ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401
www.somaenv.com

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4:31 pm, Feb 01, 2011
Alameda County
Environmental Health

January 26, 2011

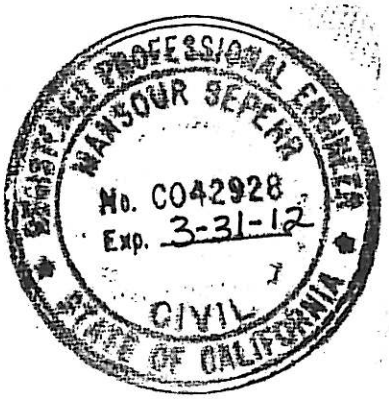
Mr. Jerry Wickham
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Fuel Leak Case #RO0000458
Site Located at 3820 Manila Avenue, Oakland, California
Former Glovatorium Facility

Dear Mr. Wickham:

SOMA's "Workplan to Delineate Extent of Free Product and Conduct Soil Vapor Sampling" 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. Please do not hesitate to call me at (925) 734-6400, if you have any questions or comments.



Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

cc: Mr. Albert M. Cohen, LOEB&LOEB LLP w/enclosure
Ms. Betty Graham, Regional Water Quality Control Board w/o enclosure
Dr. Bruce Page, Bruce W. Page Consulting w/enclosure
Mr. Peter W. McGaw, ARCHER NORRIS w/enclosure
Mr. Stuart Depper w/enclosure

Workplan to Delineate Extent of Free Product and Conduct Soil Vapor Sampling

Former Glovatorium
3820 Manila Avenue
Oakland, California

Project 2510

January 26, 2011

Prepared for:
Loeb & Loeb LLP
10100 Santa Monica Boulevard, Suite 2200
Los Angeles, California 90067-4164

SOMA ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

Perjury Statement

Stuart Depper	Responsible Party
Name	Title

3820 Manila Avenue	Oakland	94609
Street Address	City	Zip

I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report were prepared under my direction and to the best of my knowledge true and correct.

Signature

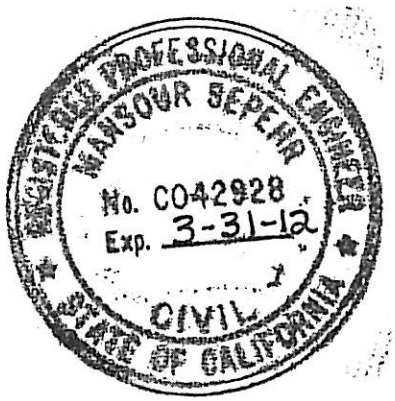
1-26-11

Date

CERTIFICATION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this workplan for the Law Offices of Loeb & Loeb LLP, in order to determine the nature and extent of, and responsibility for, soil and groundwater contamination in response to claims brought by Earl Thompson and in response a request from Alameda County Environmental Health Services in correspondence dated November 17, 2010.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist



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1. INTRODUCTION

In a letter dated November 17, 2010, the Alameda County Health Care Services Agency ("ACHCSA"), in response to the "Second Semi-Annual 2010 Groundwater Monitoring Report, Former Glovatorium Facility" dated October, 22, 2010 requested that additional investigation be performed including an evaluation of the extent of free product (FP) and an evaluation of the potential for vapor intrusion. SOMA Environmental Engineering, Inc. (SOMA) has prepared this workplan in response to the request from the Law Offices of Loeb & Loeb LLP on behalf of their client, the owners of the subject property.

FP has been observed historically in several wells, specifically in MPE-2 and MPE-3 during groundwater sampling events in February and August 2010. The thickness of FP in MPE-3 increased from 0.34 feet in February 2010 to 0.84 feet in August 2010. The thickness of FP in MPE-2 increased from 0.24 feet in February 2010 to 2.44 feet in August 2010. MPE-3 is located near the eastern site boundary close to the Red Cross building. At this time, the extent of FP to the north and east of MPE-2 and MPE-3 is unknown. Therefore, SOMA presents this workplan to define the extent of FP in the area.

Furthermore, in order to determine whether the FP observed in the northeastern portion of the site could pose a potential risk for vapor intrusion to indoor air, ACHCSA requested that SOMA collect and analyze soil vapor samples in the northeastern area of the site. The purpose of this soil vapor sampling is to focus on the potential for chlorinated solvents to volatilize from the FP to soil vapor beneath adjacent off-site buildings.

The property (the former Glovatorium) is located at 3820 Manila Avenue (formerly known as 3815 Broadway), Oakland, California (Figure 1). The site is located in an area of primarily commercial and residential properties.

1.1 Site Description

The site is located between Manila Avenue and Broadway Street, near the intersection of 38th Street and Manila Avenue. Surface elevation ranges from approximately 78 to 84 feet above mean sea level.

Surrounding properties are primarily commercial and residential. TOSCO Marketing Company is located north and upgradient of the site, at 40th Street and Broadway, and contains a number of groundwater monitoring wells. Figure 2 shows locations of the main building, fuel tank areas, and on- and off-site groundwater monitoring wells.

A 54-inch, inside-diameter storm drain culvert passes under the property, from Manila Avenue on the west, to 38th Street to the south (Figure 2). The depth of the storm drain invert is approximately 8.5 feet under the sidewalk on the eastern

side of Manila Avenue and approximately 13.2 feet below ground surface (bgs) at the far end, approximately 60 feet south of GW-4.

A 10-inch-diameter cast iron sanitary sewer conduit runs westerly from the on-site building and discharges into the sanitary sewer line, which runs north to south along Manila Avenue. Figure 2 shows locations of the storm drain and sanitary sewer system.

Six underground storage tanks (USTs) were formerly located on-site. Two were located under the sidewalk on 38th Street and four inside the building. UST capacities have been variously reported as ranging from 800 to 4,000 gallons. The USTs reportedly contained Stoddard solvent (TPH-ss), fuel oil and possibly waste oil. The USTs inside the building were interconnected through a series of pipes and valves. Reportedly, in the late 1970s a significant release of TPH-ss occurred when a new piping system was installed (Figure 2). In 1997, the six USTs were abandoned in place, by backfilling with either cement-sand slurry or pea gravel, by HK2, Inc of San Mateo. HK2 conducted the UST closure and reporting. UST-1 through UST-4, inside the building, contained residual liquid. On June 5 and 9, 1997, HK2 delivered a 1,500-gallon aboveground storage tank (AST) to the site, measured the amount of liquid in each of these four USTs, collected samples of residual liquid from each, pumped the residual liquid into the AST, rinsed the USTs, pumped the rinsate into the AST, and inspected the inside of each UST with video camera. The report indicates presence of holes in UST-1 and UST-3, which contained TPH-ss; the report also indicates that on June 11, 1997, HK2 pumped out groundwater that had recharged into UST-1 and UST-4. This indirectly indicates the presence of hole(s) in UST-1 and UST-4 also. A total of 81 drums containing diesel fuel, TPH-ss, oil, and various wastes were removed from the site and properly disposed of.

Based on results of past site investigations and groundwater monitoring data, soil and groundwater have been impacted by petroleum hydrocarbons and chlorinated solvents. The source area for TPH-ss appears to have been formed by chemical releases from the former indoor USTs and their associated piping system, as well as from the washing machine operation. As noted above, a significant release was reportedly discovered in the late 1970s, when new underground piping connecting the USTs to the washing machines was found to have been installed incorrectly.

1.2 Site Geology and Hydrogeology

The property is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland hills. Surface sediments in the site vicinity consist of Holocene alluvial deposits representative of an alluvial fan depositional environment. These deposits consist of brown, medium-dense sand that fines upward to sandy or silty clay. The pattern of stream-channel deposition environment results in a three-dimensional network of coarse-grained sediments

interspersed with finer-grained silts and clays. The individual units tend to be discontinuous lenses aligned parallel to the axis of the former stream flow direction.

The sediments encountered in soil borings are predominantly fine grained, consisting of clay, silty clay, sandy clay, gravelly clay and clayey silt. Discontinuous layers of coarse-grained sediments (clayey sand, silty sand, and clayey gravel) generally also contain relatively high percentages of silt and clay, which tends to reduce their permeability. Based on previous investigations conducted by Geosolv and LFR, a relatively coarse-grained layer of silty sand, clayey sand, and clayey gravel was encountered in soil borings E-23, E-25, E-26, GW-2, GW-3, GW-7, and GW-8 at depths of approximately 4.5 to 14 feet bgs. A discontinuous layer of silty to clayey sand was encountered in borings B-11, E-23, E-25, GW-7 and GW-8 at depths of 17 to 21 feet bgs.

Cross-sections created from lithologic logs of groundwater monitoring wells installed by SOMA and boring logs from the previous investigation revealed the upper 25 to 30 feet of the subsurface beneath the site. Location of geologic cross-sections is shown in Figure 3. These cross-sections (Figures 4 and 5) indicate that the water-bearing zone is composed of fine-grained, clayey sand to sandy clay sediments underlaid by a very low-permeability clay layer, which is unsaturated in some locations.

Groundwater monitoring events reveal groundwater depths ranging from 4 to 14 feet bgs with groundwater flow gradients ranging from 0.017 ft/ft to 0.035 ft/ft. Groundwater flow has been predominantly northeast to southwest across the site. Slug test results indicate that hydraulic conductivity of the saturated sediments ranges between 1.2×10^{-4} and 6.9×10^{-4} cm/sec. Using the average groundwater flow gradient of 0.027 and aquifer porosity of 0.32, the groundwater flow velocity ranges between 10.5 and 60.1 ft/year.

1.2.1 Lateral and Vertical Extent of Contamination in Soil

During the most recent investigation, in May 2009, the highest photoionization detector (PID) readings were recorded in soil boring SB-16 at 11 feet bgs at 6,768 parts per million (ppm). During the May 2009 investigation, total petroleum hydrocarbons as gasoline (TPH-g) and TPH-ss were detected above California Regional Water Quality Control Boards (CRWQCB) Environmental Screening Level (ESL, 83 mg/kg) for shallow and deep soil, in soil samples from all borings except SB-1 and SB-2; concentrations ranged from 100 mg/kg and 86 mg/kg (SB-14 at 8 feet bgs) to 19,000 mg/kg and 16,000 mg/kg (SB-16 at 11 feet bgs).

The above contamination appears to be located adjacent to the former USTs-related piping, where a release reportedly occurred. On June 2, 2009, FP was observed in MPE-2, which is adjacent to above-referenced soil boring SB-16. Furthermore, a medium to strong petroleum hydrocarbon odor in combination

with a greenish-gray color indicative of a smear zone was observed in all borings above the capillary fringe between 6.5 and 13 feet bgs extending to a maximum depth of 13 to 16 feet bgs at SB-16. As Figures 4 and 5 show, historically, the smear zone was located beneath the former indoor USTs piping and collection sump where a release was reported to have occurred. The smear zone appears contained within the water-bearing clayey sand/sandy clays with smear extending into the discontinuous coarser sand and gravel layers along the base of the WBZ and into the top 1-2 feet of silty clay located beneath the WBZ. No smear zone or contamination appears in the deeper water-bearing sediments (screened in SOMA-3 and SOMA-5). Soil analytical data is presented in Table 1.

1.2.2 Lateral and Vertical Extent of Contamination in Groundwater

During soil and groundwater investigation in May 2009, the total petroleum hydrocarbons were above ESLs (100 µg/L) for all hydrocarbon ranges. The highest concentrations of TPH-g and TPH-ss were observed in SB-15 (9,400,000 µg/L and 8,900,000 µg/L, respectively), with a second hotspot observed around SB-4 (490,000 µg/L and 460,000 µg/L, respectively). TPH-g concentrations ranged from 210 µg/L in SB-8 to 1.3 X 10^6 µg/L and 9.4 X 10^6 µg/L in SB-12 and SB-15, respectively. TPH-ss concentrations ranged from 180 µg/L in SB-8 to 1.0 X 10^6 µg/L and 8.9 X 10^6 µg/L in SB-12 and SB-15, respectively. Although the highest soil impact was detected at SB-16, in the room adjacent to the former USTs, and its piping, the highest groundwater concentrations were observed in SB-15, between two former USTs. TPH as diesel (TPH-d) ranged from 500 µg/L in SB-5 to 1.3 X 10^6 µg/L in SB-15. Historical grab groundwater analytical data is presented in Table 2.

During the most recent groundwater monitoring event (Second Semi-Annual 2010), the highest TPH-ss and TPH-g concentrations (aside from the FP observed in MPE-2 and MPE-3) were detected in LFR-2 at 60,000 µg/L and 93,000 µg/L, respectively. Since the previous monitoring event (First Semi-Annual 2010), TPH-ss has decreased in B-8R, LFR-2, SOMA-2, SOMA-3, SOMA-4R, MPE-4, and MPE-5 and increased in B-10R, GW-3, and MPE-1; TPH-g has decreased in B-8R, LFR-2, SOMA-2, SOMA-3, SOMA-4R, MPE-4 and MPE-5 and increased in B-10R, GW-3, SOMA-1, and MPE-1.

Results of this sampling event showed a significant decrease in perchloroethylene (PCE) and trichloroethylene (TCE) levels in B-10R, since the sampling event of February and March 2008 when FP was discovered for the first time in B-10 and SOMA-2. Since the most recent monitoring event (First Semi-Annual 2010), PCE has decreased in B-8R, B-10R, MPE-1, and MPE-4 and TCE has decreased in B-10R, MPE-1, MPE-4, and MPE-5 (Table 4).

PCE typically degrades into TCE, then cis-1,2-dichloroethylene (cis-1,2-DCE) and then trans-1,2-DCE (at much lower concentrations than cis-1,2-DCE), then to vinyl chloride (VC), ethane and ethene and, finally, to carbon dioxide, water, and chloride. This sequence of degradation would be anticipated where

biological reductive dehalogenation of PCE is occurring. The presence of TCE in B-10R, GW-2, GW-3, LFR-1, SOMA-1, MPE-1 and MPE-4 demonstrates that PCE degradation is occurring. The presence of cis-1,2-DCE in B-8R, B-10R, GW-3, LFR-1, LFR-2, SOMA-1, SOMA-2, SOMA-3, SOMA-4R, MPE-1, MPE-4, and MPE-5 indicates the occurrence of dechlorination of PCE in the subsurface. In addition, VC was detected in B-10R and LFR-2, which indicates final stages of biodegradation activities in the subsurface.

