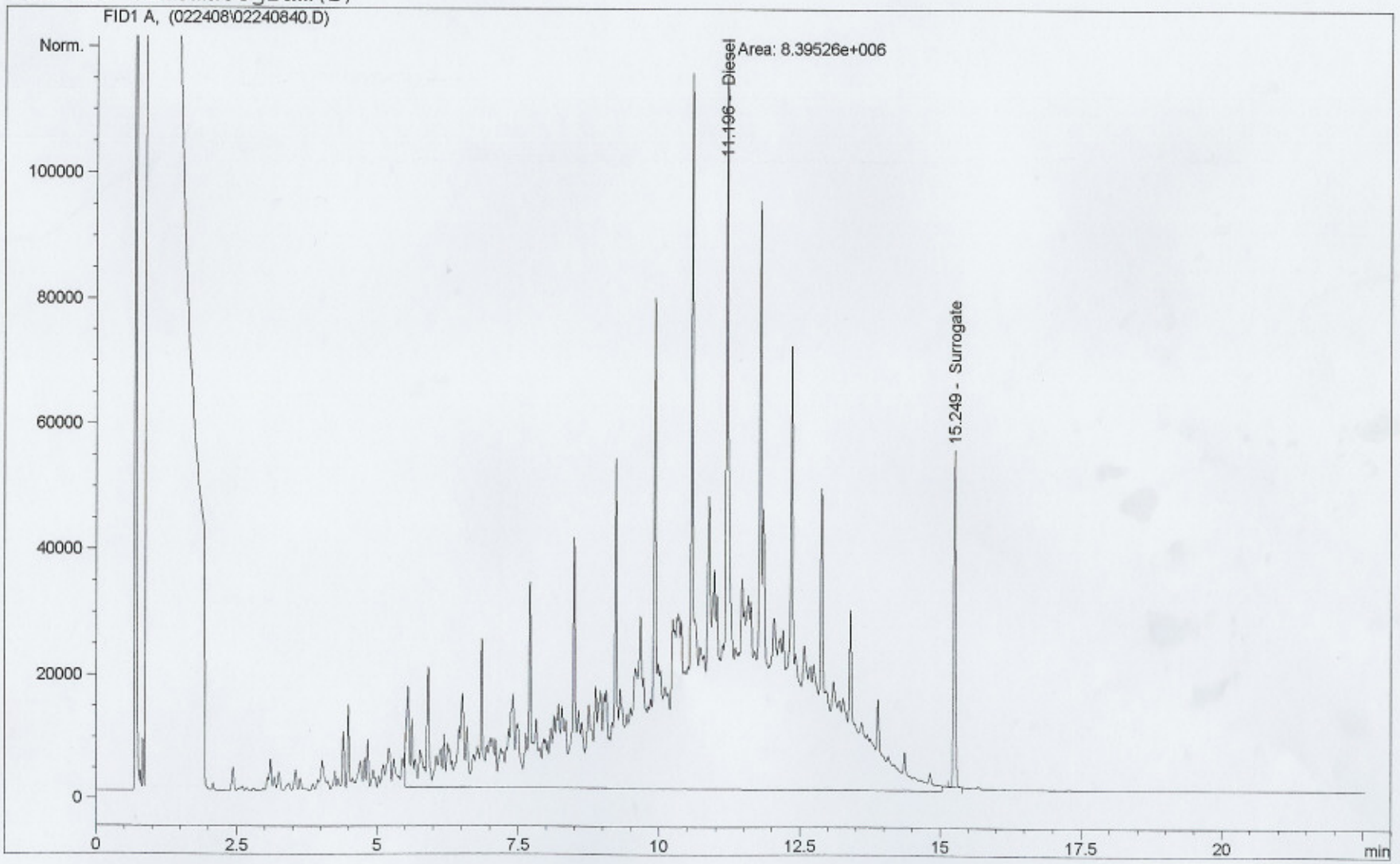
Current Chromatogram(s)



Instrument 1 3/3/08 9:04:59 PM jz

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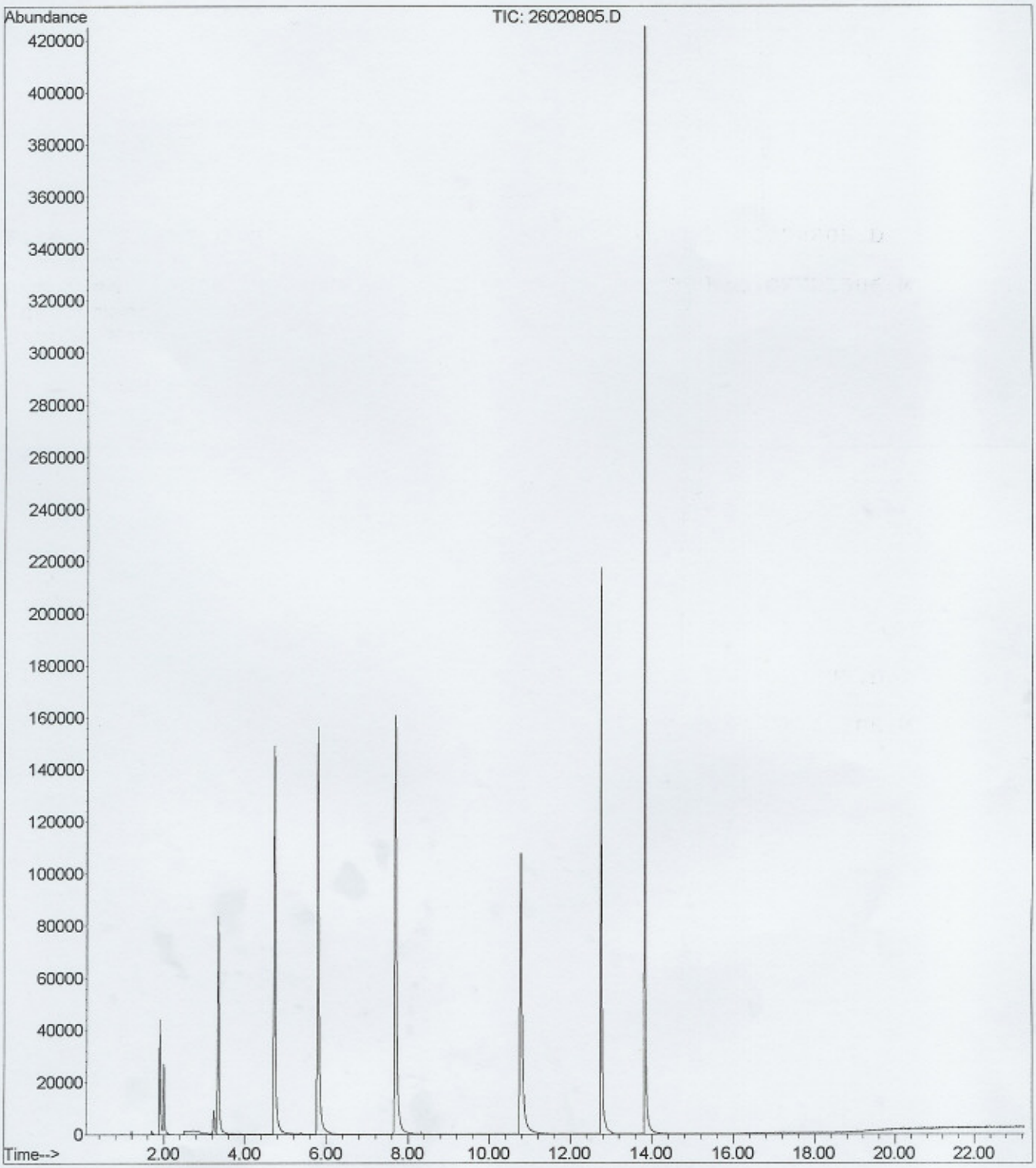
Instrument : PAL GCMS
Sample Name: BB82702-BLK1
Misc Info :
Vial Number: 5



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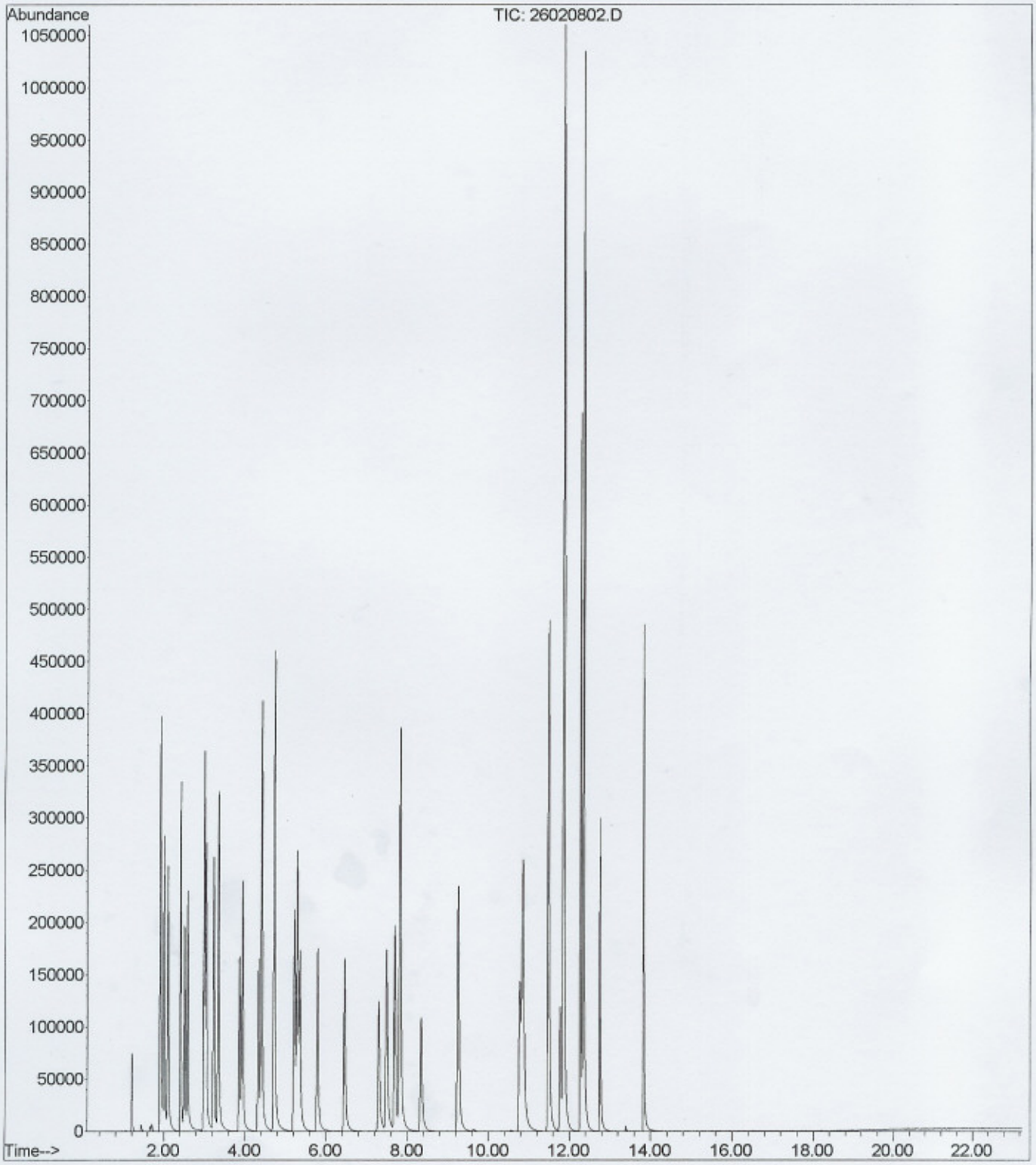
Operator :
Acquired : 26 Feb 2008 6:54 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB82702-BS1@voc
Misc Info :
Vial Number: 2