In general, the region near B-10R, SOMA-2, GW-3, LFR-1, LFR-2, MPE-2, and MPE-3 appears to be more impacted by chemicals of potential concern.

1.3 Vapor Intrusion Pathway Evaluation

In order to evaluate the presence of VOCs in void spaces of the vadose zone south west of the site, next to the two nearby residences, a soil vapor study was conducted in 2004. The result of this historical investigation demonstrated that the vadose zone beneath the residential units is not conducive to migration of the subsurface contaminant vapors, due to the low permeability of subsurface soils with respect to air.

No soil vapor testing was been performed in the northeastern portion of the site (adjacent to the Red Cross Building). In order to determine whether the vadose zone adjacent to the Red Cross building is likewise not conductive to migration of the subsurface contaminant vapors, at the request of ACHCSA, SOMA proposes advancing three soil vapor sampling boreholes adjacent to said building for evaluation of vapor intrusion.

2. SCOPE OF WORK

FP has been historically observed in several wells and was observed in MPE-2 and MPE-3 during groundwater sampling events in February and August 2010. The thickness of FP in MPE-3 increased from 0.34 feet in February 2010 to 0.84 feet in August 2010. The thickness of FP in MPE-2 increased from 0.24 feet in February 2010 to 2.44 feet in August 2010. MPE-3 is located near the eastern site boundary near the Red Cross building. The extent of FP to the north and east is unknown. Therefore, SOMA presents this workplan to define the extent of FP in this area.

Furthermore, in order to help assess whether the FP observed in the northeastern portion of the site could pose a potential risk for vapor intrusion to indoor air, ACHCSA requested that SOMA include plans to collect and analyze soil vapor samples in the northeastern portion of the site, focused on the potential for chlorinated solvents to volatilize from the FP to soil vapor.

The scope of work consists of the following tasks:

Task 1: Permit acquisition, Health and Safety Plan preparation, and subsurface utility clearance

Task 2: Soil boring advancement

Task 2: Soil vapor study

Task 3: Report preparation

2.1 Permit Acquisition, Health and Safety Plan, and Subsurface Utility Clearance

Prior to initiating field activities, SOMA will obtain required permits from Alameda County Public Works Department for drilling activities.

SOMA will also update the site-specific Health and Safety Plan (HASP) before beginning field installation activities. 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 will be reviewed and signed by field staff and contractors prior to beginning field operations at the site.

SOMA will notify Underground Service Alert (USA) to ensure drilling areas are clear of underground utilities. Following USA clearance, SOMA will retain a private utility locator to survey proposed drilling areas and locate any additional subsurface conduits.

2.2 Soil Boring Advancement to Evaluate Extent of Free Product

In order to fully delineate the FP, SOMA proposes advancing six soil borings (SB-17 through SB-22) with possible step-out borings; Figure 6 shows locations of the proposed borings. Advancement of step-out borings may occur, if any FP is observed in borings SB-17 through 22. Step-out boring locations will be selected in the field based on field observations of FP; the step-out borings will be advanced away from the source area and at least 5-10 feet away from the original soil boring from which they step out. If necessary, the step-out borings for SB-21 and SB-22 will be advanced immediately adjacent to the sidewall of the Red Cross building. SOMA will notify ACHCSA if step-out borings are necessary to delineate the lateral extent of FP.

In order to advance borings within the confines of the site building, SOMA proposes utilizing a small, limited-access rig, as opposed to the standard Geoprobe. Based on historical boring logs and soil sampling, contamination is anticipated to be heaviest between 5 and 15 feet bgs, centered in the vicinity of MPE-2 and MPE-3. Prior to boring advancement, depth to groundwater in the adjacent wells will be measured in order to verify the target boring depth. It should be noted that a walkway (Figure 2) located east of MPE-3 between the site and the Red Cross building is at an elevation approximately 5 feet higher than the rest of the subject site. Therefore, SOMA proposes advancing all borings proposed in that area to a depth at least 5 feet deeper than the proposed 15 feet bgs, to account for this elevation change. Therefore, each proposed boring will be advanced to 15 feet bgs (20 feet bgs where appropriate) to fully define the extent of FP. Soil samples may be collected for chemical analysis from each boring from the areas of gross contamination. SOMA also proposes collecting vadose zone soil samples from SB-21 and SB-22, to be utilized for geotechnical parameters, if results of proposed soil vapor sampling indicate a potential risk for vapor intrusion to indoor air. Geotechnical samples will be held until results of vapor sampling are available for review. If necessary, geotechnical samples at minimum will be analyzed for soil bulk density (g/cm^3), total porosity (unitless), and soil water filled porosity (cm^3/cm^3).

Each boring will be continuously cored, and cored soil described in accordance with the Unified Soil Classification System (USCS). In addition, cored soil will be checked for hydrocarbon odors, visual staining, and FP, and screened using a PID. PID readings will be noted on the boring logs. Borings will be advanced and secured for at least 1 to 2 weeks to allow for FP accumulation. If FP is observed in any borings, SOMA will note FP thickness; no groundwater sample will be collected at that location for laboratory analysis.

SOMA will collect grab groundwater samples from borings that did not exhibit any presence of FP. To collect groundwater samples, a disposable bailer will be used to evacuate a desirable amount of groundwater and decant it slowly (to avoid volatilization) into the appropriately preserved laboratory-supplied containers. Each sample will be labeled with a unique sample identifier and preserved on ice pending delivery to a certified analytical laboratory. All samples will be delivered to the laboratory for chemical analysis under appropriate chain-of-custody protocol.

Following sampling and FP observations, borings will be destroyed with a neat cement grout mixture, tremmied into place, and completed at the surface with materials to match existing grade.

2.3 Soil Vapor Study

Volatile organic compounds (VOCs) found in soil and groundwater beneath the site can potentially volatilize and enter into enclosed air spaces at on-site buildings or the residential units adjacent to the site.

Based on the historical presence of FP in the vicinity of MPE-3, SOMA proposes advancing three soil vapor sampling boreholes (SV-1 through SV-3) adjacent to the Red Cross Building building, in the vicinity of MPE-3 to evaluate the potential for vapor intrusion into the nearby structure. The surface elevation at the Red Cross building (Figure 2) is approximately 5 feet higher than at MPE-3 location. Therefore, in order to assess the sub-slab concentrations of VOCs directly underneath the Red Cross building, SOMA proposes advancing the proposed vapor borings to approximately 5 feet bgs even though their surface elevation is 5 feet higher than MPE-3. Prior to start of drilling activities, SOMA will confirm that no significant precipitation has occurred within the previous five days.

Soil vapor sampling using Geoprobe will entail drawing a soil vapor sample from the subsurface and direct it into the sampling manifold. The samples will be collected according to established guidelines, as outlined in general field procedures (Appendix A). A Geoprobe rod will be hydraulically advanced to the target vapor sampling depth. The lead drill rod will be fitted with a sampling adaptor known as a Post-Run Tubing (PRT) adaptor. Approximately 10 feet of 1/8-inch-diameter nylaflow sampling tube will be connected into the sampling port at the end of the rod. The sampling tube will then be capped with a vapor-tight valve. Once the target sampling depth is reached, the probe will be retracted 6 inches and allowed to equilibrate for approximately 20 to 30 minutes.

Hydrated bentonite will be placed around the drill rod to inhibit surface air migration down the outer portion of the drill rod. SOMA will utilize Torrent Laboratory manifold set-up (Appendix A), which allows automatic leak checking of the canister sample train. A pre- and post-sample vacuum reading will be recorded for each sample Summa canister. The initial vacuum of the canister should be greater than 25 inches of Hg; if the canister vacuum is less than 25 inches Hg, the canister will not be used during the field test. Once the sampling train is assembled, all connections between the Summa canisters and valve on the downhole side of the regulator will be leak tested for 10 minutes by opening and closing the purge canister valve to place a test vacuum on the assembly. The sampling train will be pretested prior to mobilizing to the field. When the sampler opens and then closes the purge can, a vacuum is created within the canister lines and fittings. When this vacuum is maintained, the train can be considered leak free. In addition, because there is only one connection (probe tubing to sample train) the potential for leaks is greatly reduced.

The sampling manifold will be pressure tested and approximately three volumes of gas will be purged from the manifold and boring prior to sampling. Any further work will be terminated if gauge vacuum cannot be maintained for 10 minutes. If

gauge vacuum is maintained for 10 minutes and it has been at least 20-30 minutes since the drill rod was sealed at the surface with bentonite, the purge canister valve and the valve on the downhole side of the regulator will be open to begin purging ambient air from the sampling apparatus and borehole. The time of purging will be recorded on field logs and incorporated in the investigation report. The purge canister valve will be closed when three volumes of air have been purged from the sample apparatus and borehole.

Adequacy of purging will be determined based on the inches of pressure drop on the purge canister as well as the time required for purging based on the anticipated purged volume. The volume of air sampled is a linear function of the canister vacuum pressure drop, and will be calculated accordingly based on the initial vacuum reading. The purge volume or "dead space volume" will be estimated based on a summation of the volume of the sample container, internal volume of tubing used, and annular space around the probe tip.

The following describes a sample calculation for the appropriate purge volume and purge time:

The effective volume of 1/8-diameter Teflon tubing is about 2.41 mL/ft; the average vapor flow rate through the sampling tube will be 167 mL/min, the total length of the Teflon tubing will be about 10 feet. Because it is recommended that purge volumes and sample volumes be collected at the same flow rate, SOMA will utilize a soil gas sampling manifold with a built-in flow restrictor (both the purge canister and sample canister are in line after the flow restrictor), a frit of stainless steel tubing between the two gauges that is calibrated by the laboratory to 167 mL/min (Appendix A). Additionally, the volume of the 6-inch-long retracting probe rod is about 80 mL. During the sampling event, three tube volumes will be purged through the sampling tubes unless otherwise specified by ACHCSA. Therefore, the total purged air volume (three-volume purge) will be calculated as follows:

Total volume of purged air = (2.41 mL/ft x 10 ft + 80 mL) x 3 = 312.3 mL

Since volume of air sampled is a linear function of the canister vacuum pressure drop, it will be calculated accordingly based on the initial vacuum reading: for example, if the initial vacuum is 30 inches of Hg, 348.45 mL will correspond to drop of 1.56 inches of Hg. To calculate time during purging, 312.3 mL is divided by 167 mL/min, which equals 1.9 minutes.

SOMA anticipates using 6-L summa canisters, and sampling will be terminated when the sample canister gauge indicates that approximately 5 inches Hg of vacuum remain in the canister. Therefore, sample collection duration at 167 mL/min can be approximated at:

Sample collection time = 5,000 mL / 167 mL/min = 29.94 minutes

Pressure drops along with sample collection times at each location will be recorded on field logs during sample collection.

Leakage during soil gas sampling may dilute samples with ambient air and produce results that underestimate actual site concentrations or contaminate the sample with external contaminants. A leak test will be conducted to determine whether leakage is present (i.e., the leak check compound is detected and confirmed in the test sample after its application). During sampling, isopropyl alcohol (2-propanol) will be used as a tracer to test for leaks. This will be accomplished by placing gauze soaked with isopropyl alcohol along the drill rod, and around valves, joints, and pressure regulators. The gauze with isopropyl alcohol will be remoistened every 5 minutes.

At least one sample will be field duplicated. Each duplicate sample will be collected from areas of concern in a separate sample container, at the same location and depth and immediately after the original sample. The sampler will change to a new pair of gloves prior to assembling the sampling train and collection of each of the vapor samples to limit potential cross-contamination. Any reusable parts will be field decontaminated. The general procedure for decontaminating sampling equipment is as follows: clean equipment with a brush using a non-phosphate detergent solution, rinse equipment with control water (i.e., water having a known chemistry), use deionized/distilled water rinse to finish decontamination.

Upon collection of proposed samples, the drilling rod will be removed along with the sampling apparatus and the boring will decommissioned.

2.4 Borehole Abandonment and Waste Disposal

Following soil and groundwater investigation and soil vapor sampling, borings will be abandoned with a neat cement grout mixture tremmied into place and completed at the surface with materials to match existing grade.

Any waste generated during boring activities will be temporarily stored on-site in separate DOT rated, 55 gallon steel drums pending characterization, profiling and transport to an approved disposal/recycling facility. Waste manifests will be included in SOMA's investigation report.

2.5 Laboratory Analyses

Soil and groundwater samples will be submitted to a California state-certified environmental laboratory for analyses of the following:

- TPH-ss, TPH-g, and TPH-d using EPA Method 8015

- VOCs including benzene, toluene, ethyl benzene, and total xylenes (collectively termed BTEX); methyl tertiary-butyl ether (MtBE); tertiary-butyl alcohol (TBA); PCE' TCE; VC, and cis/trans-1,2-DCE using EPA Method 8260B.

Soil vapor samples will be submitted to a California state-certified environmental laboratory for analysis under the appropriate sample handling protocol. The samples will be analyzed for the following:

- BTEX, MtBE, (VOCs), and chlorinated VOCs using EPA Method TO-15.
- TPH-g, TPH-ss using EPA TO-3.

In addition to isopropyl alcohol, SOMA recommends analyzing atmospheric gases O_2, CO_2, and methane. The reporting limit for O_2, CO_2, and methane will be less than or equal to concentrations of these gases in the atmosphere. SOMA will ensure that laboratory-reporting limits for chemicals of concern are below shallow soil gas ESLs that address inhalation of contaminants in an indoor setting, set by CRWQCB–San Francisco Bay.

If necessary, samples collected for geotechnical parameters at minimum will be analyzed for soil bulk density (g/cm^3), total porosity (unitless), and soil water filled porosity (cm^3/cm^3).

2.6 Report Preparation

A report will be submitted that includes the following:

- Detailed description of completed boring advancement
- Detailed descriptions of all field activities
- Tabulation and analysis of historical and current soil sample analytical data
- Maps of sampling locations
- Conclusions and recommendations

2.7 Schedule

The workplan will be implemented upon receipt of written authorization from ACHCSA and cost preapproval from the client. We anticipate that proposed work will be completed in eight weeks following receipt of required approvals, given favorable weather conditions.