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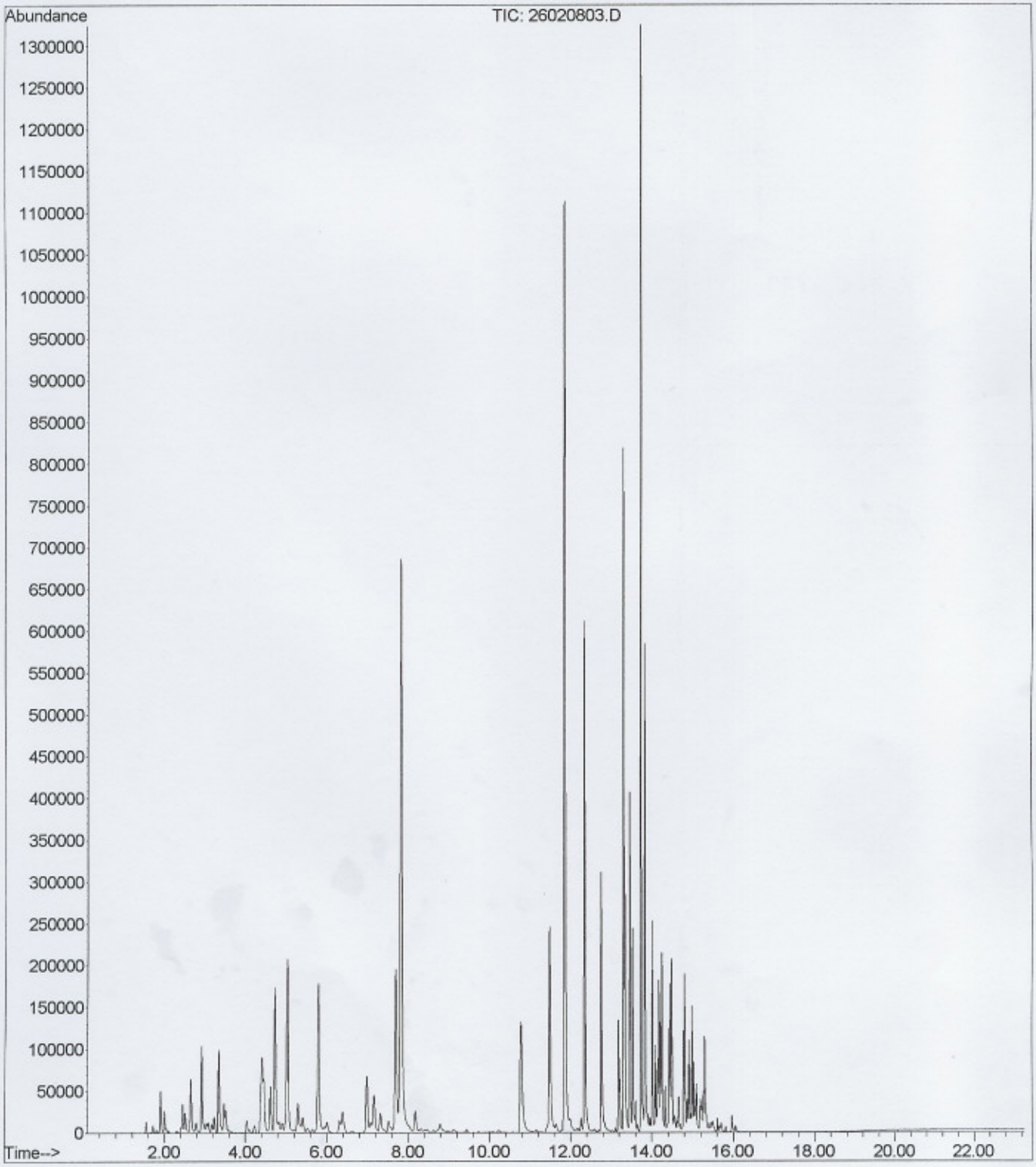
Operator :
Acquired : 26 Feb 2008 7:25 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB82702-BS1@gas
Misc Info :
Vial Number: 3



Print of Window 38: Current Chromatogram(s)

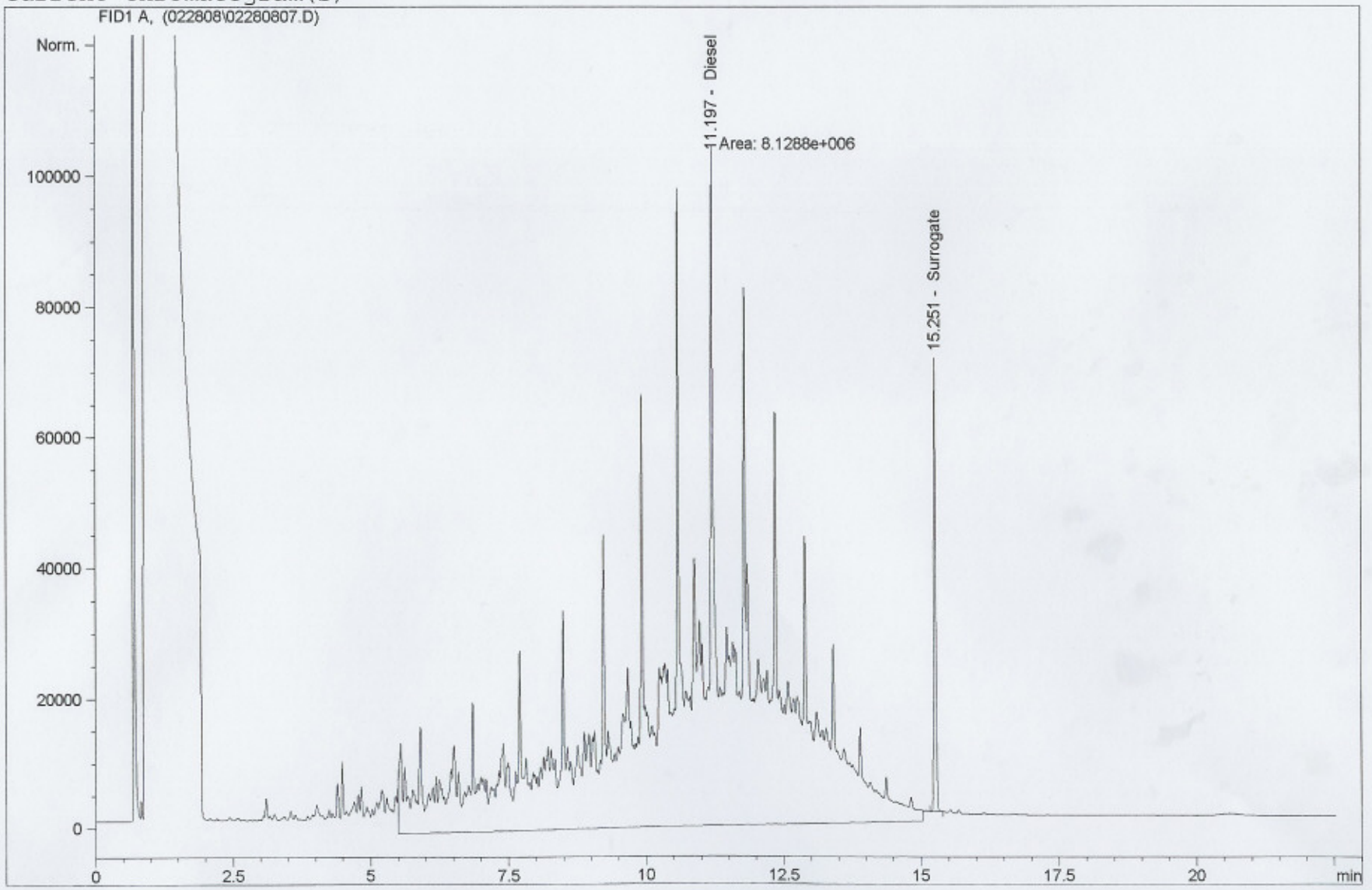
Injection Date	: 2/29/08 12:57:32 AM	Seq. Line	: 5
Sample Name	: BB82801-BLK1	Vial	: 4
Acq. Operator	: jz	Inj	: 1
		Inj Volume	: 2 ul
Method	: C:\HPCHEM\1\METHODS\GC122607.M		
Last changed	: 2/28/08 10:18:08 PM by jz		

Current Chromatogram(s)

Print of window 38: Current Chromatogram(s)

Injection Date	: 2/29/08 1:28:59 AM	Seq. Line	: 6
Sample Name	: BB82801-BS1	Vial	: 5
Acq. Operator	: jz	Inj	: 1
		Inj Volume	: 2 ul
Method	: C:\HPCHEM\1\METHODS\GC122607.M		
Last changed	: 2/28/08 10:18:08 PM by jz		

Current Chromatogram(s)