FIGURES

N

approximate scale in feet

0 250 500

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

COMMERCIAL AREA

COMMERCIAL AREA

PARKING AREA

PARKING AREA

MW-8

MW-9

MW-11

MH-1

MH-3

Sanitary Sewer Manhole

GW-1

GW-8

LFR-1

10" Diameter Cast Iron Sanitary Sewer

THE GLOVATORIUM

SB-11

MPE-1

SB-7

SB-8

SB-9

B-10R

MH-5

54" Diameter Storm Drain

B-8R

B-2

B-1

B-9

MPE-2

SB-16

MPE-3

SOMA-2

SB-10

SOMA-3

SB-6

SB-12

B-7

SB-15

SB-13

SOMA-4R

B-4

MPE-5

B-6

B-13

GW-2

SB-5

SB-2

B-5

B-3

SB-14

SB-4

SB-3

SOMA-5

MPE-4

#1

#2

SB-1

LFR-2

RESIDENCE

#9

#3

SOMA-1

GW-4

#4

PARKING

RESIDENCE

#5

DRIVE

RESIDENCE

DRIVE

Earl Thompson

GW-3

#8

#6

B-12

10" Storm Conduit

GW-5A

B-11

MH-4

GW-5

GW-7

LFR-4

Lamphole

GW-6A

GW-6

LFR-3

38TH ST

MH-2

RESIDENCES

MANILA AVENUE

walkway

RED CROSS BUILDING

BROADWAY

- Soil Gas Bore (2004)
- Decommissioned Wells
- Soil Borings May 2009
- Extraction Wells May 2009
- SOMA Monitoring Well
- TOSCO Monitoring Well
- Geosolv Monitoring Well
- LFR Monitoring Wells
- 54" Diameter Storm Conduit
- Storm Conduit Manhole
- 10" Diameter Cast Iron Sanitary Sewer w/ Floor Drains
- Sanitary Sewer Manhole
- Former USTs - Earl Thompson
- Former USTs -Glovatorium

approximate scale in feet

0 40 80

Figure 2: Site Map Showing Locations of Monitoring Wells, Soil Borings, and Preferential Flow Pathways

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

COMMERCIAL AREA

COMMERCIAL AREA

PARKING AREA

PARKING AREA

MW-8

MW-9

MW-11

MH-1

MH-3

Sanitary Sewer Manhole

GW-1

GW-8

LFR-1

10" Diameter Cast Iron Sanitary Sewer

THE GLOVATORIUM

SB-11

MPE-1

SB-7

SB-8

SB-9

B-10R

MH-5

54" Diameter Storm Drain

B-8R

B'

B-2

B-1

B-9

MPE-2

SB-16

MPE-3

SOMA-2

SB-10

SOMA-3

SB-6

SB-12

B-7

SB-15

SB-13

SOMA-4R

B-4

MPE-5

B-6

B-13

SB-5

SB-2

B-5

B-3

SB-14

A'

SB-4

SOMA-5

MPE-4

GW-2

#1

#2

B

SB-1

SB-3

LFR-2

SOMA-1

GW-4

#9

#3

#4

PARKING

RESIDENCE

RESIDENCE

#5

DRIVE

RESIDENCE

DRIVE

Earl Thompson

GW-3

#8

#6

B-12

10" Storm Conduit

GW-5A

B-11

GW-5

GW-7

LFR-4

MH-4

Inlet

Lamphole

GW-6A

GW-6

LFR-3

38TH ST

MH-2

RESIDENCES

MANILA AVENUE

walkway

RED CROSS BUILDING

BROADWAY

- Soil Gas Bore (2004)
- Decommissioned Wells
- Soil Borings May 2009
- Extraction Wells May 2009
- SOMA Monitoring Well
- TOSCO Monitoring Well
- Geosolv Monitoring Well
- LFR Monitoring Wells
- 54" Diameter Storm Conduit
- Storm Conduit Manhole
- 10" Diameter Cast Iron Sanitary Sewer w/ Floor Drains
- Sanitary Sewer Manhole
- Former USTs - Earl Thompson
- Former USTs -Glovatorium

approximate scale in feet

0 40 80

Figure 3: Location of Geologic Cross-Sections

SOMA ENVIRONMENTAL ENGINEERING, INC.

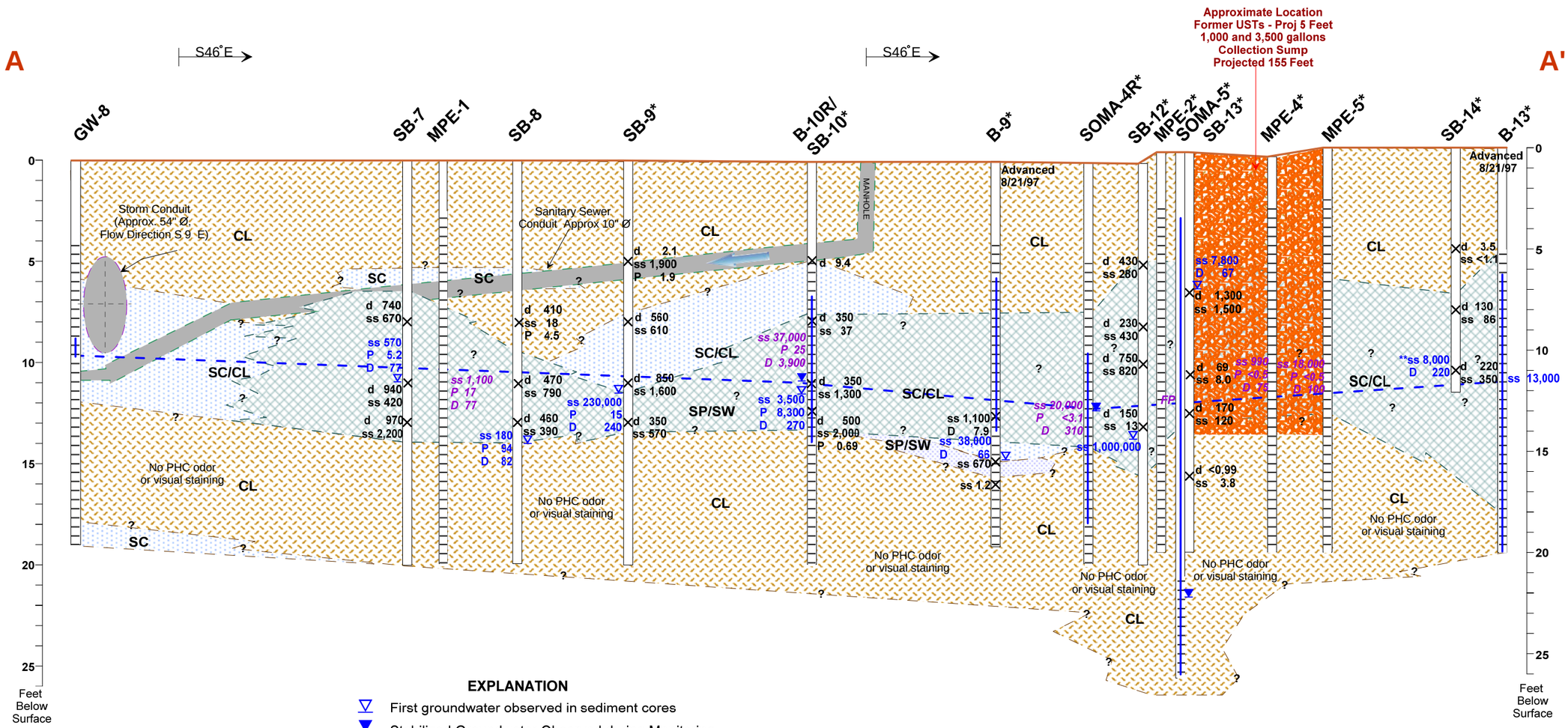

Figure 4: Geologic Cross-section A-A'

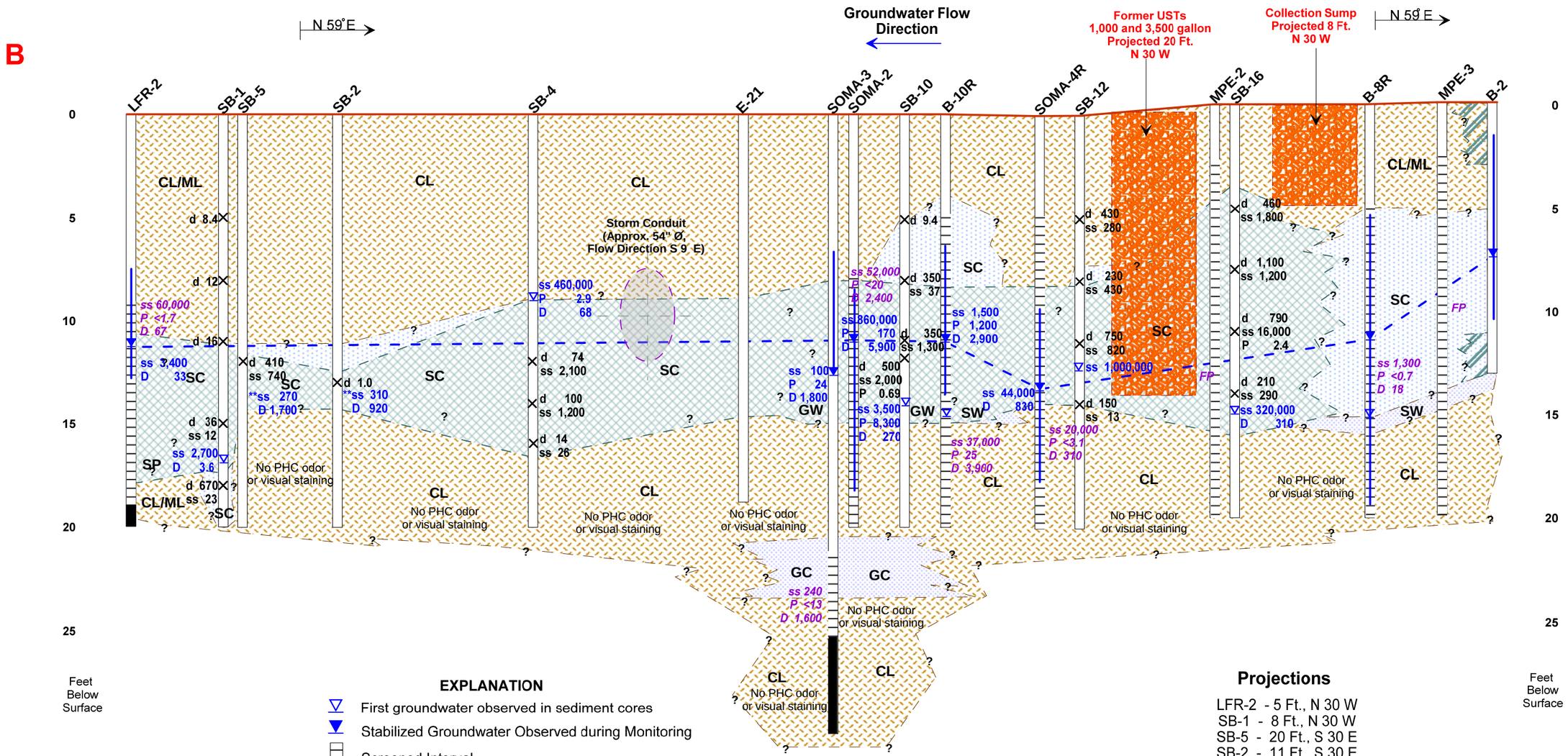

Figure 5: Geologic Cross-section B-B'

N

COMMERCIAL AREA

COMMERCIAL AREA

PARKING AREA

PARKING AREA

MW-8

MW-9

MW-11

BROADWAY

THE GLOVATORIUM

RED CROSS BUILDING

walkway

MH-1

MH-3

Sanitary Sewer Manhole

GW-1

GW-8

LFR-1

10" Diameter Cast Iron Sanitary Sewer

54" Diameter Storm Drain

SB-11

SB-7

MPE-1

SB-8

SB-9

B-10R

MH-5

B-8R

SB-19

SB-18

SB-20

SB-17

B-2

B-1

B-9

SB-21

SV-3

SOMA-2

SB-10

MPE-2

MPE-3

SB-16

SV-2

SOMA-3

SB-6

SB-12

B-7

SB-22

SB-13

SB-15

SOMA-4R

B-4

SV-1

B-6

MPE-5

B-13

GW-2

SB-5

SB-2

B-5

B-3

SB-14

#1

#2

SB-4

SB-3

SOMA-5

MPE-4

SB-1

LFR-2

RESIDENCE

MANILA AVENUE

RESIDENCES

#9

#3

SOMA-1

GW-4

#4

PARKING

RESIDENCE

#5

DRIVE

RESIDENCE

DRIVE

Earl Thompson

Inlet

GW-3

#8

#6

B-12

10" Storm Conduit

GW-5A

MH-4

GW-5

B-11

GW-7

LFR-4

Lamphole

GW-6A

GW-6

LFR-3

38TH ST

MH-2

Proposed Soil Borings for FP Evaluation

Proposed Soil Vapor Borings

Soil Gas Bore (2004)

Decommissioned Wells

Soil Borings May 2009

Extraction Wells May 2009

SOMA Monitoring Well

TOSCO Monitoring Well

Geosolv Monitoring Well

LFR Monitoring Wells

54" Diameter Storm Conduit

Storm Conduit Manhole

10" Diameter Cast Iron Sanitary Sewer w/ Floor Drains

Sanitary Sewer Manhole

Former USTs - Earl Thompson

Former USTs -Glovatorium

approximate scale in feet

0 40 80

Figure 6: Locations of Proposed Soil Borings and Soil Vapor Probes

SOMA ENVIRONMENTAL ENGINEERING, INC.

TABLES

Table 1
Historical Soil Analytical Data
3820 Manila Avenue
Oakland, California

Sample ID	Depth (Feet)	Date	TPH-g (mg/Kg)	TPH-d (mg/Kg)	TPH-ss (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	MtBE (mg/Kg)	PCE (mg/Kg)	TCE (mg/Kg)	cis-1,2-DCE (mg/Kg)	trans-1,2-DCE (mg/Kg)	Vinyl Chloride (mg/Kg)	1,2-DCP (mg/Kg)
SB-1	**5**	5/4/2009	<0.92	8.4[Y]	<0.92	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0097	<0.0049
SB-1	**8**	5/4/2009	<0.96	12[Y]	<0.96	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046
SB-1	**11**	5/4/2009	<0.93	16[Y]	<0.93	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0095	<0.0048
SB-1	**15**	5/4/2009	15[Y]	36[Y]	12	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.094	<0.047
SB-1	**18**	5/4/2009	30[Y]	**670[Y]**	23	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049
SB-2	**13**	5/5/2009	<1.0	1.0[Y]	<1.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049
SB-4	**12**	5/6/2009	**2,500[Y]**	74[Y]	**2,100**	<5.0	<5.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0
SB-4	**14**	5/6/2009	**1,400[Y]**	100[Y]	**1,200**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-4	**16**	5/6/2009	31[Y]	14[Y]	26[Y]	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-5	**12**	5/5/2009	**870[Y]**	**410[Y]**	**740**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
SB-7	**8**	5/5/2009	**830[Y]**	**740[Y]**	**670**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<3.3	<1.7
SB-7	**11**	5/5/2009	**520[Y]**	**910[Y]**	**420**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-7	**13**	5/5/2009	**2,700[Y]**	**970[Y]**	**2,200**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
SB-8	**8**	5/5/2009	25[Y]	**410[Y]**	18	<0.25	<0.25	<0.25	<0.25	<0.25	**4.5**	<0.25	<0.25	<0.25	<0.5	<0.25
SB-8	**11**	5/5/2009	**980[Y]**	**470[Y]**	**790**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-8	**13**	5/5/2009	**480[Y]**	**460[Y]**	**390**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
SB-9	**5**	5/4/2009	**2,400[Y]**	**2.1[Y]**	**1900**	<0.25	<0.25	<0.25	<0.25	<0.25	**1.9**	<0.25	<0.25	<0.25	<0.5	<0.25
SB-9	**8**	5/4/2009	53[Y]	**560[Y]**	**610**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-9	**11**	5/4/2009	**1,900[Y]**	**850[Y]**	**1,600**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-9	**13**	5/4/2009	**660[Y]**	**350[Y]**	**570**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
SB-10	**5**	5/4/2009	<0.91	9.4 [Y]	<0.91	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
SB-10	**8**	5/4/2009	46[Y]	**350[Y]**	37	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-10	**11**	5/4/2009	**1,600[Y]**	**350[Y]**	**1,300**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-10	**12.5**	5/4/2009	**2,400[Y]**	**500[Y]**	**2,000**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.69**	<0.5	<0.5	<0.5	<1.0	<0.5
SB-11	**5**	5/4/2009	<0.95	2.0[Y]	<0.95	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048
SB-11	**8**	5/4/2009	**670[Y]**	**670[Y]**	**540**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-11	**10**	5/4/2009	**1,800[Y]**	**670[Y]**	**1,400**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-11	**12**	5/4/2009	**730[Y]**	**130[Y]**	**590**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<7.1	<3.6
SB-12	**5**	5/5/2009	**340[Y]**	**430[Y]**	**280**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-12	**8**	5/5/2009	**530[Y]**	**230[Y]**	**430**	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<1.7	<0.83
SB-12	**11**	5/5/2009	**1,000[Y]**	**750[Y]**	**820**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5
SB-12	**13**	5/5/2009	16[Y]	**150[Y]**	13	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0097	<0.0048
SB-13	**7**	5/5/2009	**1,800[Y]**	**1,300[Y]**	**1,500**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0
SB-13	**11**	5/5/2009	9.4[Y]	69[Y]	8.0	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.047	<0.094	<0.047
SB-13	**13**	5/5/2009	**140[Y]**	**170[Y]**	**120**	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<1.3	<0.63
SB-13	**16**	5/5/2009	5.3[Y]	<0.99	3.8	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0099	<0.0049
SB-14	**5**	5/6/2009	<1.1	3.5[Y]	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048
SB-14	**8**	5/6/2009	**100[Y]**	**130[Y]**	**86**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25
SB-14	**11**	5/6/2009	**410[Y]**	**220[Y]**	**350**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.25

Table 1
Historical Soil Analytical Data
3820 Manila Avenue
Oakland, California

Sample ID	Depth (Feet)	Date	TPH-g (mg/Kg)	TPH-d (mg/Kg)	TPH-ss (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	MtBE (mg/Kg)	PCE (mg/Kg)	TCE (mg/Kg)	cis-1,2-DCE (mg/Kg)	trans-1,2-DCE (mg/Kg)	Vinyl Chloride (mg/Kg)	1,2-DCP (mg/Kg)
SB-15	**5**	5/5/2009	**7,700^{Y}**	**1,800^{Y}**	**6,600**	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0
SB-15	**8**	5/5/2009	**6,800^{Y}**	**2,100^{Y}**	**5,700**	<1.0	<1.0	<1.0	**5.5**	<1.0	<1.0	<1.0	**1.0**	<1.0	<1.0	<1.0
SB-15	**11**	5/5/2009	**4,000^{Y}**	**940^{Y}**	**3,400**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
SB-15	**14**	5/5/2009	29^{Y}	2.1^{Y}	25^{Y}	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.096	<0.048
SB-16	**5**	5/6/2009	**2,100^{Y}**	**460^{Y}**	**1,800**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5
SB-16	**8**	5/6/2009	**1,500^{Y}**	**1,100^{Y}**	**1,200**	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<2.5	<1.3
SB-16	**11**	5/6/2009	**19,000^{Y}**	**790^{Y}**	**16,000**	<2.0	<2.0	<2.0	**2.4**	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0
SB-16	**14**	5/6/2009	**340^{Y}**	**210^{Y}**	**290**	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<1.3	<0.63
ESLs- Shallow (mg/Kg)		**Residential**	**83.0**	**83.0**	**83.0**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**0.37**	**0.46**	**0.19**	**0.67**	**0.022**	**0.12**
		Commercial	**83.0**	**83.0**	**83.0**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**0.7**	**0.46**	**0.19**	**0.67**	**0.047**	**0.12**
ESLs- Deep (mg/Kg)		**Residential**	**83.0**	**83.0**	**83.0**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**0.7**	**0.46**	**0.19**	**0.67**	**0.085**	**0.12**
		Commercial	**83.0**	**83.0**	**83.0**	**0.044**	**2.9**	**3.3**	**2.3**	**0.023**	**0.7**	**0.46**	**0.19**	**0.67**	**0.085**	**0.12**

Notes:

ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final November 2007, revised May 2008 (Table C. Deep Soils (>3m bgs) Groundwater is a Current or Potential Source of Drinking Water)

Y: Sample exhibits chromatographic pattern which does not resemble standard

<: Below laboratory detection limits

Table 2
Historical Grab Groundwater Analytical Data
3820 Manila Avenue
Oakland, California

Sample ID	Date	Dilution Factor	TPH-g µg/L	TPH-d µg/L	TPH-ss µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MtBE µg/L
SB-1	**5/5/2009**	**1.0**	**3,200[Y]**	**9,100[Y]**	**2,700**	**1.2**	<0.5	<0.5	0.6	<0.5
SB-2	**5/6/2009**	**16.7**	**370[Y]**	**2,800[Y]**	**310[Y]**	**8.7**	<8.3	<8.3	<8.3	<8.3
SB-4	**5/6/2009**	**3.3**	**490,000[Y]**	**130,000[Y]**	**460,000**	**7.2**	9.4	7.8	**79**	**32**
SB-5	**5/6/2009**	**25.0**	**320[Y]**	**500[Y]**	**270[Y]**	<13	<13	<13	<13	<13
SB-7	**5/6/2009**	**1.0**	**670[Y]**	**650[Y]**	**570**	<0.5	<0.5	<0.5	3.2	<0.5
SB-8	**5/6/2009**	**1.0**	**210[Y]**	**590[Y]**	**180[Y]**	<0.5	<0.5	<0.5	<0.5	<0.5
SB-9	**5/5/2009**	**5.0**	**240,000[Y]**	**13,000[Y]**	**230,000**	<2.5	<2.5	<2.5	<2.5	<2.5
SB-10	**5/5/2009**	**33.3**	**4,100[YZ]**	**2,400[Y]**	**3,500[Y]**	<17	<17	<17	<17	**94**
SB-11	**5/4/2009**	**3.3**	**130,000[Y]**	**830,000[Y]**	**120,000**	<1.7	<1.7	<1.7	<1.7	<1.7
SB-12	**5/5/2009**	**50.0**	**1,300,000[Y]**	**340,000[Y]**	**1,000,000**	<25	<25	<25	<25	**90**
SB-13	**5/5/2009**	**2.0**	**9,200[Y]**	**9,500[Y]**	**7,800**	**1.9**	18	6.5	**53**	**32**
SB-14	**5/6/2009**	**5.0**	**9,400[Y]**	**NS**	**8,000**	<2.5	<2.5	<2.5	<2.5	<2.5
SB-15	**5/5/2009**	**50.0**	**9,400,000[Y]**	**1,300,000[Y]**	**8,900,000**	<25	**83**	**38**	**340**	<25
SB-16	**5/6/2009**	**50.0**	**410,000[Y]**	**430,000[Y]**	**320,000**	<25	**45**	<25	**109**	<25
ESLs			**100**	**100**	**100**	**1**	**40**	**30**	**20**	**5**

Sample ID	Date	Dilution Factor	PCE µg/L	TCE µg/L	cis-1,2-DCE µg/L	trans-1,2-DCE µg/L	Vinyl Chloride µg/L	1,2-DCP µg/L	Napthalene µg/L
SB-1	**5/5/2009**	**1.0**	<0.5	<0.5	3.6	<0.5	<0.5	<0.5	<2.0
SB-2	**5/6/2009**	**16.7**	<8.3	<8.3	**920**	<8.3	<8.3	<8.3	<33
SB-4	**5/6/2009**	**3.3**	2.9	<1.7	**68**	<1.7	<1.7	<1.7	7.9
SB-5	**5/6/2009**	**25.0**	<13	<13	**1,700**	<13	<13	<13	<50
SB-7	**5/6/2009**	**1.0**	**5.2**	1.8	**77**	**9.7**	<0.5	<0.5	<2.0
SB-8	**5/6/2009**	**1.0**	**94**	**25**	**82**	0.7	<0.5	0.8	<2.0
SB-9	**5/5/2009**	**5.0**	**15**	**29**	**240**	<2.5	<2.5	<2.5	<10
SB-10	**5/5/2009**	**166.7/33.33**	**8,300**	**480**	**270**	<17	<17	<17	<67
SB-11	**5/4/2009**	**3.3**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
SB-12	**5/5/2009**	**50.0**	<25	<25	<25	<25	<25	<25	<100
SB-13	**5/5/2009**	**2.0**	<1.0	<1.0	**67**	<1.0	<1.0	**23**	**77**
SB-14	**5/6/2009**	**5.0**	<2.5	<2.5	**220**	4.7	<2.5	<2.5	<10
SB-15	**5/5/2009**	**50.0**	<25	<25	**530**	<25	<25	<25	<50
SB-16	**5/6/2009**	**50.0**	<25	<25	**310**	<25	<25	<25	<100
ESLs			**5.0**	**5.0**	**6.0**	**6.0**	**0.5**	**5.0**	**17.0**

Notes:

ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final November 2007, revised May 2008 (Table F-1a. Groundwater Screening Levels. Groundwater is a Current or Potential Source of Drinking Water µg/L)

NA Not listed on the ESL Tables

Y Sample exhibits chromatographic pattern which does not resemble standard

Table 3
Historical Groundwater Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples
Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
Temporary Sampling Points Installed by Geosolv, LLC								
B-2	24-Jan-00	20 J	31 YJ	<0.05	<0.013	<0.013	0.11 C	0.22 C
B-3	24-Jan-00	4.9 J	8.8 YJ	<0.01	0.0048	<0.0025	<0.0025	0.0714
B-7	24-Jan-00	19	30 J	<0.05	<0.013	0.062	<0.013	0.207
	11-Aug-00	3.7 J	6.8 YHJ	0.02	0.0077 J	0.047 J	0.007 J	0.065 CJ
	31-Oct-00	62 J	98 YHJ	0.01 J	0.0091 J	0.061 J	<0.0005	0.237 J
	27-Jul-01	2.5	5.2 HY	0.0057	0.0070	0.051	0.0082	0.0740
	31-Jan-01	5.3	7.9	0.0100	0.0089	0.059	0.0097	0.0870
	26-Apr-01	4.5	8.9 H	0.0069	0.0110	0.071	0.077 C	0.2080
B-8	24-Jan-00	11 J	19 YJ	<0.01	<0.0025	<0.0025	<0.0025	0.17 C
B-8R	12-Aug-09	22	39 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	2-Feb-10	8.2	13 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Aug-10	**1.3**	**2 Y**	**<0.0007**	**<0.0007**	**<0.0007**	**<0.0007**	**<0.0007**
B-9	24-Jan-00	1 YJ	1.8 YHJ	<0.002	<0.0005	<0.0005	0.01 C	0.0089 C
B-10	24-Jan-00	2.4 Y	4.2	0.0140 c	0.0072	0.027	0.025 C	0.032
	10-Aug-00	2.8 Y	6.1 Y	0.1600	0.0073	0.012	<0.005	0.0241
	31-Oct-00	2.2 YZ	3.5 Z	<0.002	0.0038	0.011	<0.0005	0.0182
	27-Jul-01	1.7	3.6 H	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	31-Jan-01	2.4 Z	3.6 HYZ	<0.002	0.0031	0.010	0.00076 c	0.0197
	26-Apr-01	2.4 Z	4.7 Z	0.0025	0.0041	0.013	ND	0.0290
	6-Jul-05	3.4 H	4.5 HY	<0.1	<0.1	<0.1	<0.1	<0.1
	9-Jan-06	11 Y	15	<0.1	<0.1	<0.1	<0.1	<0.1
	6-Jul-06	1.3	2.2 HY	<0.1	<0.1	<0.1	<0.1	<0.1
	1-Mar-07	0.5 L	0.810 HY	<0.1	<0.1	<0.1	<0.1	<0.1
	23-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	860	1,100 Y	<0.25	<0.25	<0.25	<0.25	<0.25
	25-Mar-08	2,000	43 Yb	<0.36	<0.36	0.75	0.42	2.12
	21-Aug-08	760	1,200 Y	<0.083	<0.083	<0.083	<0.083	<0.083
	10-Feb-09	1.5	2.3 Y	<0.02	<0.02	<0.02	<0.02	<0.02
B-10R	12-Aug-09	50	88 Y	0.067	<0.013	<0.013	<0.013	<0.013
	2-Feb-10	9.3	15 Y	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
	6-Aug-10	**37**	**58 Y**	**<0.001**	**0.0012**	**0.0013**	**<0.001**	**<0.001**
B-13	24-Jan-00	1.7 J	3 YJ	<0.01	<0.0025	<0.0025	<0.0025	0.0200
Temporary Sampling Points Installed by LFR								
GW-2	19-Jul-99	<0.05	<0.05	0.0025	<0.0005	0.00071	<0.0005	0.00074
	20-Jan-00	0.15	0.25 Y	0.0044	<0.0005	<0.0005	0.00097 C	0.0013
	28-Apr-00	<0.05	0.095 YZ	<0.0021	<0.0005	<0.0005	<0.0005	<0.0005
	2-Nov-00	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-01	<0.05	ND	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	<0.05	0.086 YZ	0.0022	<0.0005	0.0240	<0.0005	<0.0005
	27-Jul-01	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	<0.05	<0.05	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
GW-2 cont.	31-Jan-02	<0.05	<0.05	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b
	16,17-Apr-02	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005