Appendix D

Supporting Documentation: Sensitive Receptor and Preferential Flow Path Study

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

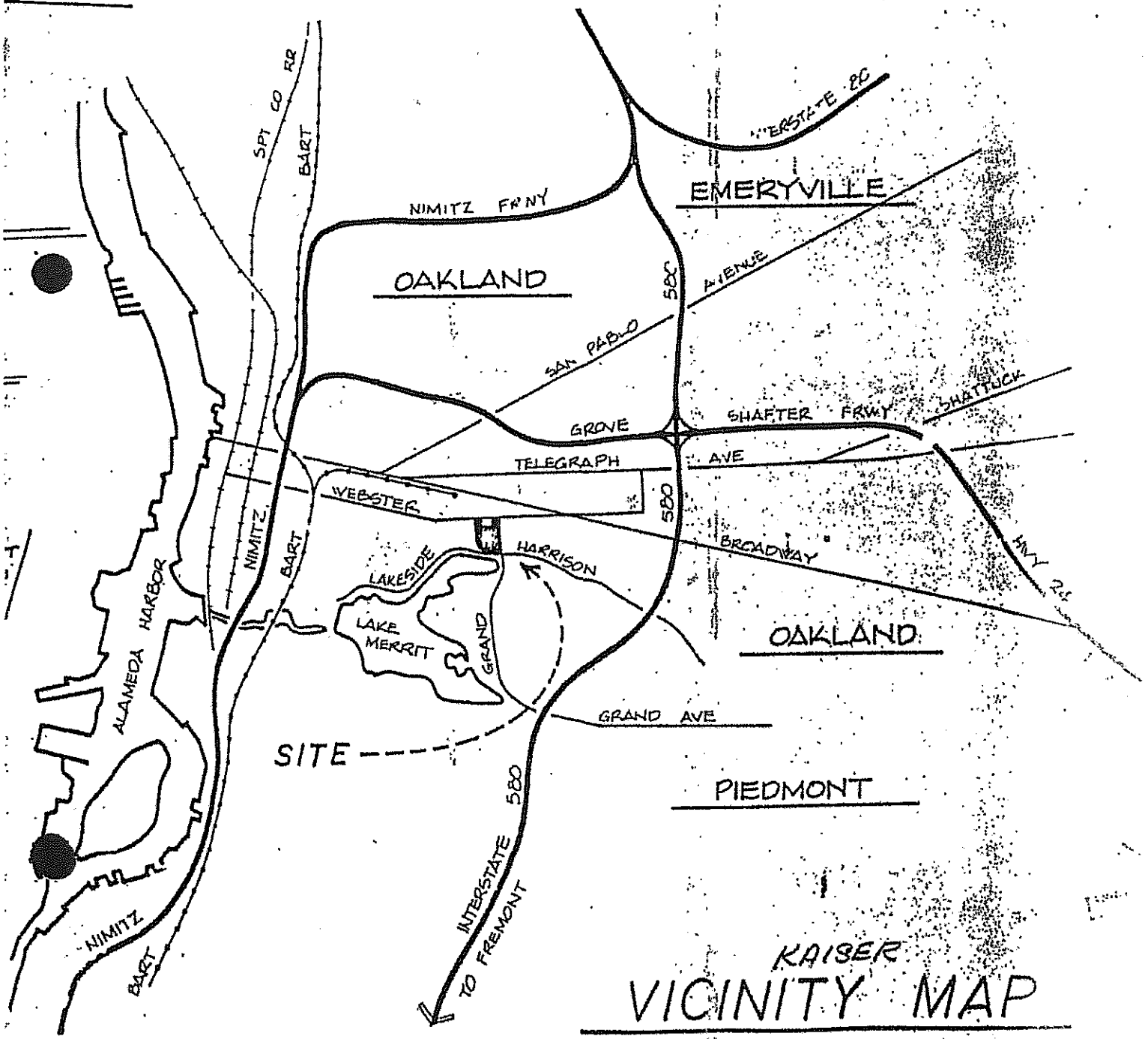
REMOVED

LEGAL DESCRIPTION

345857

REAL PROPERTY IN THE CITY OF OAKLAND, COUNTY OF ALAMEDA, STATE OF CALIFORNIA DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF TWENTY-FIRST (21ST) STREET WITH THE WEST LINE OF HARRISON STREET; THENCE FROM SAID POINT OF BEGINNING, ALONG SAID NORTH LINE, NORTH 73 56' 58" WEST, 198.80 FEET; THENCE DEPARTING SAID NORTH LINE, NORTH 13 02' 54" EAST, 262.00 FEET TO THE SOUTH LINE OF TWENTY-SECOND (22ND) STREET; THENCE ALONG SAID SOUTH LINE, SOUTH 73 56' 58" EAST, 212.39 FEET TO THE WEST LINE OF HARRISON STREET; THENCE ALONG SAID WEST LINE, SOUTH 16 01' 04" WEST, 262.35 FEET TO THE POINT OF BEGINNING.



KAISER

VICINITY MAP

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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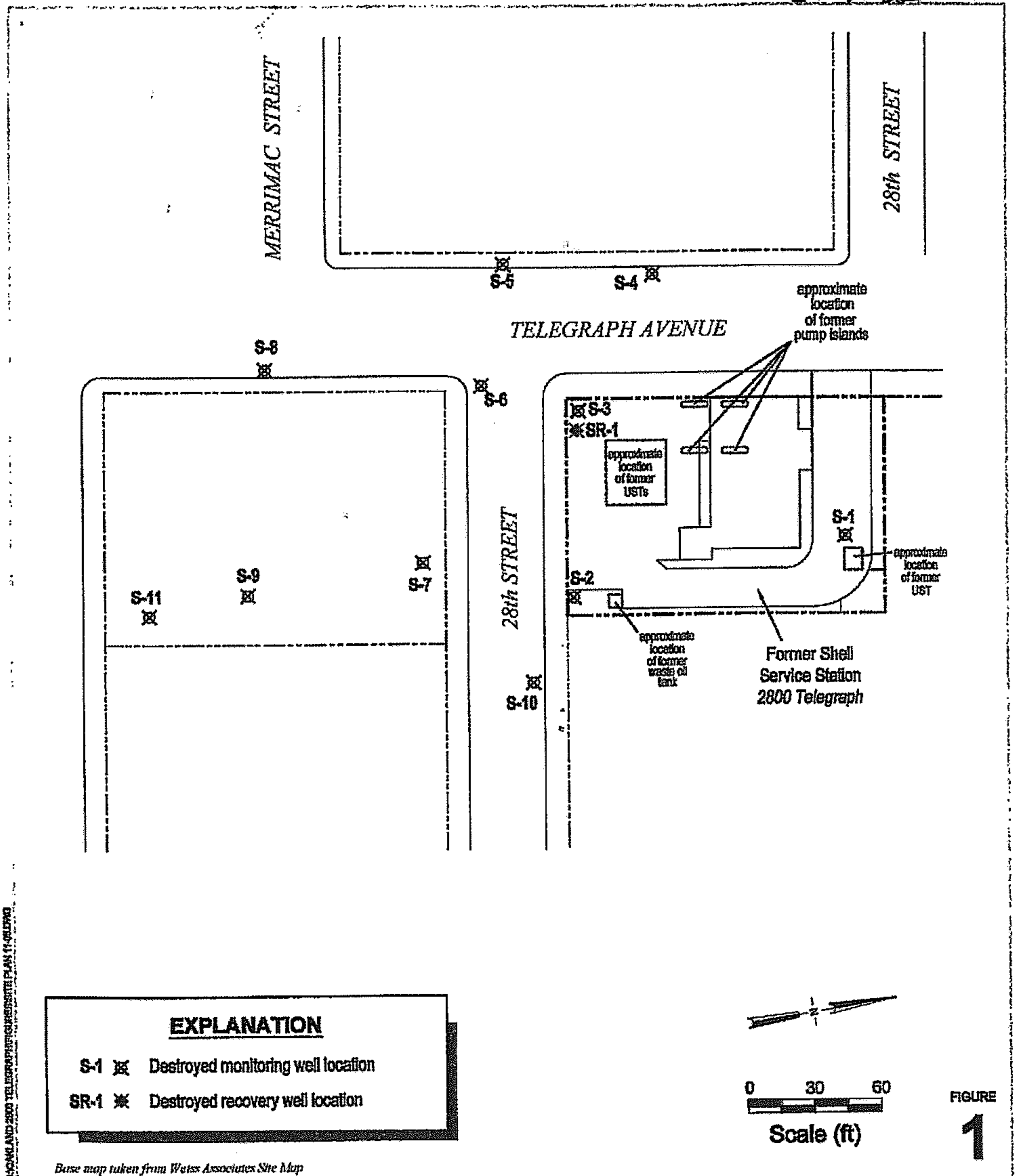

MERRIMAC STREET
28th STREET
S-5
S-4
TELEGRAPH AVENUE
approximate location of former pump islands
S-8
S-6
S-3
SR-1
approximate location of former USTs
S-1
approximate location of former UST
S-2
approximate location of former waste oil tank
S-9
S-7
S-11
28th STREET
S-10
Former Shell Service Station
2800 Telegraph
EXPLANATION
S-1 Destroyed monitoring well location
SR-1 Destroyed recovery well location
0 30 60
Scale (ft)
FIGURE
1
Base map taken from Weiss Associates Site Map

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

Field location of boring: (See Plate 2)	Project No.: 7610	Date: 10/03/89	Boring No.: SR-1
	Client: Shell Oil Company		
	Location: 2800 Telegraph Avenue		
	City: Oakland, California		Sheet 1 of 2
	Logged by: T.J.W.	Driller: Bayland	
Drilling method: Hollow-Stem Auger	Casing installation data: (See Well Completion Detail)		
Hole diameter: 8-Inch	Top of Box Elevation:	Datum:	

								Water Level				
								Time				
								Date				

Blow Count	Recovery or Penetration Rate	Type of Sample	Sample Number	Depth (ft)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								FILL - Gravels, Sands, Silts, Clays (GM) - very dark brown (10YR 2/2), stiff, damp; no chemical odor.
96				1				
				2				
				3				Pea Gravel
				4				
	100	S&H						CLAYEY SILT with SAND (ML) - very dark grayish brown (10YR 3/2), medium stiff, damp; moderate chemical odor.
130	100	push	SR-1-5.5	5				
	150			6				
				7				
				8				
				9				
	100	S&H						
295	100	push	SR-1-10.5	10				COLOR CHANGE to olive (2.5 4/4), medium stiff, damp; mottled with grey; moderate to strong chemical odor.
	100			11				
				12				
				13				
				14		▽		SAND (SP) - very dark grayish brown (2.5Y 3/2), medium dense, saturated; medium sand; trace silt; no chemical odor.
	5	S&H						
19.0	10		SR-1-15.5	15				
	18			16				
				17				SAND with GRAVEL (SW) - brown (10YR 5/3), medium dense, saturated; 25-30% fine gravel.
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. SR-1

JOB NUMBER	REVIEWED BY RGCE	DATE	REVISED DATE	REVISED DATE
7610	CWP 06 1267	10/89		

G07Y863

Field location of boring: (See Plate 2)	Project No.: 7610	Date: 10/03/89	Boring No.: SR-1
	Client: Shell Oil Company		
	Location: 2600 Telegraph Avenue		Sheet 2 of 2
	City: Oakland, California		
	Logged by: T.J.W.	Driller: Bayland	
Drilling method: Hollow-Stem Auger	Casing installation data: (See Well Completion Detail)		
Hole diameter: 8-inch	Top of Box Elevation:	Datum:	
	Water Level		
	Time		
	Date		

Blow Count	Sample Recovery (inches)	Type of Sample	Sample Number	Depth (ft)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
	7	S&H		20				
N/A	7		SR-1-					
	8		20.5					
				21				
				22				
				23				
				24				
	2	S&H		25				COLOR CHANGE to yellowish brown (10YR 5/6); 15-25% fine gravel; no chemical odor.
N/A	7		SR-1-					
	8		25.5					
				26				
				27				
				28				
				29				
	3	S&H		30				SILTY SAND (SM) - yellowish brown (10YR 5/4), loose, saturated; very fine sand; 20-30% silt; no chemical odor.
N/A	5		SR-1-					
	19		30.5					
				31				
				32				GRAVEL with SAND (GW) - yellowish brown (10YR 5/6), medium dense, saturated; fine gravel; 20-30% fine to coarse sand; no chemical odor.
				33				
				34				
	6	S&H		35				SAND with SILT and GRAVEL (SW) - brown (10YR 5/3), dense, saturated; 60-60% very fine sand; 15% fine gravel; 15% silt; roothales contained moisture; trace clay; no chemical odor.
N/A	14		SR-1-					
	20		35.5					
				36				
				37				Bottom of boring at 35.5 feet.
				38				Bottom of sample at 35.5 feet.
				39				10/03/89

Remarks:

GeoStrategies Inc.

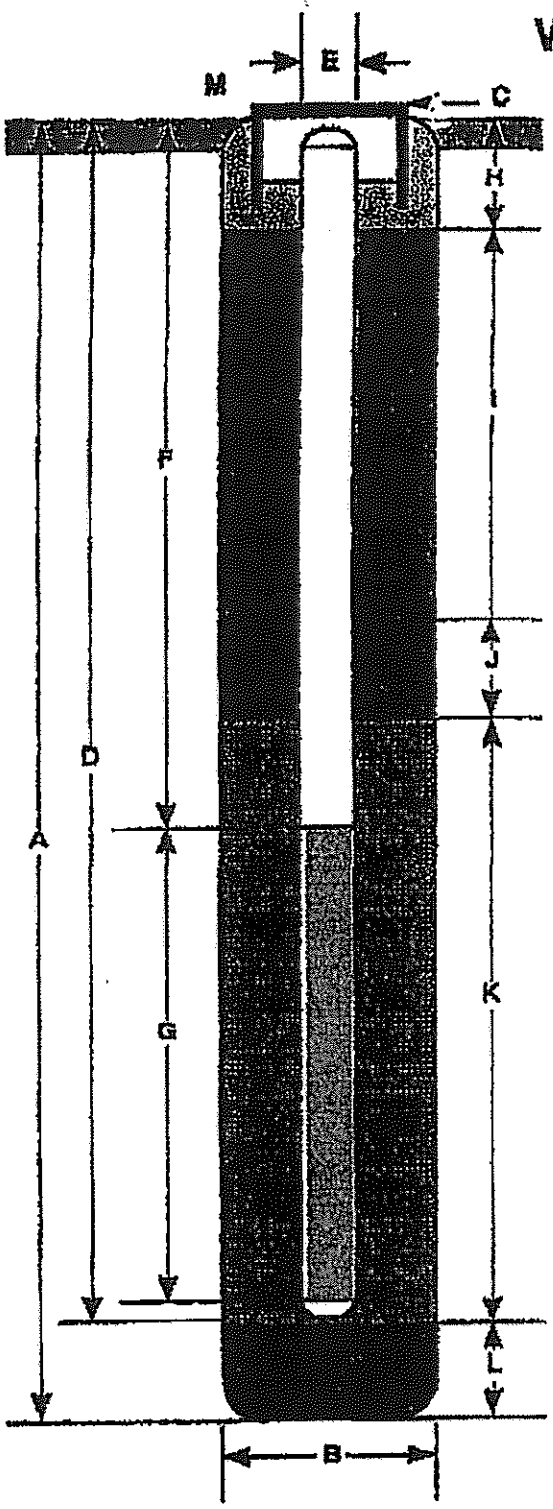
Log of Boring

BORING NO. SR-1

JOB NUMBER	REVIEWED BY REVISED	DATE	REVISED DATE	REVISED DATE
7610	CWP 06/12/52	10/89		

E0532863

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35 ft.

B Diameter of Boring 20 in.
Drilling Method Bucket Auger

C Top of Box Elevation ft.
☐ Referenced to Mean Sea Level
☐ Referenced to Project Datum

D Casing Length 35 ft.
Material Schedule 40 PVC

E Casing Diameter 6 in.

F Depth to Top Perforations 10 ft.

G Perforated Length 25 ft.
Perforated Interval from 10 to 35 ft.
Perforation Type Machine Slot
Perforation Size 0.020 in.

H Surface Seal from 0 to 1 ft.
Seal Material Concrete

I Backfill from 1 to 51/2 ft.
Backfill Material Cement Grout

J Seal from 51/2 to 61/2 ft.
Seal Material Bentonite pellets

K Gravel Pack from 61/2 to 35 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M Christy Box

Note: Depths measured from initial ground surface.

WELL NO.

GeoStrategies Inc.

SR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	[illegible]	10/99		

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

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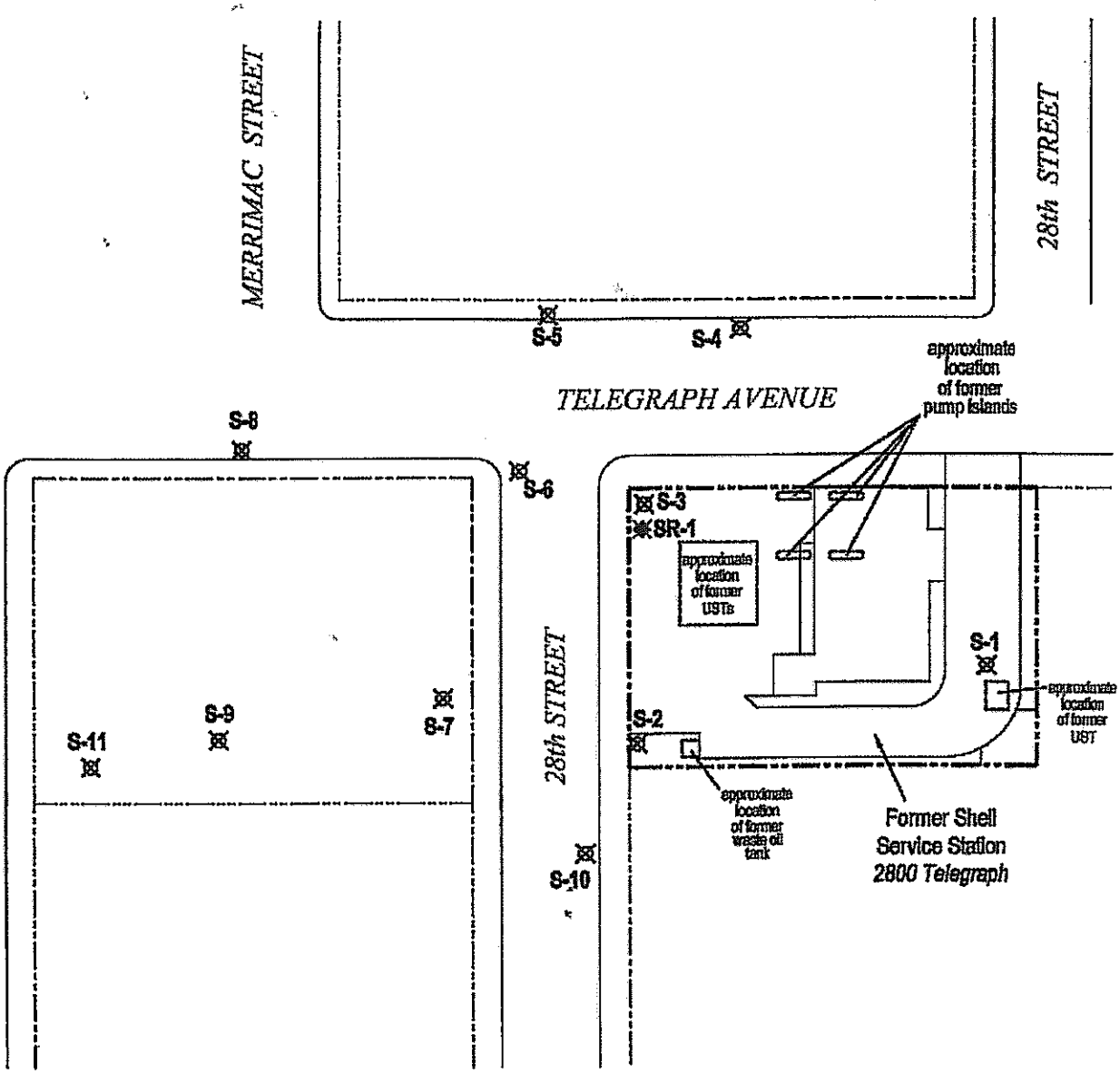

EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ⊠ Destroyed recovery well location

0 30 60

Scale (ft)

FIGURE 1

Base map taken from Weiss Associates Site Map

G:\OAKLAND\2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

EO32860

Woodward-Clyde Consultants PROJECT NAME GETTLER RYAN NO. 8520011A

MONITORING WELL LOCATION 2800 Telegraph Avenue, Oakland CA: S-1		ELEVATION AND DATUM	
DRILLING AGENCY Bay Land Drilling	DRILLER	DATE STARTED / DATE FINISHED 4/22/88	
DRILLING EQUIPMENT CME - 55 Truckmount		COMPLETION DEPTH 28.5'	SAMPLER Modified California Sampler
DRILLING METHOD 8" HSA	DRILL BIT CME Carbide	NO. OF SAMPLES DIST. 5	UNDIST.
SIZE AND TYPE OF CASING 3" PVC		WATER LEVEL FIRST 12'	COMPL. N/A / 24 HRS.
TYPE OF PERFORATION 0.020" slotted	FROM 27.5 TO 3.5 FT.	LOGGED BY: S. Blusstone	CHECKED BY: M. Borkowski
SIZE AND TYPE OF PACK 12/20 Monterey Sand	FROM 28.5 TO 2.0 FT.		
TYPE OF SEAL NO. 1 Bentonite Pellets	FROM 2.0 TO 1.5 FT.		
NO. 2 Concrete Grout	FROM 1.5 TO G.S. FT.		

Depth (feet)	Samples	Blows	MATERIAL DESCRIPTION	USCS	Well Construction
			ASPHALT		
			SILTY SAND (Cuttings) dark brown, with fine to medium sand grains, little coarse sand, moist, loose	SM	
			SILTY CLAY	CL	
5	1	pushed with 300 lbs	light olive gray and brown mottled, little fine sand, low plasticity, soft, moist, appears to be interbedded with thin layers (0.5' - 1' thick) of Silty Sand, trace to little black organic debris		
			H Nu = 0 No Hydrocarbon odor		
10	2	4 4 18	CLAY light brown to olive gray mottled, little fine sand, medium plasticity, stiff, wet	CL	
			H Nu = 0 No Hydrocarbon odor		
			CLAYEY GRAVEL? (Cuttings) (according to driller)	GC(?)	
15	3	4 9 26	CLAYEY SAND to SANDY CLAY light brown and grey mottled, little coarse sand, some medium to fine sand, little gravel to 1.5", moderate plasticity, medium dense	SC-CL	
			H Nu = 0 No Hydrocarbon odor		
20	4	5 7 10	CLAYEY GRAVEL to CLAYEY SAND with interbeds of SANDY CLAY to abt. 5' & SILTY SAND light brown to gray mottled, moderate plasticity saturated, medium dense, saturated	GC-SC, CL-SM	
			H Nu = 0 No Hydrocarbon odor		
			GRAVEL (according to driller)		
25	5	4 5 6	CLAYEY SAND to SANDY CLAY olive gray to light brown mottled, fine to medium sand, moderate plasticity, stiff (or med. dense), saturated	SC-CL	
			H Nu = 0 No Hydrocarbon odor		
30			Bottom of Well: 28.5 feet		
35					

LOG OF MONITORING WELL NO. S-1 SHEET 1 OF 1

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STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

01-419A 1S/4W 21 G

Woodward-Clyde Consultants

PROJECT NAME GETTLER RYAN NO. 8820011A

MONITORING WELL LOCATION	2600 Telegraph Avenue, Oakland CA; S-4	ELEVATION AND DATUM	
DRILLING AGENCY	Bay Land Drilling	DRILLER Kurt Voss	DATE STARTED / DATE FINISHED 10/31/88
DRILLING EQUIPMENT	CME-75 Truckmount	COMPLETION DEPTH 28.5	SAMPLER Modified California Sampler
DRILLING METHOD	8" HSA	DRILL BIT CME Carbide	NO. OF SAMPLES DIST. 6 / UNDIST. —
SIZE AND TYPE OF CASING	3" PVC	FROM 30.5 TO 0.5 FT.	WATER LEVEL FIRST 11-14' / COMPL. / 24 HRS. —
TYPE OF PERFORATION	0.020" slotted	FROM 30.0 TO 5 FT.	LOGGED BY: G. Hayman / CHECKED BY: M. Borkowski
SIZE AND TYPE OF PACK	2/12 Lonestar Sand	FROM 30.5 TO 4.0 FT.	
TYPE OF SEAL NO. 1	Bentonite Pellets	FROM 4.0 TO 3.5 FT.	
TYPE OF SEAL NO. 2	Concrete Grout	FROM 3.5 TO ~~0.5~~ Surface FT.	