Table 3
Historical Groundwater Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples
Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22-Oct-02	<0.05	<0.05	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	19-Feb-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jul-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	4-Aug-04	0.054 YZ	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	2-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA	NA
	22-Aug-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Feb-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	11-Aug-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	<0.05	<0.05	<0.0005	0.0046	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.05**	**<0.05**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
GW-3	19-Jul-99	0.070 Z	0.100 Z	<0.0020	<0.0005	<0.0005	<0.0005	0.00064
	20-Jan-00	0.15	0.260 Y	<0.0020	<0.0005	<0.0005	<0.0005	0.00130 C
	27-Apr-00	0.20 YZ	0.380 YZ	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	27-Apr-00	0.30 Z	0.570 YZ	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	11-Aug-00	<0.05	0.077 YZ	<0.0020	<0.0005	<0.0005	<0.0005	0.00051
	2-Nov-00	<0.05	0.050 YZ	0.0026	<0.0005	<0.0005	<0.0005	<0.00050
	1-Feb-01	<0.05	<0.05	<.0020	<.0005	<0.0005	<0.0005	<0.00050
	27-Apr-01	<0.05	0.062 YZ	0.0056	<0.0005	<0.0005	<0.0005	<0.00050
	27-Jul-01	<0.05	<0.05	0.0008	<0.0005	<0.0005	<0.0005	<0.00050
	19-Oct-01	0.054	0.11	<0.0100	<0.0100	<0.0100	<0.0100	<0.02000
	31-Jan-02	<0.05	0.070 YZ	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.00500 b
	16,17-Apr-02	<0.05	0.055 YZ	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	0.11 YZ	0.140 YZ	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071
	19-Feb-03	0.068 YZ	0.100 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jul-03	0.120 YZ	0.180 YZ	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.051 YZ	0.086 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	0.170 YZ	0.150 YZ	<0.017	<0.017	<0.017	<0.017	<0.017
	2-Feb-05	0.190 Z	0.250 HYZ	<0.031	<0.031	<0.031	<0.031	<0.031
	6-Jul-05	0.084 YZ	0.11 YZ	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jan-06	0.063 YZ	0.088 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.091 YZ	.140 YZ	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	1-Mar-07	0.088 YZ	0.140 YZ	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
	23-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	20-Feb-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	0.079 Y	0.120 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Feb-09	0.070 Y	0.084 YZ	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	11-Aug-09	0.075 Y	0.085 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table 3
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Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
	5-Aug-10	**0.066 YZ**	**0.10 YZ**	**<0.0017**	**<0.0017**	**<0.0017**	**<0.0017**	**<0.0017**
GW-4	21-Jul-99	6.80 J	10 YHJ	0.0022	<0.0005	<0.0005	<0.0005	0.0029 J
	20-Jan-00	0.97 J	1.60 YJ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Split	20-Jan-00	0.85 J	1.50 YJ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.31	0.60 Y	<0.0020	<0.0005	<0.0005	<0.0005	0.0027
	30-Jan-01	0.39	0.58 HY	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.42	0.86 HY	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.83	1.60	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100
	31-Jan-02	0.92	1.70 HY	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b
	16,17-Apr-02	0.40	0.67 HY	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.97	1.7 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	0.55	0.700 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.58	0.880 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	0.39	0.580 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	0.31	0.520 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	0.71	0.640 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	0.28	0.370 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	0.12	0.16 HY	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	0.54	0.75 HY	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	0.56	0.90 HY	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	0.50	0.63 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	21-Aug-08	NA	NA	NA	NA	NA	NA	NA
	10-Feb-09	0.49	0.58 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	11-Aug-09	NA	NA	NA	NA	NA	NA	NA
	1-Feb-10	0.25	0.42 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	4-Aug-10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
GW-5	27-Aug-99	<0.05	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001
	20-Jan-00	<0.05	0.057 Y	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.05 Y	0.096 Y	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.05**	**<0.05**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
GW-6A	27-Aug-99	<0.05	0.054 Y	0.0089	<0.0005	<0.0005	<0.0005	<0.0005
Split	27-Aug-99	<0.05	0.057 Y	0.0087	<0.0005	<0.0005	<0.0005	<0.0005
	25-Jan-00	<0.05	<0.05	0.0022	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	<0.05	0.087 Y	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
GW-7	15-Jul-99	NA	NA	<0.0025	0.05 J	<0.0005	0.000727	0.00313 J
Split	15-Jul-99	NA	NA	NA	NA	NA	NA	NA
	15-Jul-99	NA	NA	NA	0.0567 J	<0.002	<0.002	<0.002
Split	15-Jul-99	NA	NA	NA	0.0755 J	<0.002	<0.002	<0.002
GW-8	19-Jul-99	<0.05	<0.05	0.0078	<0.0005	0.00064	<0.0005	0.00151
	20-Jan-00	0.19	0.33 Y	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	20-Jan-00	0.20	0.37 Y	<0.002	0.00058	<0.0005	<0.0005	<0.0005
	28-Apr-00	0.064 YZ	0.12 YZ	0.013	<0.0005	<0.0005	<0.0005	<0.0005
Monitoring Wells Owned by TOSCO								
MW-11	25-Jan-00	< 0.05	<0.05	0.0090	<0.0005	<0.0005	<0.0005	<0.0005
	28-Apr-00	<0.05	<0.05	<0.0087	<0.0005	<0.0005	<0.0005	<0.0005

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	10-Aug-00	<0.05	<0.05	0.0110	<0.0005	<0.0005	<0.0005	<0.0005
	1-Nov-00	<0.05	<0.05	0.0068	<0.0005	<0.0005	<0.0005	<0.0005
	31-Jan-01	< 0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	<0.05	0.10 HY	0.0010	<0.0005	<0.0005	<0.0005	0.0007
	19-Oct-01	<0.05	<0.05	<0.0050	<0.0050	<0.005	<0.005	<0.010
	31-Jan-02	<0.05	0.071 Y	<0.0050 b	<0.0050 b	<0.005 b	<0.005 b	<0.005 b
	16,17-Apr-02	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	<0.05	<0.05	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.05	<0.05	0.001	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Feb-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	10-Feb-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	12-Aug-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.05**	**<0.05**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
Monitoring Wells Installed by LFR								
LFR-1	9-Aug-00	0.53	1.2	0.0095	<0.0005	<0.0005	<0.0005	<0.0005
	30-Oct-00	0.24 YZ	0.37 YZ	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	30-Oct-00	0.24 YZ	0.37 YZ	0.0043	<0.0005	<0.0005	<0.0005	<0.0005
	29-Jan-01	0.21 YZ	0.31 YZ	0.0033	<0.0005	<0.0005	<0.0005	<0.0005
	26-Apr-01	0.092	0.18 YZ	0.0044	<0.0005	0.002	<0.0005	<0.0005
	27-Jul-01	0.086	0.18 YZ	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
	18-Oct-01	0.19	0.38	<0.031	<0.031	<0.031	<0.031	<0.062
	31-Jan-02	0.15 YZ	0.27 YZ	<0.013 b	<0.013 b	<0.013 b	<0.013 b	<0.013 b
	16,17-Apr-02	0.10 YZ	0.17 YZ	< 0.013	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.084 Y Z	0.14 Y Z	<0.013	<0.013	<0.013	<0.013	<0.013
	22,23-Oct-02	<0.05	0.078 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	0.076 YZ	0.110 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.05	0.068 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	0.060 YZ	0.100 YZ	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
	4-Aug-04	<0.05	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	2-Feb-05	<0.05	0.056 YZ	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	<0.05	0.053 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	0.070 YZ	0.120 YZ	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	19-Feb-08	0.062 Y	0.077 Y	<0.001	<0.001	<0.001	<0.001	0.0033
	22-Aug-08	<0.05	0.059 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table 3
Historical Groundwater Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples
Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
	9-Feb-09	0.057 [Y]	0.067 [YZ]	<0.001	<0.001	<0.001	<0.001	<0.001
	11-Aug-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
LFR-1 cont.	1-Feb-10	<0.05	0.051 [Y]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.05**	**<0.05**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
LFR-2	11-Aug-00	0.59	1.10 [YH]	0.0022	0.0018	<0.0005	<0.0005	0.0013 [C]
	2-Nov-00	0.38	0.70 [YH]	0.003	0.0035	0.0011	0.0042	0.01184 [C]
	30-Jan-01	0.36	0.54 [HY]	0.0034	0.00057	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.33	0.66 [HY]	<0.002	<0.0005	0.0013	<0.0005	<0.0005
	27-Apr-01	0.36	0.72 [HY]	<0.002	0.00059	0.0019	<0.0005	0.013
	27-Jul-01	0.33	0.76 [HY]	<0.0005	0.0013	<0.0005	<0.0005	0.0006
	18-Oct-01	0.73	1.50	<0.0071	<0.0071	<0.0071	<0.0071	<0.0142
	31-Jan-02	0.76	1.40 [HY]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]
	16,17-Apr-02	1.10	1.90 [HY]	<0.002	<0.0005	<0.0005	<0.0005	0.019 [C]
	17,18-Jul-02	0.97	1.7 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	3.10	5.000 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	1.50	2.300 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	4.10	6.000 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	NA	NA	NA	NA	NA	NA	NA
	4-Aug-04	2.50	2.2 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	1.10	1.5 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	0.95	1.3 [HY]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	4.00	5.6 [HY]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.49	0.770 [HY]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	1.20	1.9 [HY]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	3.70	6.4 [HY]	<0.0005	0.0022	<0.0005	<0.0005	<0.0005
	20-Feb-08	73	92 [Y]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	21-Aug-08	15	23 [Y]	<0.0083	0.0059	0.0017	<0.0005	<0.0005
	10-Feb-09	3.4	4.0 [Y]	<0.0017	0.0027	<0.0017	<0.0017	<0.0017
	11-Aug-09	38	68 [Y]	<0.0008	0.0010	<0.0008	<0.0008	<0.0008
	1-Feb-10	100	160 [Y]	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**60**	**93 [Y]**	**<0.0017**	**<0.0017**	**<0.0017**	**<0.0017**	**<0.0017**
LFR-3	10-Aug-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	10-Aug-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	1-Nov-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	30-Jan-01	<0.05	<0.05	0.0036	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	<0.05	<0.05	0.0024	<0.0005	0.0054	<0.0005	<0.0005
	27-Jul-01	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.01
	31-Jan-02	<0.05	0.067 [Y]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]
	16,17-Apr-02	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005

Table 3
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Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
	2-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Dec-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	20-Feb-08	<0.05	0.053 Y	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
LFR-3 cont.	9-Feb-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	11-Aug-09	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.05**	**<0.05**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
LFR-4	11-Aug-00	0.22 Y	0.41 Y	0.0051	0.01100	<0.0005	<0.0005	0.00162 C
	31-Oct-00	0.17 Y	0.27	0.0065	0.00084	<0.0005	<0.0005	<0.0005
	1-Feb-01	0.16 Y	0.22	0.0097	0.00330	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.22 Y	0.44	0.0058	0.02700	0.0036	<0.0005	<0.0005
	27-Jul-01	0.091 Y	0.19	0.011	0.00090	<0.0005	<0.0005	<0.0005
	31-Jan-02	NA	NA	NA	NA	NA	NA	NA
	16,17-Apr-02	0.40 Y	0.67	< 0.005	0.05300	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.21 Y	0.36 Y	0.0075	0.007	<0.005	<0.005	<0.005
	22,23-Oct-02	0.110 Y	0.17	0.0080	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.490 Y	0.740	<0.005	0.055	<0.005	<0.005	<0.005
	30-Jul-03	0.400 Y	0.59	<0.005	0.010	<0.005	<0.005	<0.005
	29-Jan-04	0.42 Y	0.700 Y	<0.005	0.011	<0.005	<0.005	<0.005
	4-Aug-04	NA	NA	NA	NA	NA	NA	NA
	5-Jul-05	0.510 Y	0.68	0.0049	0.024	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.650 Y	1.10	0.0081	0.059	<0.0005	0.0081	0.006
	1-Mar-07	0.370 Y	0.590 H	0.006	0.0063	<0.0005	<0.0005	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA	NA
	21-Aug-08	0.990 Y	1.50 Y	0.0029	0.0009	<0.0005	<0.0005	<0.0005
	10-Feb-09	1.20 Y	1.40 Y	0.0025	0.0021	<0.0005	<0.0005	<0.0005
	11-Aug-09	0.27 Y	0.48 Y	0.0009	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	NA	NA	NA	NA	NA	NA	NA
	5-Aug-10	**0.27 Y**	**0.42 Y**	**0.0008**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
Monitoring Wells Installed by SOMA								
SOMA-1	19-Oct-01	0.22	0.44	0.034	<0.0050	<0.0050	<0.0050	<0.0100
	31-Jan-02	0.058	0.100 HY	0.110 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b
	16,17-Apr-02	<0.05	0.052 Y	0.120	0.0008	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	0.120	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.05	0.053	0.140	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	<0.05	<0.05	0.150	<0.0071	<0.0071	<0.0071	<0.0071
	30-Jul-03	<0.05	<0.05	0.190	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	<0.05	<0.05	0.190	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	<0.05	<0.05	0.170	<0.013	<0.013	<0.013	<0.013
	1-Feb-05	<0.05	<0.05	0.200	<0.017	<0.017	<0.017	<0.017