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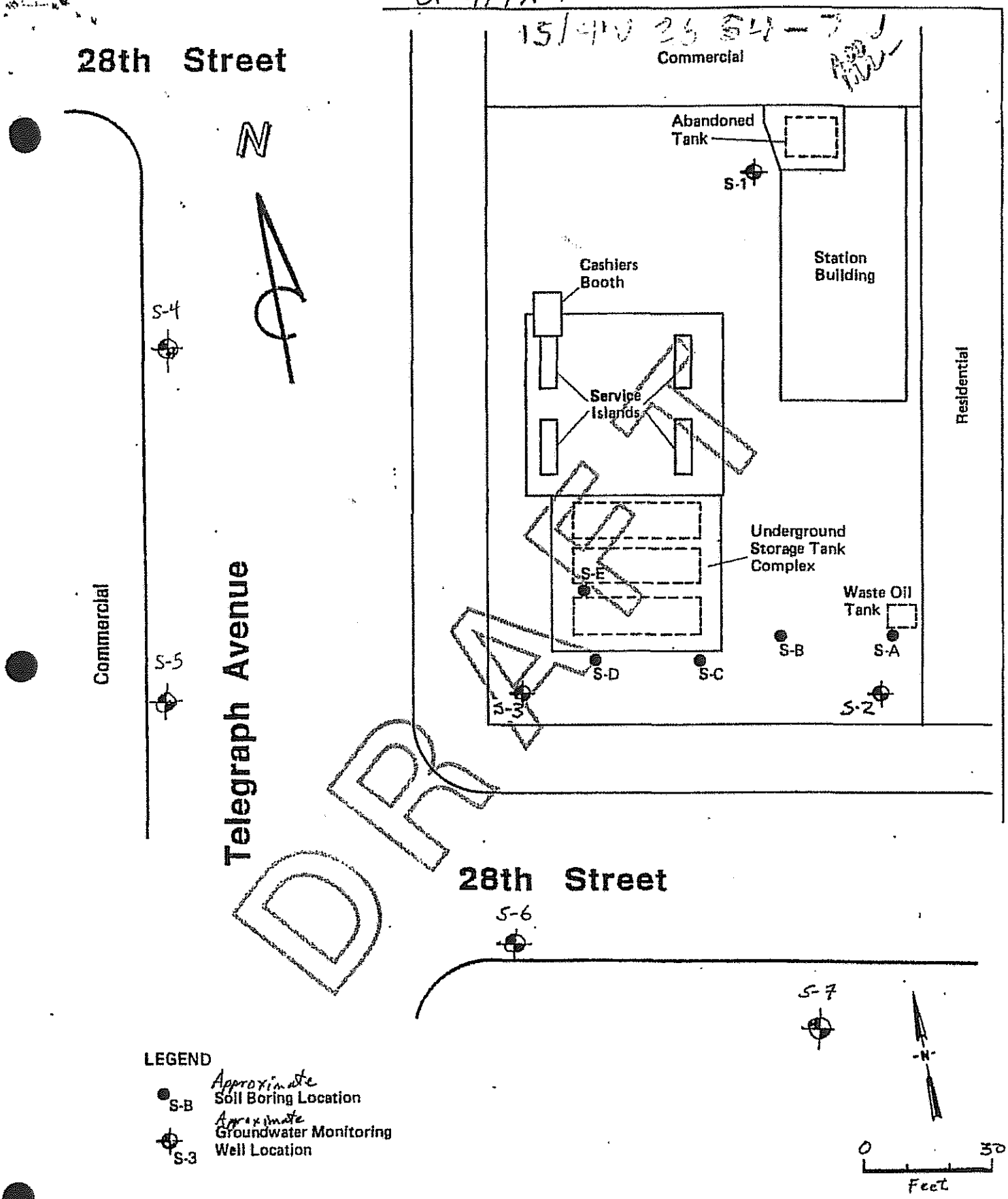
GETTLER-RYAN INC.
GENERAL CONTRACTORS

DRAFT

Depth (feet)	Samples	Blows	MATERIAL DESCRIPTION		USCS	Well Construction
			Asphalt and Concrete			
5	1	pushed 150-250	CLAYEY SAND to SANDY CLAY medium brown with yellow brown mottling, very fine to fine sand, low plasticity, firm, moist, few vesicles and root fragments.	No Hydrocarbon odor OMV = 0 ppm	SC-CL	Sand
10	2*	2 4 7	grades to clayey silt with some very fine sand, low plasticity.	No Hydrocarbon odor OMV = 0 ppm		
15	3	4 7 6	SAND (Not bold) medium brown to yellow brown, very fine grained sand, some clay, grades to clayey sand in areas silt, loose, saturated. softer drilling from 16 to 18 feet	No Hydrocarbon odor OMV = 0 ppm	SW-SP	Sand / 5/6 Well Screen / Sand
20	4	8 16 20	SAND light brown with occational yellow and dark brown mottling, very fine to fine sand with ocational fine to medium sand, trace fine gravel, wet to saturated. -less than 6" layers to gravel interbedded (driller)	No Hydrocarbon odor OMV = 0 ppm	SW-SP	
25	5	8 15 14	SAND to GRAVELLY SAND with interbedded SILT/CLAY light yellow brown, generally medium to coarse sand with fine gravel, thin (+/- 2") layers of silt and clay, saturated.	No Hydrocarbon odor OVM = 0 ppm	SW/GP ML-CL	
30	6	4 4 7	SANDY CLAY to CLAYEY SAND light brown with few yellow brown mottled areas, very fine sand, little to some silt, low to medium plasticity, firm, wet with saturated areas	No Hydrocarbon odor OVM = 0 ppm	CL-SC	
35			Total depth = 30.5 feet * = Laboratory sample			

LOG OF MONITORING WELL NO. S-4 SHEET 1 OF 1

01-419A-D

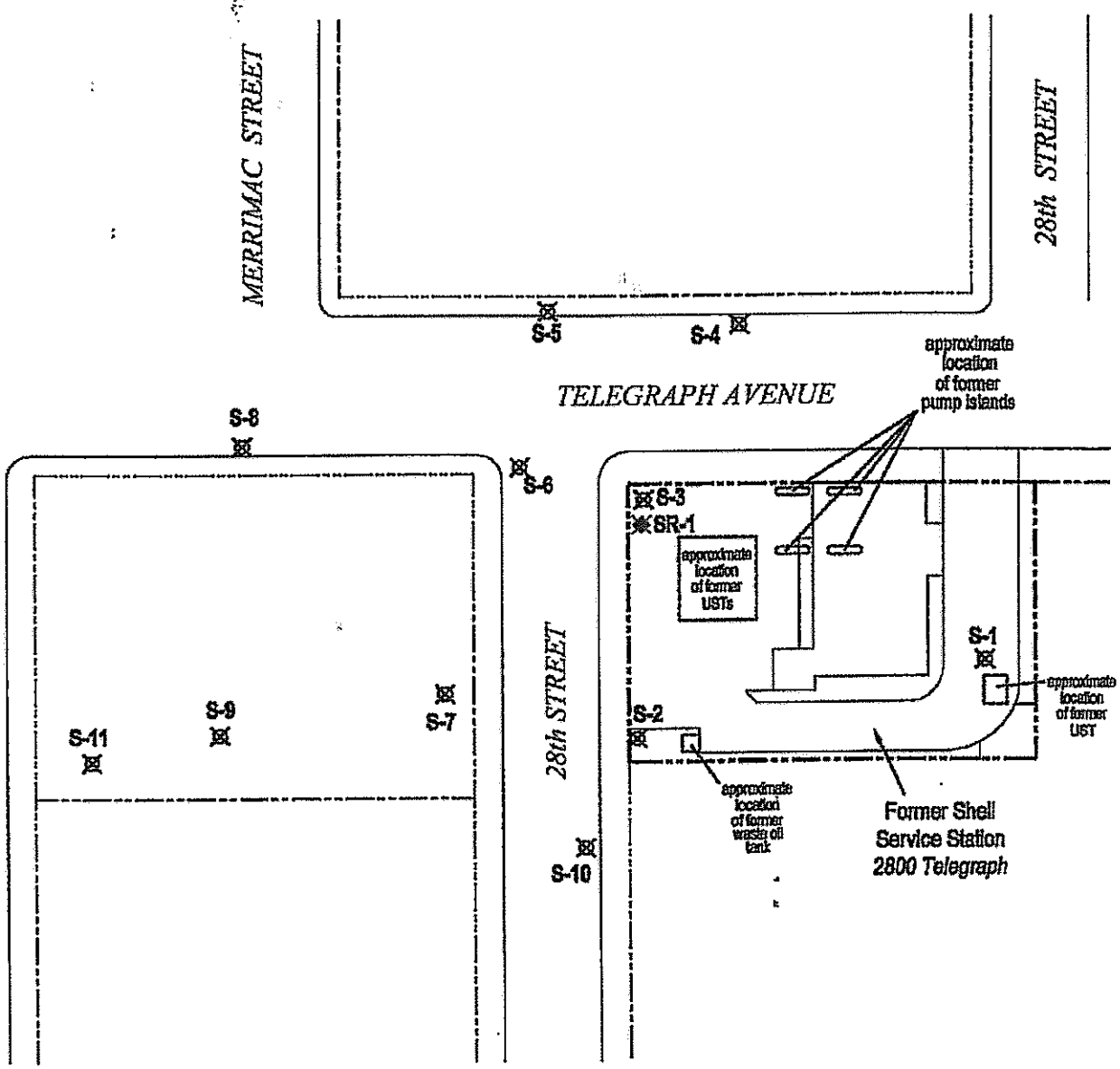


LEGEND

- S-B — Approximate Soil Boring Location
- S-3 — Approximate Groundwater Monitoring Well Location

Project No. 8820011A	Gettler-Ryan	SOIL BORING AND GROUNDWATER MONITORING WELL LOCATION MAP, FORMER SHELL SERVICE STATION, 2800 TELEGRAPH AVE., OAKLAND, CA	Figure 2
Woodward-Clyde Consultants			

E0328671/17/05



EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ⊠ Destroyed recovery well location

0 30 60

Scale (ft)