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	5-Jul-05	<0.05	<0.05	0.210	<0.0017	<0.0017	<0.0017	<0.0017
	5-Jan-06	<0.05	<0.05	0.270	0.0006	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.05	<0.05	0.310	<0.002	<0.002	<0.002	<0.002
	28-Feb-07	0.050 YZ	0.081 YZ	0.330	0.0025	<0.002	<0.002	<0.002
	22-Aug-07	<0.05	0.066 YZ	0.450	<0.002	<0.002	<0.002	<0.002
	20-Feb-08	<0.05	0.076 Y	0.340	<0.002	<0.002	<0.002	0.0084
	21-Aug-08	0.055 Y	0.084 YZ	0.390	<0.0025	<0.0025	<0.0025	<0.0025
	10-Feb-09	0.057 Y	0.086 YZ	0.370	<0.0025	<0.0025	<0.0025	<0.0025
	11-Aug-09	<0.05	0.053 Y	0.430	<0.0025	<0.0025	<0.0025	<0.0025
	2-Feb-10	<0.05	0.051 Y	0.360	<0.0025	<0.0025	<0.0025	<0.0025
	5-Aug-10	**<0.05**	**0.054 YZ**	**0.400**	**<0.0036**	**<0.0036**	**<0.0036**	**<0.0036**
SOMA-2	19-Oct-01	1.4	2.8	<0.250	<0.2500	<0.250	<0.250	<0.500
	31-Jan-02	1.3	2.4 HY	<0.071 b	<0.0710 b	<0.071 b	<0.071 b	<0.071 b
	16,17-Apr-02	1.3 L	2.2 H	< 0.130	0.0067	0.046	0.012	0.044
	17,18-Jul-02	2.6	4.4 H Y	<0.063	<0.063	<0.063	<0.063	<0.063
	22,23-Oct-02	0.37	0.600 HY	0.300	<0.0071	<0.0071	<0.0071	<0.0071
SOMA-2 cont.	19-Feb-03	0.30	0.460 HY	0.210	<0.017	<0.017	<0.017	<0.017
	29-Jul-03	0.27	0.400 HY	0.300	<0.020	<0.020	<0.020	<0.020
	28-Jan-04	0.23	0.38 HY	0.270	<0.017	<0.017	<0.017	<0.017
	4-Aug-04	0.31	0.28 HY	0.280	<0.031	<0.031	<0.031	<0.031
	2-Feb-05	39	53 HY	<0.31	<0.31	<0.31	<0.31	<0.31
	6-Jul-05	5.10	6.8 HY	<0.025	<0.025	0.053	<0.025	0.031
	9-Jan-06	67	93 HY	<0.042	<0.042	0.054	<0.042	<0.042
	6-Jul-06	25	40 HY	<0.042	<0.042	0.061	<0.042	<0.042
	1-Mar-07	18	29 HY	<0.042	<0.042	0.055	<0.042	<0.042
	23-Aug-07	75	130 HY	<0.042	<0.042	0.081	<0.042	<0.042
	20-Feb-08	3.2	4.0 Y	<0.1	<0.1	<0.1	<0.1	<0.1
	25-Mar-08	360.0	270 Yb	<0.13	<0.13	0.180	<0.13	0.170
	21-Aug-08	3.8	5.7 Y	<0.0063	0.016	0.120	0.014	0.094
	10-Feb-09	860.0	1,300 Y	<0.05	<0.05	<0.05	<0.05	<0.05
	11-Aug-09	FP	FP	FP	FP	FP	FP	FP
	2-Feb-10	430	700 Y	<0.013	<0.013	<0.013	<0.013	<0.013
	6-Aug-10	**52**	**80 Y**	**<0.02**	**<0.02**	**<0.02**	**<0.02**	**<0.02**
SOMA-3	19-Oct-01	0.42	0.83	0.65	<0.02500	<0.02500	<0.0250	<0.0500
	31-Jan-02	0.23	0.41 HY	0.31 b	<0.01300 b	<0.01300 b	<0.0130 b	<0.0130 b
	16,17-Apr-02	0.61	1.00 HY	0.42	0.00078	0.00068	<0.0005	<0.0005
	17,18-Jul-02	0.41	0.69 H Y	0.38	<0.017	<0.017	<0.017	<0.017
	22,23-Oct-02	3.00	4.700 HY	<0.17	<0.170	<0.170	<0.170	<0.170
	19-Feb-03	2.50	3.800 HY	<0.13	<0.130	<0.130	<0.130	<0.130
	29-Jul-03	2.10	3.100 HY	<0.13	<0.130	<0.130	<0.130	<0.130
	29-Jan-04	4.10	6.8 HY	<0.31	<0.310	<0.310	<0.310	<0.310
	4-Aug-04	4.00	3.6 HY	<0.50	<0.500	<0.500	<0.500	<0.500
	2-Feb-05	0.27	0.36 HY	0.25	<0.063	<0.063	<0.063	<0.063
	6-Jul-05	0.32	0.43 HY	0.32	0.0017	<0.0005	<0.0005	0.0016
	6-Jan-06	0.22	0.30 HY	0.39	0.0014	<0.0005	<0.0005	0.0012
	6-Jul-06	0.14	0.27 HY	0.500	<0.005	<0.005	<0.005	<0.005

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	1-Mar-07	0.19	0.31 HY	0.490	<0.005	<0.005	<0.005	<0.005
	23-Aug-07	0.97	1.700 HY	0.320	<0.005	<0.005	<0.005	<0.005
	20-Feb-08	0.38	0.48 Y	<0.031	<0.031	<0.031	<0.031	<0.031
	21-Aug-08	0.40	0.60 Y	0.220	<0.013	<0.013	<0.013	<0.013
	10-Feb-09	0.10	0.15 Y	0.280	<0.013	<0.013	<0.013	<0.013
	12-Aug-09	0.076 Y	0.13 Y	0.430	<0.0036	<0.0036	<0.0036	<0.0036
	2-Feb-10	0.27	0.44 Y	0.110	<0.0083	<0.0083	<0.0083	<0.0083
	6-Aug-10	**0.24**	**0.37 Y**	**0.020**	**<0.013**	**<0.013**	**<0.013**	**<0.013**
SOMA-4	19-Oct-01	2.5	5	0.63	<0.13	<0.13	<0.13	<0.26
	31-Jan-02	FP	FP	FP	FP	FP	FP	FP
	16,17-Apr-02	FP	FP	FP	FP	FP	FP	FP
	17,18-Jul-02	FP	FP	FP	FP	FP	FP	FP
	22,23-Oct-02	FP	FP	FP	FP	FP	FP	FP
	18-Feb-03	FP	FP	FP	FP	FP	FP	FP
	29-Jul-03	FP	FP	FP	FP	FP	FP	FP
	10-Feb-09	44	65 Y	0.018	<0.005	0.016	<0.005	0.029
SOMA-4R	12-Aug-09	37	65 Y	0.08	<0.001	<0.001	<0.001	0.0019
	2-Feb-10	21	34 Y	0.008	<0.002	0.0031	<0.002	0.0065
	6-Aug-10	**20**	**32 Y**	**0.015**	**<0.0031**	**0.0035**	**<0.0031**	**0.0043**
SOMA-5	4-Aug-04	4.1	3.7 HY	<0.005	<0.005	<0.005	<0.005	<0.005
	2-Feb-05	0.11 Z	0.15 HYZ	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	2.3 H	3.1 HY	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	9-Jan-06	0.89	1.2 HY	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jul-06	0.45 YZ	0.720 YZ	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	NA	3.9 YZ	0.0052	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA	NA
	21-Aug-08	NA	NA	NA	NA	NA	NA	NA
	10-Feb-09	NA	NA	NA	NA	NA	NA	NA
	11-Aug-09	NA	NA	NA	NA	NA	NA	NA
	1-Feb-10	NA	NA	NA	NA	NA	NA	NA
	6-Aug-10	**0.78**	**1.2 Y**	**0.0078**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
MPE-1	12-Aug-09	28	49 Y	0.26	<0.0005	0.0011	<0.0005	0.0029
	2-Feb-10	<5	<5	<0.002	<0.002	<0.002	<0.002	<0.002
	6-Aug-10	**1.1**	**1.8 Y**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
MPE-2	12-Aug-09	380	200 Y	0.015	0.0016	0.0053	0.0013	0.0204
	1-Feb-10	FP	FP	FP	FP	FP	FP	FP
	5-Aug-10	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MPE-3	11-Aug-09	FP	FP	FP	FP	FP	FP	FP
	1-Feb-10	FP	FP	FP	FP	FP	FP	FP
	5-Aug-10	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**

Table 3
Historical Groundwater Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples
Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
MPE-4	12-Aug-09	71	130 Y	0.0043	0.0006	<0.0005	<0.0005	0.0036
	2-Feb-10	1.3	2.2 Y	0.0021	0.0009	<0.0005	0.0006	0.0026
	6-Aug-10	**0.99**	**1.5 Y**	**0.0028**	**0.0009**	**<0.0005**	**<0.0005**	**0.0009**
MPE-5	12-Aug-09	1.1 Y	1.9 Y	0.0032	<0.001	<0.001	<0.001	<0.001
	2-Feb-10	29	47 Y	0.0021	0.001	<0.001	<0.001	<0.001
	6-Aug-10	**18**	**27 Y**	**0.0022**	**0.0005**	**<0.0005**	**<0.0005**	**<0.0005**

Notes:

b Analysis was carried out past the hold date, no analytical problems were encountered. See narrative for Q1 2008

C Presence of this compound confirmed by second column, however, the confirmation concentration different from reported results by more than a factor of two.

H Heavier hydrocarbons than the standard are present in the sample.

J Result is estimated.

L Lighter hydrocarbons contributed to the quantitation

NA Not analyzed.

During First and Second Semi-annual 2009 events SOMA-5 had insufficient groundwater for sampling

During Second Semi-annual 2009 event GW-4 had insufficient groundwater for sampling

Y Sample exhibits fuel pattern which does not resemble standard.

Z Sample exhibits unknown single peak or peaks.

FP: Not Analyzed due to Free Product

TPH, purge = Total petroleum hydrocarbons (purgeable)

Groundwater samples collected from the temporary sampling points are considered grab samples, therefore, the results should be considered estimates of groundwater quality.

MPE-1 through MPE-5 were installed May 2009

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
Temporary Sampling Points Installed by Geosolv, LLC							
B-2	24-Jan-00	<0.0013	<0.0013	0.27	0.001	< 0.0013	< 0.0013
B-3	24-Jan-00	< 0.0020	< 0.002	0.61	< 0.002	< 0.002	< 0.002
B-7	24-Jan-00	< 0.0036	< 0.0036	0.92	0.004	< 0.0036	< 0.0036
	11-Aug-00	< 0.0031	< 0.0031	0.86	0.005	< 0.0031	< 0.0031
	31-Oct-00	< 0.0042	< 0.0042	0.91	0.004	< 0.0042	< 0.0042
	27-Jul-01	0.01	0.017	0.86	0.005	<0.0031	<0.0031
	27-Apr-01	<0.0031	<0.0031	1.10	0.007	<0.0031	<0.0031
	31-Jan-01	< 0.0042	< 0.0042	0.92	0.005	< 0.0042	< 0.0042
B-8	24-Jan-00	< 0.0005	< 0.0005	0.035	< 0.0005	< 0.0005	< 0.0005
B-8R	12-Aug-09	<0.0005	<0.0005	0.027	<0.0005	<0.0005	<0.0005
	2-Feb-10	0.0012	<0.0005	0.016	<0.0005	<0.0005	<0.0005
	6-Aug-10	**<0.0007**	**<0.0007**	**0.018**	**<0.0007**	**<0.0007**	**<0.0007**
B-9	24-Jan-00	< 0.0005	0.001	0.003	< 0.0005	< 0.0005	< 0.0005
B-10	24-Jan-00	1.20	2.40	14.00	0.090	< 0.063	< 0.063
	10-Aug-00	2.90	1.60	6.50	0.050	< 0.025	< 0.025
	31-Oct-00	2.40	1.90	7.10	0.061	< 0.025	< 0.025
	27-Jul-01	1.70	1.40	7.30	0.043	<0.025	<0.025
	27-Jul-01	0.87	0.81	6.60	0.041	<0.025	<0.025
	31-Jan-01	2.10	1.60	6.60	0.044	< 0.025	< 0.025
	6-Jul-05	0.59	0.34	12.00	<0.1	<0.1	<0.1
	9-Jan-06	0.14	0.29	13.00	<0.1	<0.1	<0.1
	6-Jul-06	0.37	0.38	14.00	<0.1	<0.1	<0.1
	1-Mar-07	<0.1	<0.1	14.00	0.110	<0.1	<0.1
	23-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	20.0	9.1	16.0	<0.25	<0.25	<0.25
	25-Mar-08	520.0	70.0	28.0	<0.36	<0.36	<0.36
	21-Aug-08	1.1	0.97	17.0	0.096	<0.083	<0.083
	10-Feb-09	1.2	1.2	2.9	<0.02	<0.02	<0.02
B-10R	12-Aug-09	0.260	0.120	1.8	<0.013	<0.013	<0.013
	2-Feb-10	0.130	0.100	2.0	0.0077	<0.0063	<0.0063
	6-Aug-10	**0.025**	**0.055**	**3.9**	**0.048**	**0.012**	**<0.001**
B-13	24-Jan-00	0.020	0.029	0.13	0.005	< 0.0005	< 0.0005
Temporary Sampling Points Installed by LFR							
GW-2	19-Jul-99	0.014	0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	20-Jan-00	0.130	0.019	0.006	< 0.0005	< 0.0005	< 0.0005
	28-Apr-00	0.120	0.016	0.003	< 0.0005	< 0.0005	< 0.0005
	2-Nov-00	0.008	0.001	0.003	< 0.0005	< 0.0005	< 0.0005
	1-Feb-01	0.008	0.001	0.003	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	0.010	0.002	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.033	0.004	0.002	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.019	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	0.0092 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	0.014	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17-18-Jul-02	0.014	<0.005	<0.005	<0.005	<0.01	<0.005