FIGURE

1

Base map taken from Weiss Associates Site Map

OCKORLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

01-419B 1S/4W32 : G

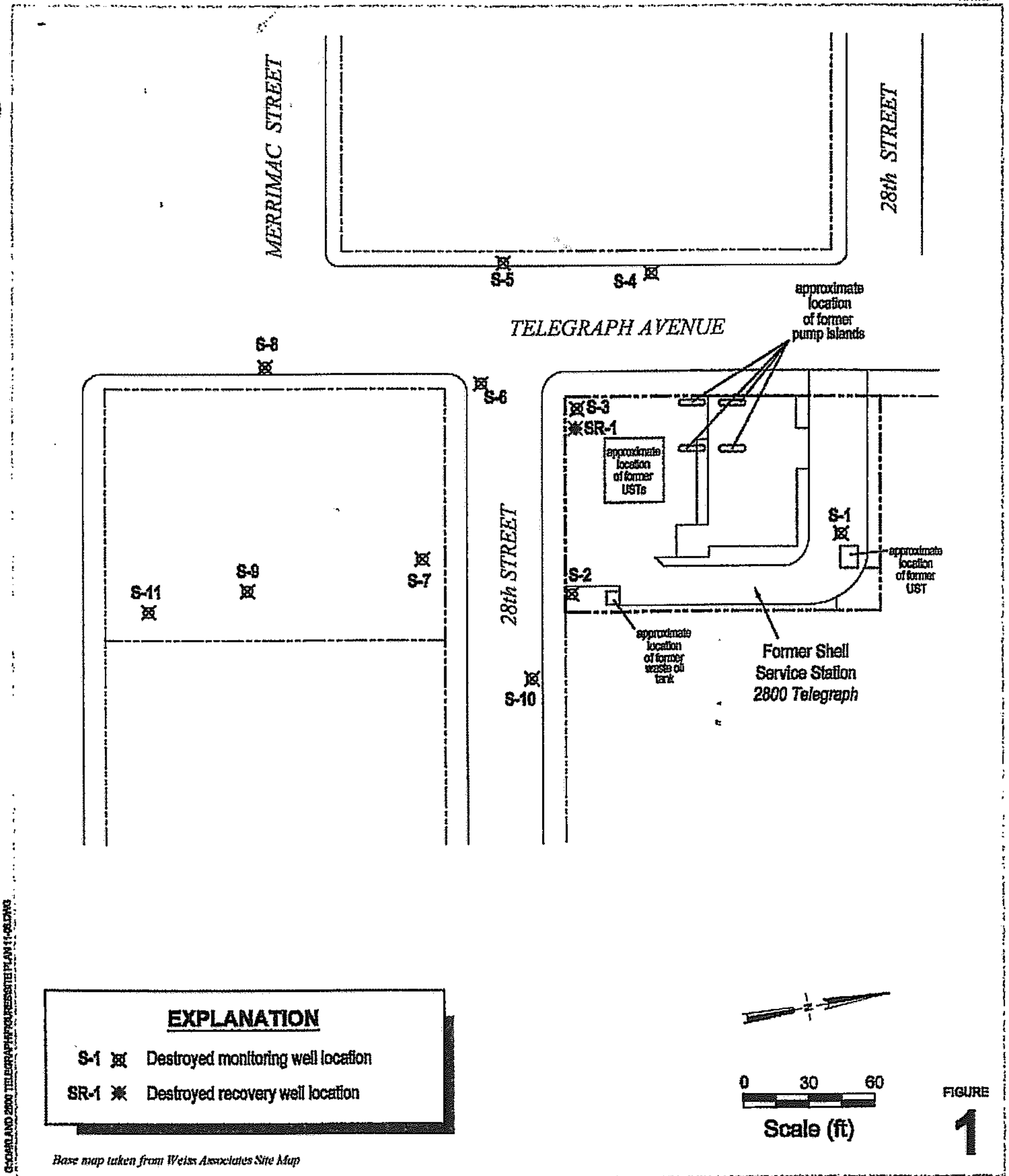
Woodward-Clyde Consultants

PROJECT NAME GETTLER-RYAN NO. 8820011A

MONITORING WELL LOCATION	~~1099 S. First St., Pleasanton, CA (S-5)~~ 2500 TELEGRAPH AVE						ELEVATION AND DATUM		
DRILLING AGENCY	Bay Land Drilling	DRILLER	Kurt Voss				DATE STARTED / DATE FINISHED	10/26/88	
DRILLING EQUIPMENT	Truck-mounted CME 75						COMPLETION DEPTH	24'	SAMPLER Modified California
DRILLING METHOD	8" Hollow stem augers	DRILL BIT	CME Carbide				NO. OF SAMPLES	DIST. 5	UNDIST. ———
SIZE AND TYPE OF CASING	3" PVC	FROM	24	TO	0.5	FT.	WATER LEVEL	FIRST 14'	COMPL. ——— 24 HRS. ———
TYPE OF PERFORATION	0.020" machined slots	FROM	23.5	TO	6	FT.	LOGGED BY: G. Hayman		CHECKED BY: M. Borkowski
SIZE AND TYPE OF PACK	2/12 Lonestar sand	FROM	24	TO	5	FT.			
TYPE OF SEAL NO. 1	1/2" Bentonite Pellets	FROM	5	TO	4	FT.			
TYPE OF SEAL NO. 2	Cement grout	FROM	4	TO	surface	FT.			

Depth (feet)	Samples	Blows	MATERIAL DESCRIPTION	USCS	Well Construction
			Road Material	CL	
			SILTY CLAY dark brown, little very fine sand, low plasticity, soft, damp, homogeneous		
5	1	Pushed @ 150 psi	No Hydrocarbon odor	ML-SM	
			SANDY SILT to SILTY SAND medium yellow brown, very fine sand, grades to silty sand, loose, low plasticity, damp, homogeneous, very easy drilling at 6' Driller indicates stiffer drilling at 8.5'		
10	2*	2 3 3	SILTY SAND with SANDY SILT medium yellow brown, very fine sand, grades to sandy silt, loose, damp, homogeneous No Hydrocarbon odor	SM-ML	
			medium sand	SP-SM	
15	3*	0 0 1	SAND medium yellow brown, very fine grained, layers up to 3" thick, grades to sandy silt, trace up to fine gravel, very loose, saturated. No Hydrocarbon odor		
20	4*	4 6 10	CLAY dark gray with green gray mottling in upper 4", up to some silt in upper 4", medium plasticity, moist with wet to saturated areas around vesicles, vesicle up to 2 mm in diameter, abundant fine root fragments No Hydrocarbon odor	CL	
	5*	6 7 7	occasional green gray mottling, medium to high plasticity	CL-CH	
25			Total Depth = 24 feet * = Lab Sample		
30					
35					

LOG OF MONITORING WELL NO. S-5 SHEET 1 OF 1



11/17/05
MERRIMAC STREET
28th STREET
S-5
S-4
TELEGRAPH AVENUE
approximate location of former pump islands
S-8
S-6
S-3
SR-1
approximate location of former USTs
S-1
approximate location of former UST
S-9
S-7
S-11
S-2
28th STREET
approximate location of former waste oil tank
Former Shell Service Station
2800 Telegraph
S-10
EXPLANATION
S-1 Destroyed monitoring well location
SR-1 Destroyed recovery well location
0 30 60
Scale (ft)
FIGURE
1
Base map taken from Weiss Associates Site Map

Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

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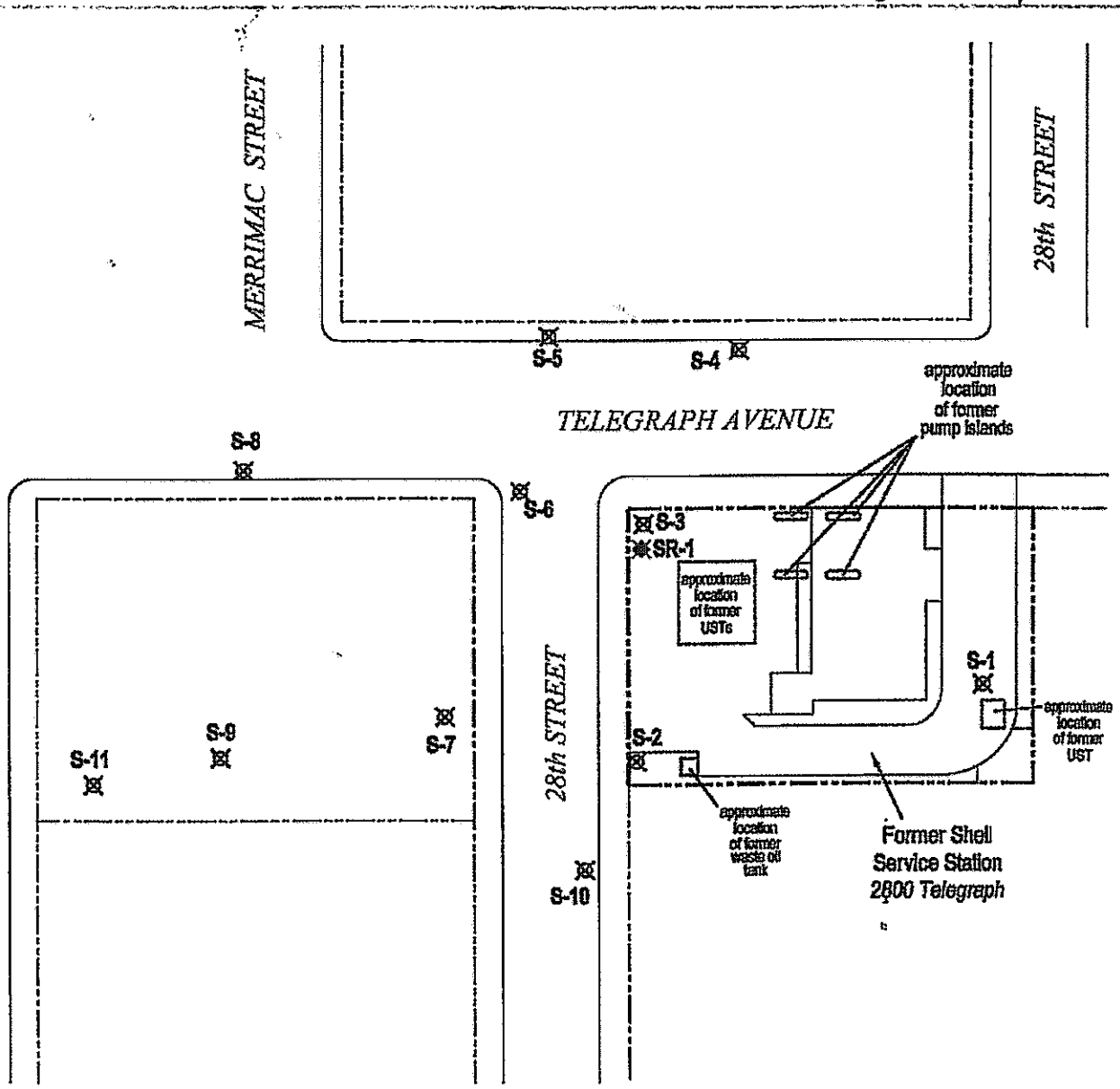
11/17/05



EXPLANATION

S-1 ⊠ Destroyed monitoring well location

SR-1 ✳ Destroyed recovery well location

0 30 60

Scale (ft)

FIGURE

1

Base map taken from Weiss Associates Site Map

G:\OAKLAND 2800 TELEGRAPH\FIGURES\SITE PLAN 11-05.DWG

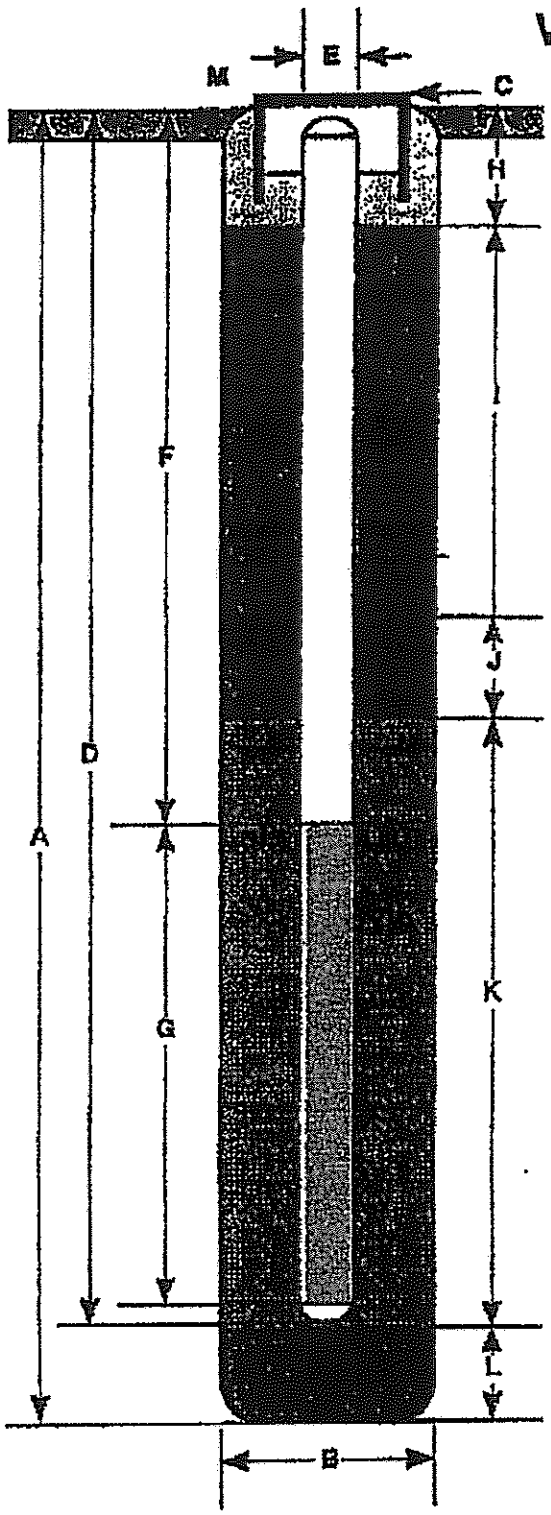
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
Incident No.97093398

CAMBRIA

Site Plan

E037864

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 30.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 26.95 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 24 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 12 ft.