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	22,23-Oct-02	0.027	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	0.057	0.007	<0.005	<0.005	<0.010	<0.005
	29-Jul-03	0.043	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	0.057	0.0069	<0.005	<0.005	<0.010	<0.005
	4-Aug-04	0.075	0.0100	<0.005	<0.005	<0.010	<0.005
	2-Feb-05	0.049	0.0066	0.016	<0.005	<0.010	<0.005
	6-Jul-05	0.082	0.0110	0.0009	<0.0005	<0.0005	<0.0005
	6-Jan-06	0.061	0.0079	0.0008	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.0750	0.0095	0.0007	<0.0005	<0.0005	<0.0005
	28-Feb-07	0.082	0.0096	0.0006	<0.0005	<0.0005	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA
	22-Aug-08	0.015	0.003	<0.0005	<0.0005	<0.0005	<0.0005
	9-Feb-09	0.059	0.0062	<0.0005	<0.0005	<0.0005	<0.0005
	11-Aug-09	0.030	0.0031	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	0.042	0.0046	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**0.033**	**0.0035**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
GW-3	19-Jul-99	0.220	<0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
	20-Jan-00	0.055	0.001	0.020	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	0.350	0.002	0.006	< 0.0005	< 0.0005	< 0.0005
Split	27-Apr-00	0.270	0.002	0.002	< 0.0013	< 0.0013	< 0.0013
	11-Aug-00	0.068	0.003	0.012	< 0.0005	< 0.0005	< 0.0005
	2-Nov-00	0.059	0.001	0.002	< 0.0005	< 0.0005	< 0.0005
	1-Feb-01	0.046	0.001	0.001	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	0.079	0.001	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.090	0.001	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.180	<0.0100	<0.0100	<0.0100	<0.0200	<0.0100
	31-Jan-02	0.0960 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	0.160	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	0.086	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	0.200	<0.0071	<0.0071	<0.0071	<0.014	<0.0071
	19-Feb-03	0.240	<0.005	0.006	<0.005	<0.010	<0.005
	29-Jul-03	0.430	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.170	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	0.440	<0.017	<0.017	<0.017	<0.033	<0.017
	2-Feb-05	0.360	<0.031	<0.031	<0.031	<0.063	<0.031
	6-Jul-05	0.320	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jan-06	0.200	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.400	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	1-Mar-07	0.400	0.002	<0.0017	<0.0017	<0.0017	<0.0017
	23-Aug-07	0.150	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	20-Feb-08	0.082	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	0.240	0.0013	<0.0005	<0.0005	<0.0005	<0.0005
	9-Feb-09	0.330	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	11-Aug-09	0.230	0.0058	0.0013	<0.0005	<0.0005	<0.0005
	1-Feb-10	0.100	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**0.180**	**0.0084**	**0.0063**	**<0.0017**	**<0.0017**	**<0.0017**
GW-4	19-Jul-99	< 0.0005	< 0.0005	0.004	< 0.0005	< 0.0005	0.002

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	20-Jan-00	0.001	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
Split	20-Jan-00	0.001	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
	27-Apr-00	0.002	< 0.0005	0.001	< 0.0005	< 0.0005	0.001
	30-Jan-01	< 0.0005	< 0.0005	0.002	< 0.0005	< 0.0005	0.001
	27-Jul-01	< 0.0005	< 0.0005	0.003	< 0.0005	0.001	0.002
	19-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	0.0081	<0.005	0.010	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	6-Jul-05	0.0006	<0.0005	0.0013	<0.0005	<0.0005	0.0011
	5-Jan-06	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	0.0015
	28-Feb-07	0.0006	<0.0005	0.0016	<0.0005	<0.0005	0.0014
	22-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	<0.0005	<0.0005	0.0010	<0.0005	<0.0005	0.0011
	21-Aug-08	NA	NA	NA	NA	NA	NA
	10-Feb-09	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	0.0017
	11-Aug-09	NA	NA	NA	NA	NA	NA
	1-Feb-10	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	0.0006
	4-Aug-10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
GW-5	27-Aug-99	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
	20-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5-Aug-10	**< 0.0005**	**< 0.0005**	**< 0.0005**	**< 0.0005**	**< 0.0005**	**< 0.0005**
GW-6A	27-Aug-99	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Split	27-Aug-99	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	25-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
GW-7	15-Jul-99	< 0.0005	< 0.0005	0.004	< 0.0005	< 0.0005	0.001
	15-Jul-99	< 0.0020	< 0.0020	0.004	< 0.0020	< 0.0020	< 0.0020
Split	15-Jul-99	< 0.0020	< 0.0020	0.004	< 0.0020	< 0.0020	< 0.0020
GW-8	19-Jul-99	0.024	0.015	0.004	0.002	0.001	< 0.0005
	20-Jan-00	0.150	0.190	0.053	0.012	0.005	< 0.0007
Split	20-Jan-00	0.150	0.180	0.052	0.011	0.005	< 0.0005
	28-Apr-00	0.120	0.110	0.029	0.005	0.002	< 0.0005
Monitoring wells owned by TOSCO							
MW-11	25-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	28-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	1-Nov-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	31-Jan-01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Jul-01	0.002	0.001	0.006	< 0.0005	< 0.0005	< 0.0005
	19-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Feb-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	10-Feb-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	12-Aug-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
Monitoring wells installed by LFR							
LFR-1	9-Aug-00	2.80	0.064	0.041	< 0.0083	< 0.0083	< 0.0083
	30-Oct-00	0.82	0.034	0.010	< 0.0031	< 0.0031	< 0.0031
Split	30-Oct-00	0.87	0.035	0.014	< 0.0031	< 0.0031	< 0.0031
	29-Jan-01	0.77	0.026	0.007	<0.0025	<0.0025	<0.0025
	26-Apr-01	0.44	0.013	0.005	<0.0013	<0.0013	<0.0013
	27-Jul-01	0.38	0.031	0.010	<0.0013	<0.0013	<0.0013
	18-Oct-01	0.78	0.093	<0.0310	<0.0310	<0.0630	<0.0310
	31-Jan-02	0.37 [b]	0.035 [b]	<0.0130 [b]	<0.0130 [b]	<0.0250 [b]	<0.0130 [b]
	16,17-Apr-02	0.38	0.040	<0.0130	<0.0130	<0.0250	<0.0130
	17,18-Jul-02	0.36	0.041	<0.013	<0.013	<0.025	<0.013
	22,23-Oct-02	0.18	0.024	0.007	<0.005	<0.010	<0.005
	18-Feb-03	0.28	0.032	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	0.15	0.027	0.007	<0.005	<0.010	<0.005
	29-Jan-04	0.15	0.023	0.0077	<0.0063	<0.013	<0.0063
	4-Aug-04	0.058	0.016	0.0052	<0.005	<0.010	<0.005
	2-Feb-05	0.089	0.0079	0.0072	<0.005	<0.010	<0.005
	6-Jul-05	0.096	0.0260	0.0049	<0.0005	<0.0005	<0.0005
	6-Jan-06	0.062	0.0076	0.0010	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.0078	0.0410	0.001	<0.0005	<0.0005	<0.0005
	1-Mar-07	0.098	0.0099	0.0017	<0.0005	<0.0005	<0.0005
	23-Aug-07	0.170	0.073	0.036	0.0066	0.0005	<0.0005
	19-Feb-08	0.130	0.051	0.021	0.0048	<0.001	<0.001
	22-Aug-08	0.084	0.047	0.014	0.0039	<0.0005	<0.0005
	9-Feb-09	0.100	0.020	0.0031	<0.001	<0.001	<0.001
	11-Aug-09	0.082	0.039	0.011	0.0028	<0.0005	<0.0005
	1-Feb-10	0.110	0.032	0.0048	0.0011	<0.0005	<0.0005
	5-Aug-10	**0.074**	**0.036**	**0.011**	**0.0035**	**<0.0005**	**<0.0005**
LFR-2	11-Aug-00	< 0.0005	< 0.0005	0.035	< 0.0005	0.005	< 0.0005

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	2-Nov-00	< 0.0005	< 0.0005	0.130	0.001	0.015	0.001
	29-Jan-01	<0.0005	<0.0005	0.006	<0.0005	0.002	<0.0005
	27-Apr-01	0.001	<0.0005	0.006	<0.0005	0.001	<0.0005
split	27-Jul-01	0.001	0.001	0.019	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.0071	<0.0071	0.160	<0.0071	<0.0140	<0.0071
	27-Apr-01	0.001	<0.0005	0.007	<0.0005	0.002	<0.0005
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	0.0069 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.012	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	0.066	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	0.011	<0.005	<0.010	<0.005
	4-Aug-04	<0.005	<0.005	0.012	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	<0.0005	<0.0005	0.078	<0.0005	0.0098	<0.0005
	20-Feb-08	<0.0005	<0.0005	0.014	<0.0005	0.004	<0.0005
	21-Aug-08	<0.0083	<0.0005	1.40	0.0083	0.089	0.0009
	10-Feb-09	<0.0017	<0.0017	0.33	0.0023	0.032	<0.0017
	11-Aug-09	<0.0008	<0.0008	0.12	<0.0008	0.013	<0.0008
	1-Feb-10	<0.0005	<0.0005	0.027	<0.0005	0.0057	<0.0005
	5-Aug-10	**<0.0017**	**<0.0017**	**0.067**	**<0.0017**	**0.0085**	**<0.0017**
LFR-3	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Split	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	1-Nov-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	30-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	2-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	0.011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Dec-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	0.0031	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	0.020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	20-Feb-08	0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-08	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Table 4
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3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	9-Feb-09	0.0015	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	11-Aug-09	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	0.0012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Aug-10	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
LFR-4	11-Aug-00	< 0.0005	< 0.0005	0.001	< 0.0005	< 0.0005	< 0.0005
	31-Oct-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	30-Jan-01	<0.0005	<0.0005	0.001	<0.0005	< 0.0005	< 0.0005
	27-Apr-01	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.001	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	4-Aug-04	NA	NA	NA	NA	NA	NA
	5-Jul-05	0.0011	<0.0005	0.0026	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	0.0022	<0.0005	0.0007	<0.0005
	1-Mar-07	<0.0005	<0.0005	0.0033	<0.0005	0.0006	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA
	21-Aug-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	10-Feb-09	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005
	11-Aug-09	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-10	NA	NA	NA	NA	NA	NA
	5-Aug-10	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
Monitoring wells installed by SOMA							
SOMA-1	19-Oct-01	<0.0050	<0.0050	0.014	<0.0050	<0.0100	<0.0050
	31-Jan-02	0.0056 [b]	<0.0050 [b]	0.0070 [b]	<0.0050 [b]	<0.0100 [b]	0.0057 [b]
	16,17-Apr-02	0.006	<0.0050	0.007	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.016	<0.005	<0.01	<0.005
	22,23-Oct-02	0.008	<0.005	0.041	<0.005	<0.010	0.007
	19-Feb-03	0.009	<0.0071	0.016	<0.0071	<0.014	<0.0071
	30-Jul-03	0.016	<0.005	0.042	<0.005	<0.010	0.006
	29-Jan-04	0.019	<0.005	0.044	<0.005	<0.010	0.0059
	3-Aug-04	0.019	<0.013	0.038	<0.013	<0.025	<0.013
	1-Feb-05	0.022	<0.017	0.028	<0.017	<0.033	<0.017
	5-Jul-05	0.041	0.0026	0.051	<0.0017	<0.0017	0.0046
	5-Jan-06	0.019	0.0013	0.028	<0.0005	<0.0005	0.0026
	5-Jul-06	0.037	0.0028	0.057	<0.002	<0.002	0.0037
	28-Feb-07	0.079	0.0062	0.170	<0.002	<0.002	0.0067
	22-Aug-07	0.062	0.0060	0.170	0.0022	<0.002	0.0035
	20-Feb-08	0.075	0.0058	0.180	0.0022	<0.002	0.0025
	21-Aug-08	0.110	0.0085	0.250	<0.0025	<0.0025	0.0031
	10-Feb-09	0.085	0.0067	0.290	0.0028	<0.0025	0.0035
	12-Aug-09	0.059	0.0063	0.220	<0.0025	<0.0025	<0.0025
	2-Feb-10	0.046	0.0052	0.180	<0.0025	<0.0025	<0.0025
	5-Aug-10	**0.050**	**0.0047**	**0.170**	**<0.0036**	**<0.0036**	**<0.0036**