G Perforated Length 12 ft.
Perforated Interval from 24 to 12 ft.
Perforation Type Machine Slot
Perforation Size 0.02 in.

H Surface Seal from 0.5 to 0 ft.
Seal Material Concrete

I Backfill from 6.0 to 0.5 ft.
Backfill Material Concrete

J Seal from 10.0 to 8.0 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 24.0 to 10.0 ft.
Pack Material 2/12 Lonestar Sand

L Bottom Seal 6.5 ft.
Seal Material Bentonite Pellets

M Christy Box with locking well cap and lock

Well Construction Detail

WELL NO. S-10

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
7610	Dwp CEG 1262	9/89		

E032864

Field location of boring: (See Plate 1)

Project No.: 7610	Date: 07/24/89
Client: Shell Oil Company	Boring No.: S-10
Location: 2800 Telegraph Avenue	
City: Oakland, California	Sheet 1 of 2
Logged by: J. Vargas	Driller: Bayland
Casing installation data:	
Drilling method: Hollow-Stem Auger	
Hole diameter: 8-inches	Top of Box Elevation: 26.85 Datum: Mean Sea-Level

	Water Level	Time	Date

Blow Count	Recovery (inches)	Type of Sample	Sample Number	Depth (ft.)	Backfill	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - Concrete/Base Rock/Sand
				2				FILL - sand (SP), loose, moist,95% fine to medium sand; 5% clay; trace concrete and debris
				3				
				4				
	150	S&H		5				SANDY CLAY (CL) - very dark gray (5Y 3/1), medium stiff, damp; 60% clay; 30% fine sand; 10% silt; medium plasticity, roots, brown oxidation, trace subrounded coarse sand; no chemical odor.
0	150	push	S-10-5					
				6				
				7				
				8				
				9				
	150	S&H		10				CLAYEY SAND to SANDY CLAY (CL/SC) - grey (5Y 5/1), medium stiff, moist; 40-50% fine sand; 40-50% clay; trace coarse subrounded sand, brown oxidation stains; no chemical odor.
0	150	push						
	150		S-10-10	11				
				12				
				13				
				14				
	12	S&H		15				GRAVEL with CLAY and SAND (GP-GC) - olive brown (2.5Y 4/4), dense, saturated; 50-60% fine angular gravel; 30-40% fine to coarse sand; trace - 10% clay; no chemical odor.
0	16							
	30		S-10-15	16				
				17				
				18				
				19				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7610	DMP 10/4/1262	9/89		

E037864

Field location of boring: (See Plate 1)

Project No.: 7610	Date: 07/24/89	Boring No: S-10	
Client: Shell Oil Company			
Location: 2800 Telegraph Avenue		Sheet 2	
City: Oakland, California		of 2	
Logged by: J. Vargas	Driller: Bayland		

Casing installation data:

Drilling method: Hollow-Stem Auger
Hole diameter: 8-inches

Top of Box Elevation: 26.95 Datum: Mean Sea-Level

Water Level				
Time				
Date				

Blow Count	Blows/6" or Recovery (%)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Drug Symbol (USCS)	Description
	8	S&H		20				Interbedded fine to medium sand lamina at 19.5 feet.
0	13							
	9		S-10-20	21				
				22				
				23				SANDY CLAY (CL) - yellowish brown (10YR 5/4), medium stiff, moist; 60-70% clay; 30% fine sand; trace silt, medium plasticity, interbedded fine gravel lamina which are saturated, trace subangular coarse gravels, worm burrows, brown oxidation; no chemical odor.
				24				
	6	S&H		25				
	3							
	7			26				
				27				
				28				
				29				becoming damp, increased brown staining.
	6	S&H		30				
	7							
	9			31				Bottom of boring at 29.0 feet.
								Bottom of sample at 30.5 feet.
				32				07/24/89
				33				
				34				
				35				
				36				
				39				

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-10

JOB NUMBER	REVIEWED BY PE/CEG	DATE	REVISED DATE	REVISED DATE
7610	Cmp CEG 1262	9/89		

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

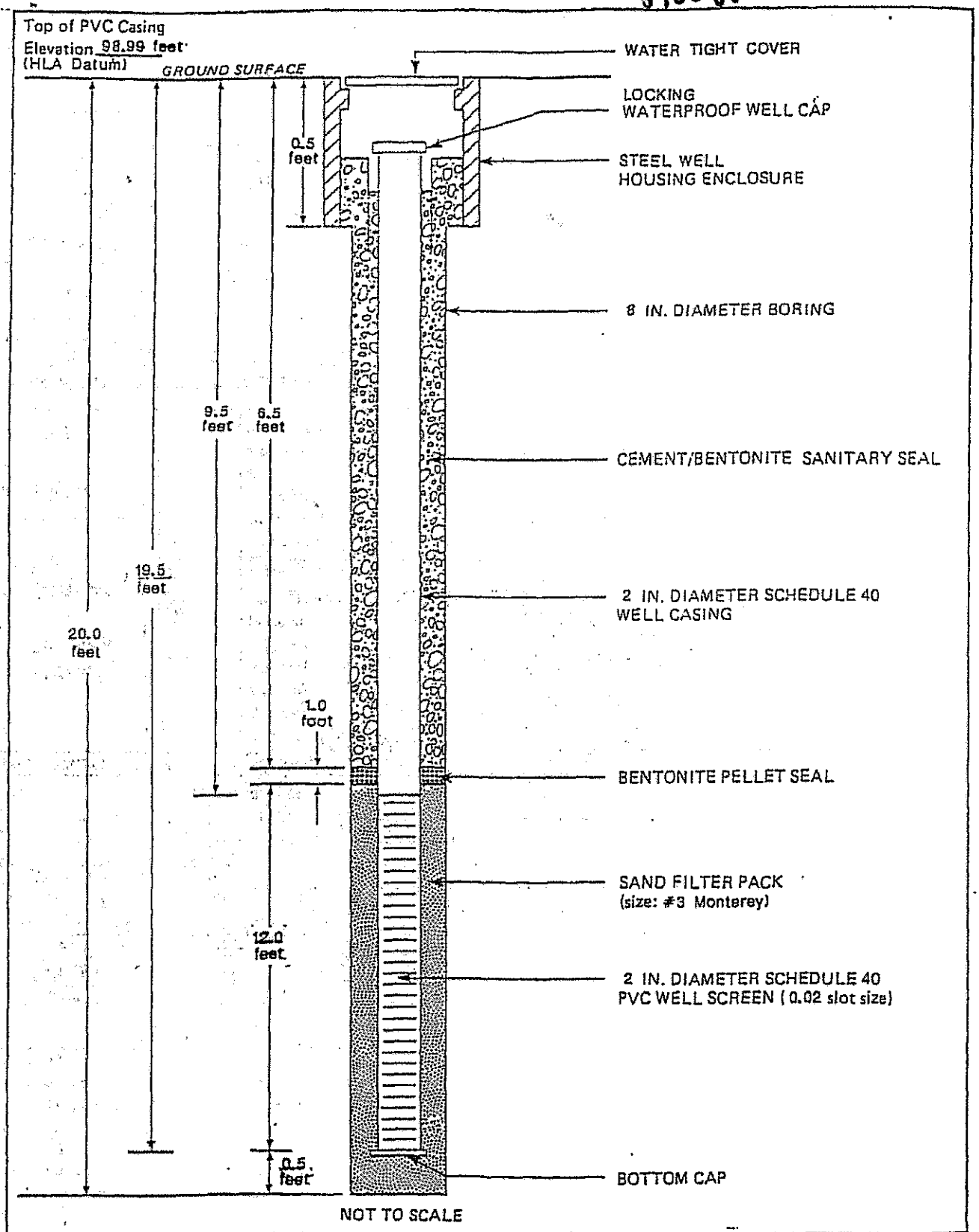
REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

372285 OIS 04W 26K12



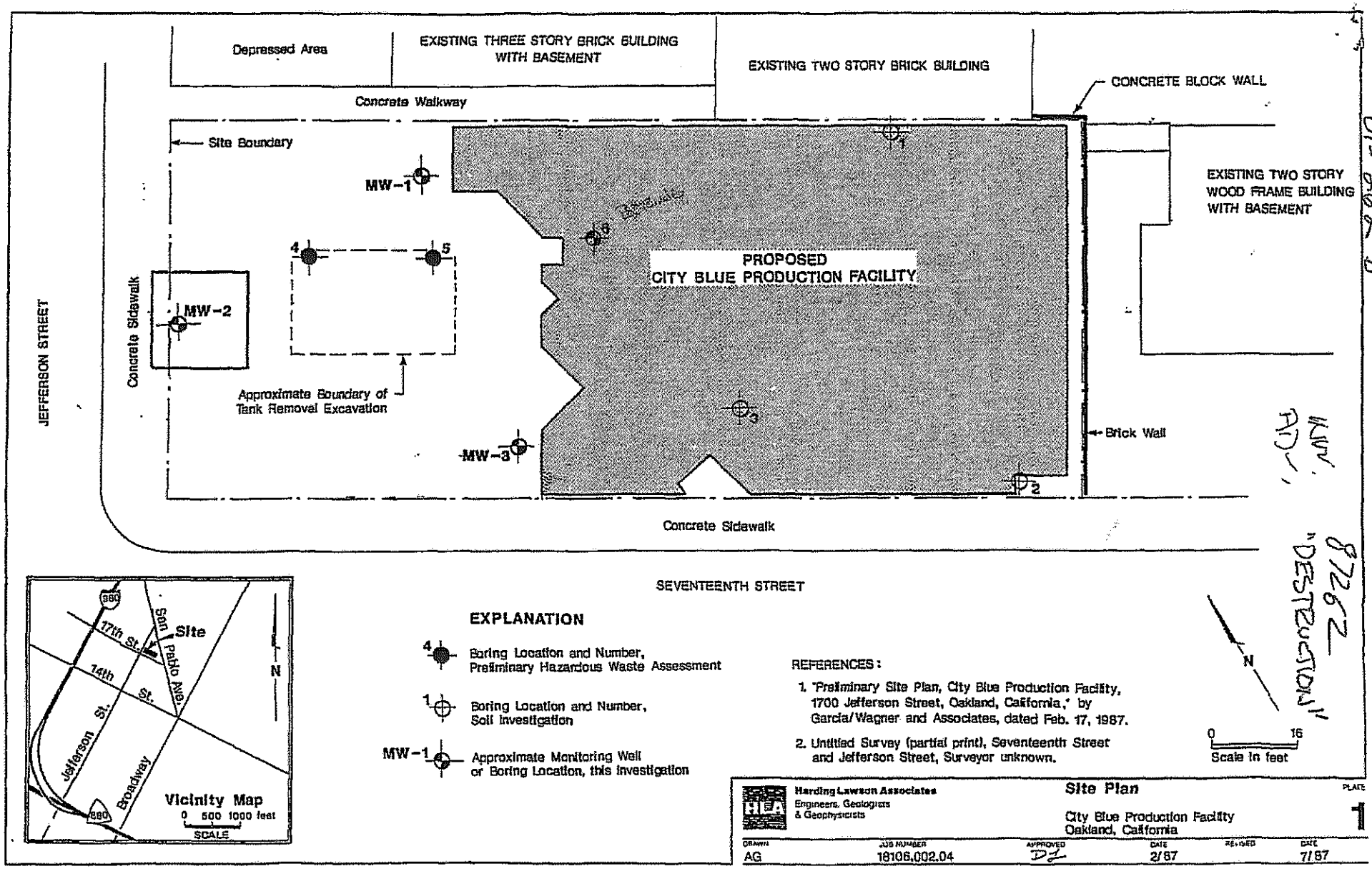
Harding Lawson Associates
Engineers, Geologists
& Geophysicists

Monitoring Well MW-6A
Completion Detail
Texaco Station - 62488000195
2225 Telegraph Avenue
Oakland, California

PLATE

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	2251,080.03	JO	2/89		

FORM GW3



01-962 D

INV. ADV.

87262 "DESTRUCTION"

DRILLER: DATUM EXPLORATION

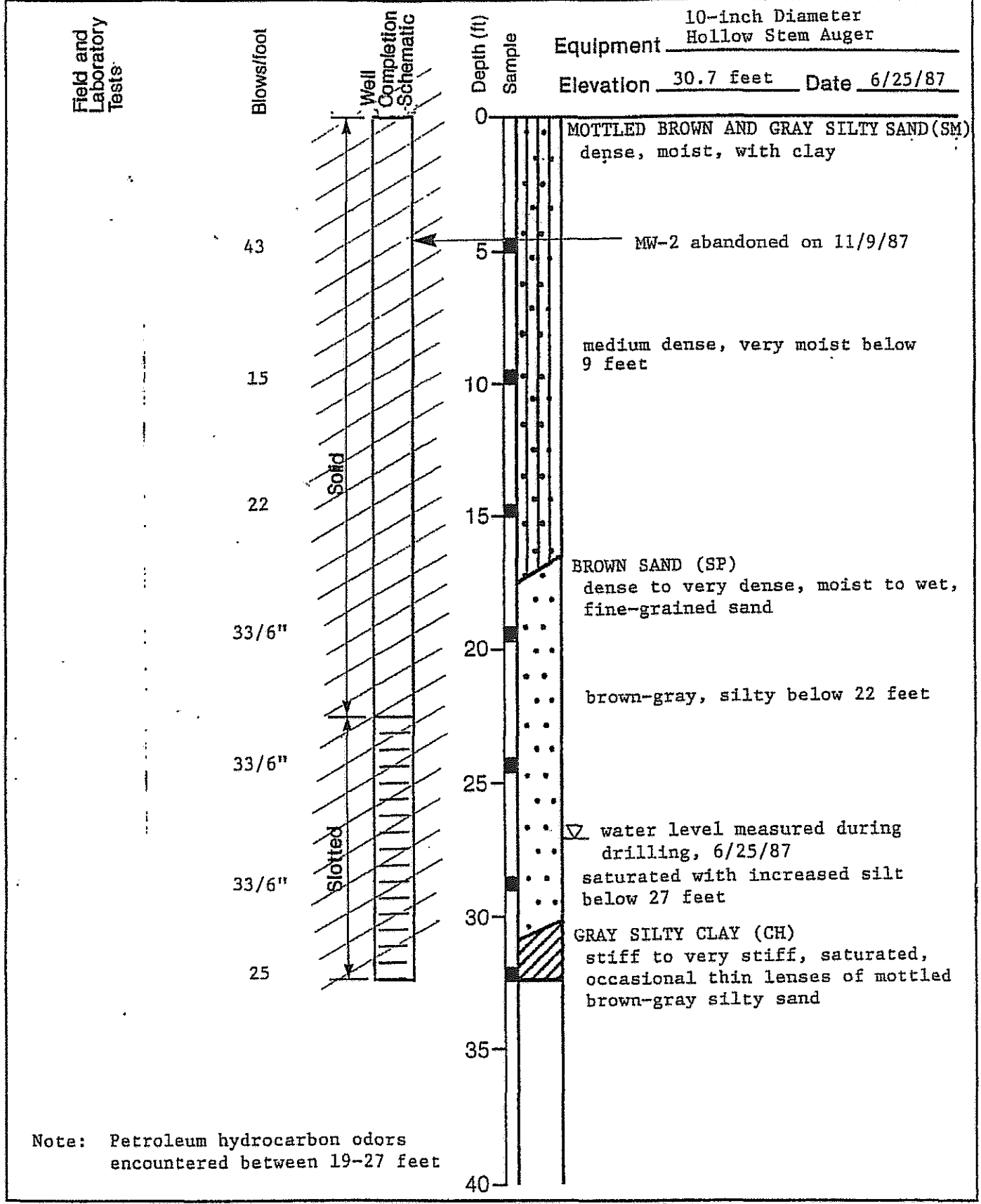
BLUE PRINT SERVICES CO
1700 JEFFERSON ST & 17th
OAKLAND, CA

ISAN 26PZ

DESTRUCTIONS 01-262D
1S/4W26P2

Equipment 10-inch Diameter Hollow Stem Auger

Elevation 30.7 feet Date 6/25/87



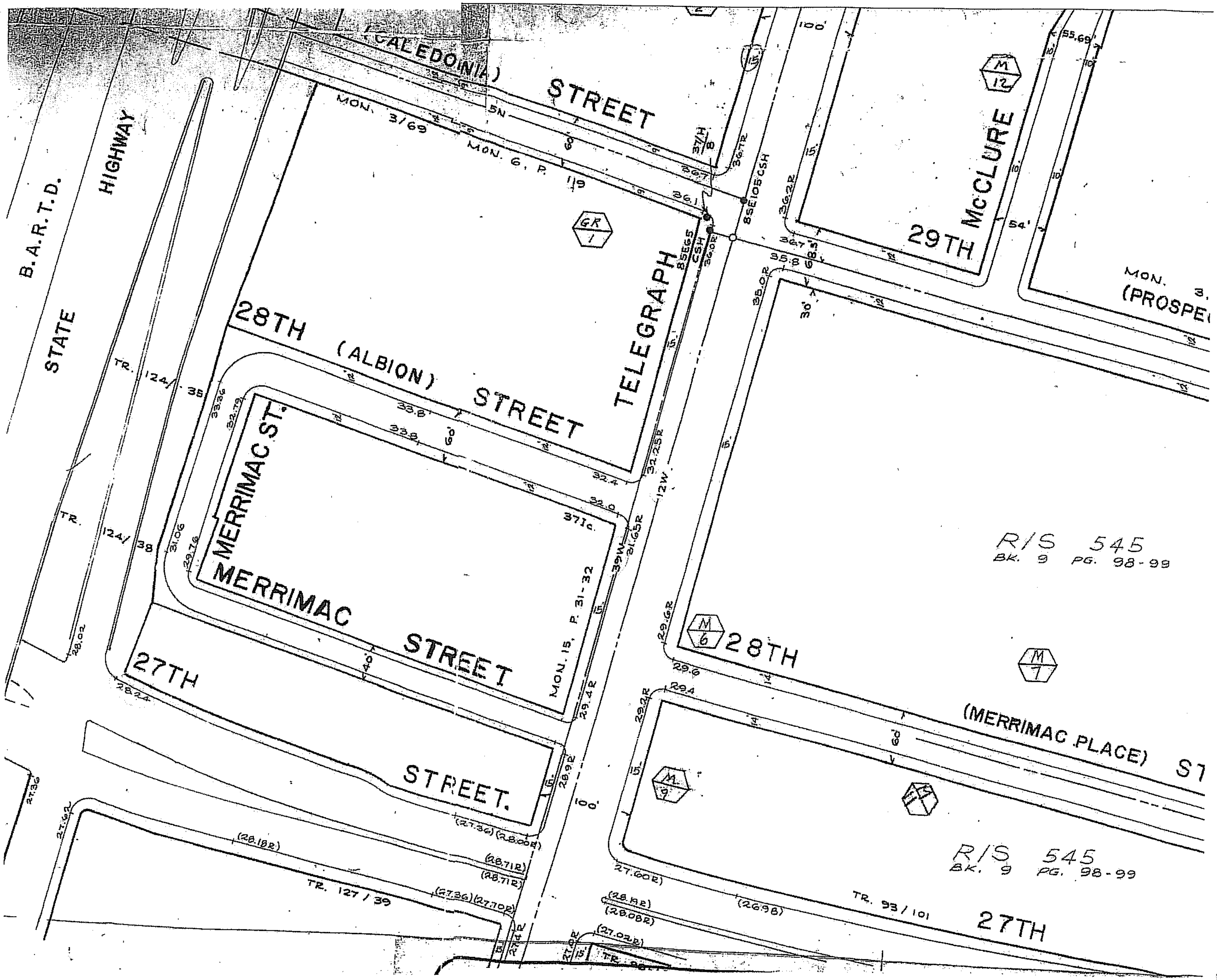
Note: Petroleum hydrocarbon odors encountered between 19-27 feet

Harding Lawson Associates
Engineers, Geologists & Geophysicists

Log of Boring MW-2

Underground Tank Investigation
City Blue Production Facility
Oakland, California

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
AG	18106.002.04	DZ	7/87		1/88



CALEDONIA
STREET
MON. 3/69
MON. 6, P. 119
B.A.R.T.D.
HIGHWAY
STATE
TELEGRAPH
McCLURE
29TH
MON. 3.
(PROSPE
28TH
(ALBION)
STREET
MERRIMAC ST.
MERRIMAC
STREET
MON. 15, P. 31-32
R/S 545
BK. 9 PG. 98-99
28TH
(MERRIMAC PLACE)
ST
R/S 545
BK. 9 PG. 98-99
27TH
STREET.
TR. 124/35
TR. 124/38
TR. 127/39
TR. 93/101
27TH

HIGHWAY
(CALEDONIA)
CALEDONIA
STREET
HOMESTEAD ASSN.
CALDEN
TRACT
TELEGRAPH
28TH
(ALBION)
STREET
MERRIMAC ST.
MERRIMAC
STREET
27TH
ST.
McCLURE
MC CLURE
29TH
ACADEMY
PARK
GROUNDS
(PROSPECT AVE.)
SUMMIT
PROPERTY OF THE OAKLAND
GRANT
SCHOOL
PORTION OF PLOT 8
RANCHOS OF VICENTE & DOMINGO PERALTA
28TH
(MERRIMAC PLACE)
STREET
SUMMIT
ST.
27TH
52-811-12
52-811-11
52-810-06
52-811-10
52-811-09
52-811-08
52-810-05
52-811-07
52-811-06
52-810-04
52-802-30
52-810-03
52-803-10
52-803-11
52-803-12
52-804-31
52-804-30
52-804-25
52-804-24
52-804-23
52-803-06
52-803-07
52-803-08
52-803-09
52-803-04
52-803-16
1149
1585
8403
8922
8191
8372
6725
8298
6415
8674
9075
9141
1116
40061
8917
7097
7916
8341
7227
9072
7239
7310
8364
7240
7218
6767
6761
8258
7229
1115
2129
2814
8830
8746
8365
7916
8152
8930
2555
8200
1298
50671
2722
484-45
486-25
675-99
C-1022
C-511
10" VIT
12" x 30" RCP
18" x 80" RCP
12" x 42" CMP
12" x 24" CMP
275'
144.25
143.67
100'
22.25'
Location & size indeterminate