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
SOMA-2	19-Oct-01	1.400	0.350	5.000	<0.250	<0.500	<0.250
	31-Jan-02	<0.071 [b]	<0.071 [b]	1.8 [b]	<0.071 [b]	<0.140 [b]	<0.071 [b]
	16,17-Apr-02	<0.130	<0.130	2.900	<0.130	<0.250	<0.130
	17,18-Jul-02	<0.063	<0.063	1.600	<0.063	<0.13	<0.063
	22,23-Oct-02	0.017	0.008	0.350	<0.0071	<0.014	<0.0071
	19-Feb-03	<0.017	<0.017	0.790	<0.017	<0.033	<0.017
	29-Jul-03	0.032	<0.020	0.580	<0.040	<0.040	<0.020
	28-Jan-04	0.036	<0.017	0.430	<0.017	<0.033	<0.017
	4-Aug-04	<0.031	<0.031	0.430	<0.031	<0.063	<0.031
	2-Feb-05	<0.310	<0.310	6.100	<0.310	<0.630	<0.310
	6-Jul-05	0.078	0.047	5.200	0.044	<0.025	<0.025
	9-Jan-06	<0.042	<0.042	7.30	0.049	<0.042	<0.042
	6-Jul-06	<0.042	<0.042	5.400	0.046	<0.042	<0.042
	1-Mar-07	<0.042	<0.042	5.100	<0.042	<0.042	<0.042
	23-Aug-07	<0.042	0.110	5.400	0.042	<0.042	<0.042
	20-Feb-08	0.200	0.360	16.00	0.100	<0.100	<0.100
	25-Mar-08	6.400	2.500	20.00	0.130	<0.130	<0.130
	21-Aug-08	0.620	0.870	15.00	0.160	<0.0063	<0.0063
	10-Feb-09	0.170	0.390	5.90	<0.05	<0.05	<0.05
	11-Aug-09	FP	FP	FP	FP	FP	FP
	2-Feb-10	<0.013	<0.013	1.90	0.018	<0.013	<0.013
	6-Aug-10	**<0.02**	**<0.02**	**2.40**	**0.023**	**<0.02**	**<0.02**
SOMA-3	19-Oct-01	0.042	0.057	0.440	<0.025	<0.050	<0.025
	31-Jan-02	0.018 [b]	0.023 [b]	0.38 [b]	<0.013 [b]	<0.025 [b]	<0.013 [b]
	16,17-Apr-02	0.025	0.018	0.36	<0.017	<0.033	<0.017
	17,18-Jul-02	0.027	<0.017	0.44	<0.017	<0.033	<0.017
	22,23-Oct-02	<0.170	<0.170	5.90	<0.170	<0.330	<0.170
	19-Feb-03	<0.130	<0.130	4.10	<0.130	<0.250	<0.130
	29-Jul-03	0.150	0.220	4.70	<0.130	<0.250	<0.130
	29-Jan-04	<0.310	<0.310	7.70	<0.310	<0.630	<0.310
	4-Aug-04	<0.500	<0.500	6.90	<0.500	<1.0	<0.500
	2-Feb-05	<0.063	<0.063	1.10	<0.063	<0.130	<0.063
	6-Jul-05	0.031	0.014	0.89	0.0067	0.0011	0.0032
	6-Jan-06	0.025	0.0094	0.77	0.005	0.001	0.0026
	6-Jul-06	0.015	0.0064	0.370	<0.005	<0.005	<0.005
	1-Mar-07	0.015	<0.005	0.270	<0.005	<0.005	<0.005
	23-Aug-07	0.280	0.060	2.900	0.010	<0.005	<0.005
	20-Feb-08	0.041	0.062	5.300	0.068	<0.031	<0.031
	21-Aug-08	0.160	0.030	2.100	0.019	<0.013	<0.013
SOMA-3 cont.	10-Feb-09	0.024	0.014	1.800	0.013	<0.013	<0.013
	12-Aug-09	0.0078	0.0036	0.170	<0.0036	<0.0036	<0.0036
	2-Feb-10	<0.0083	<0.0083	1.50	<0.0083	<0.0083	<0.0083
	6-Aug-10	**<0.013**	**<0.013**	**1.60**	**<0.013**	**<0.013**	**<0.013**
SOMA-4	19-Oct-01	<0.13	<0.13	2.600	<0.13	<0.25	<0.13
	31-Jan-02	FP	FP	FP	FP	FP	FP
	16,17-Apr-02	FP	FP	FP	FP	FP	FP
	17,18-Jul-02	FP	FP	FP	FP	FP	FP
	22,23-Oct-02	FP	FP	FP	FP	FP	FP

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)
	18-Feb-03	FP	FP	FP	FP	FP	FP
	29-Jul-03	FP	FP	FP	FP	FP	FP
	10-Feb-09	<0.005	<0.005	0.830	0.0051	<0.005	<0.005
SOMA-4R	12-Aug-09	0.0015	<0.001	0.099	<0.001	<0.001	0.0015
	2-Feb-10	<0.002	<0.002	0.360	0.00350	<0.002	<0.002
	6-Aug-10	**<0.0031**	**<0.0031**	**0.310**	**<0.0031**	**<0.0031**	**<0.0031**
SOMA-5	4-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	2-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	6-Jul-05	<0.0025	<0.0025	0.0057	<0.0025	<0.0025	<0.0025
	9-Jan-06	<0.0025	0.0067	0.430	0.027	<0.0025	<0.0025
	6-Jul-06	<0.0005	<0.0005	0.0035	<0.0005	<0.0005	<0.0005
	1-Mar-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA
	21-Aug-08	NA	NA	NA	NA	NA	NA
	10-Feb-09	NA	NA	NA	NA	NA	NA
	11-Aug-09	NA	NA	NA	NA	NA	NA
	1-Feb-10	NA	NA	NA	NA	NA	NA
	6-Aug-10	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**
MPE-1	12-Aug-09	0.0039	0.012	0.880	0.0053	<0.0005	<0.0005
	2-Feb-10	0.0240	0.052	0.330	0.0062	<0.0002	<0.0002
	6-Aug-10	**0.0170**	**0.021**	**0.077**	**0.0057**	**<0.0005**	**<0.0005**
MPE-2	12-Aug-09	<0.0013	<0.0013	0.150	0.0013	<0.0013	0.0016
	1-Feb-10	FP	FP	FP	FP	FP	FP
	5-Aug-10	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MPE-3	11-Aug-09	FP	FP	FP	FP	FP	FP
	1-Feb-10	FP	FP	FP	FP	FP	FP
	5-Aug-10	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MPE-4	12-Aug-09	<0.0005	<0.0005	0.083	0.0021	<0.0005	<0.0005
	2-Feb-10	0.0006	0.0016	0.092	0.0032	<0.0005	<0.0005
	6-Aug-10	**<0.0005**	**0.0007**	**0.075**	**0.0017**	**<0.0005**	**<0.0005**
MPE-5	12-Aug-09	<0.001	<0.001	0.14	0.0045	<0.001	<0.001
	2-Feb-10	<0.001	0.0021	0.16	0.0062	<0.001	<0.001
	6-Aug-10	**<0.0005**	**<0.0005**	**0.10**	**0.0038**	**<0.0005**	**<0.0005**

Table 4
Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples
at the Former Glovatorium Site
3820 Manila Avenue, Oakland, California

Well Name	Date Sampled	PCE (mg/L)	TCE (mg/L)	cis-1,2-DCE (mg/L)	trans-1,2-DCE (mg/L)	Vinyl Chloride (mg/L)	1,2-DCP (mg/L)

Notes:

<: Not detected above the laboratory reporting limits.

[b] analysis was carried out past hold date, no analytical problems were encountered

FP: Not Analyzed due to Free Product

NA: Not Analyzed.

During First and Second Semi-annual 2009 events SOMA-5 had insufficient groundwater for sampling

During Second Semi-annual 2009 event GW-4 had insufficient groundwater for sampling

MPE-1 through MPE-5 were installed May 2009

APPENDIX A

Field Procedures

GENERAL FIELD PROCEDURES

HYDRAULIC PUSH (GEOPROBE) DRILLING (SOIL AND GROUNDWATER INVESTIGATION)

Utility Locating

Prior to drilling, boring locations are marked with white paint or other discernible marking and cleared for underground utilities through Underground Service Alert (USA). In addition, the first five feet of each borehole are air-knifed, or carefully advanced with a hand auger if shallow soil samples are necessary, to help evaluate the borehole location for underground structures or utilities.

Borehole Advancement

Pre-cleaned push rods (typically one to two inches in diameter) are advanced using a hydraulic push type rig for the purpose of collecting samples and evaluating subsurface conditions. The drill rod serves as a soil sampler, and an acetate liner is inserted into the annulus of the drill rod prior to advancement. Once the sample is collected, the rods and sampler are retracted and the sample tubes are removed from the sampler head. The sampler head is then cleaned, filled with clean sample tubes, inserted into the borehole and advanced to the next sampling point where the sample collection process is repeated.

Soil Sample Collection

The undisturbed soil samples intended for laboratory analysis are cut away from the acetate sample liner using a hacksaw, or equivalent tool, in sections approximately 6 inches in length. The 6 inch samples are lined at each end with Teflon® sheets and capped with plastic caps. Labels documenting job number, borehole identification, collection date, and depth are affixed to each sample. The samples are then placed into an ice-filled cooler for delivery under chain-of-custody to a laboratory certified by the State of California to perform the specified tests. The remaining collected soil that has not been selected for laboratory analysis is logged using the United Soil Classification System (USCS) under the direction of a State Registered Professional Geologist, and is field screened for organic vapors using a photo-ionization detector (PID), or an equivalent tool. Soil cuttings generated are stored in Department of Transportation (DOT) approved 55-gallon steel drums, or an equivalent storage container.

Groundwater Sample Collection

Once the desired groundwater sampling depth has been reached, a Hydropunch tip is affixed to the head of the sampling rods. The Hydropunch tip is advanced between approximately 6 inches to one foot within the desired groundwater sampling zone (effort is made to emplace the Hydropunch screen across the center and lower portion of the water table), and retracted to expose the Hydropunch screen.

Grab groundwater samples are collected by lowering a pre-cleaned, single-sample polypropylene, disposable bailer down the annulus of the sampler rod. The groundwater sample is discharged from the bailer to the sample container through a bottom emptying flow control valve to minimize volatilization.

Because the sampling section of the non-discrete groundwater sampler is not protected or sealed, this sampler should only be used where cross contamination from overlying materials is not a concern. Discrete groundwater samplers are driven to the sample interval, then o-rings, a protective tube/sheath, and an expendable point provide a water-tight seal.

Collected water samples are discharged directly into laboratory-provided, pre-cleaned vials or containers and sealed with Teflon-lined septum, screw-on lids. Labels documenting sample number, well identification, collection date, and type of preservative (if applicable, e.g., HCl for TPPH, BTEX, and fuel oxygenates) are affixed to each sample. The samples are then placed into an ice-filled cooler for delivery under chain-of-custody to a laboratory certified by the State of California to perform the specified tests.

Borehole Completion

Upon completion of drilling and sampling, the rods are retracted. Neat cement grout, mixed at a ratio of 6 gallons of water per 94 pounds of Portland cement, is introduced, *via* a tremmie pipe, and pumped to displace standing water in the borehole. Displaced groundwater is collected at the surface into DOT approved 55-gallon steel drums, or an equivalent storage container. In areas where the borehole penetrates asphalt or concrete, the borehole is capped with an equivalent thickness of asphalt or concrete patch to match finished grade.

Organic Vapor Procedures

Soil samples are collected for analysis in the field for ionizable organic compounds using a PID with a 10.2 eV lamp. The test procedure *involves* measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a Ziploc--type bag or in a clean glass jar, and sealing the jar with aluminum foil secured under a ring-type threaded lid. The container is warmed for approximately 20 minutes (in the sun); then the head-space within the container is tested for total organic *vapor,* measured in parts per million as benzene (ppm; volume/volume). The instrument is calibrated prior to drilling. The results of the field-testing are noted on the boring logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate petroleum hydrocarbon levels with the confidence of laboratory analyses.

Equipment Decontamination

Equipment that could potentially contact subsurface media and compromise the integrity of the samples is carefully decontaminated prior to drilling and sampling. Drill augers and other large pieces of equipment are decontaminated using high pressure hot water spray. Samplers, groundwater pumps, liners and other equipment are decontaminated in an Alconox scrub solution and double rinsed in clean tap water rinse followed by a final distilled water rinse.

The rinsate and other wastewater are contained in 55-gallon DOT-approved drums, labeled (to identify the contents, generation date and project) and stored on-site pending waste profiling and disposal.

Soil Cuttings and Rinsate/Purge Water

Soil cuttings and rinsate/purge water generated during drilling and sampling are stored onsite in DOT-approved 55-gallon steel drums pending characterization. A label is affixed to the drums indicating the contents of the drum, suspected contaminants, date of generation, and the boring number from which the waste is generated. The drums are removed from the site by a licensed waste disposal contractor under manifest to an appropriate facility for treatment/recycling.

USING A GEOPROBE TO COLLECT SUBSURFACE VAPOR SAMPLES FOR HUMAN HEALTH RISK EVALUATION

- Do not mobilize to sample subsurface vapor if measurable precipitation or site irrigation near the sampling location has occurred within the previous 5 days;

- Drill continuous cores as necessary to identify permeable strata (target vapor sampling locations) then backfill the borings with Portland cement (previous assessment may have provided this data);

- Connect a PRT adaptor to approximately 10 to 15 feet of tubing (assuming the total depth of the boring will be approximately 5 feet below grade), install a vapor tight valve on the other end of the tubing, close the vapor tight valve, and seat the PRT adaptor into the bottom of the lead drill rod;

- Hydraulically push the Geoprobe rod to the target vapor sampling depth then raise the drill rod approximately 6 inches';

- Place hydrated bentonite around the drill rod to inhibit surface air migration down the outer portion of the drill rod (do not simply add water to a pile of bentonite chips or pellets placed around the drill rod);

- Connect a tee fitting to the top of each purge and sample Summa canister and install a pressure gauge on the top of this fitting;

- Connect 1 to 2 feet of tubing to the tee fitting on each purge and sample canister (the consultant may opt to install an optional valve on the downhole side of the tee connected to the purge canister);

- Connect the free ends of each of the above tubes to a separate (third) tee fitting;

- Connect a 100 to 200 milliliter/minute flow regulator to the downhole side of the third tee fitting and connect the laboratory supplied particulate filter to the downhole side of the regulator (if required);

- Connect the vapor-tight valve in Bullet #3 to the downhole side of the filter (or regulator if the filter was built-in to the regulator);

- Vacuum test the connections between the summa canisters and valve on the downhole side of the regulator for 10 minutes by opening and closing the purge canister valve to place a test vacuum on the assembly (terminate further work if gauge vacuum can not be maintained for 10 minutes);

- If gauge vacuum was maintained for 10 minutes and it has been at least 30 minutes since the drill rod was sealed at the surface with bentonite, then open the purge canister valve and the valve on the downhole side of the regulator to begin purging ambient air from the sampling apparatus and borehole (record the time purging commenced);

- Close the purge canister valve when three volumes of air have been purged from the sample apparatus and borehole (the consultant must know how to calculate the appropriate purge volume prior to mobilization - the adequacy of purging must be based on the inches of pressure drop on the purge canister gauge and not time);

- Open the sample canister valve to begin sample collection (record the time sample collection begins);

- Drop a few pieces of isopropyl alcohol (leak test compound) moistened gauze down the inside of the drill rod and on the downhole side of the valve on the borehole side of the regulator (tinfoil is useful to hold the gauze in place - be careful not to pour isopropyl alcohol directly on the tubing and sample apparatus connections);

- Remoisten the gauze with isopropyl alcohol every 5 minutes";

- Close the sample canister valve when the sample canister gauge indicates approximately 5 inches Hg of vacuum remain in the canister (this should take approximately 25 minutes for a 6L Summa canister connected to a 200 milliliters/minute flow regulator);

- Record the time sample collection was stopped and replace the tee fitting on the sample canister with the laboratory supplied brass plug;

- Label the sample and record on the chain of custody the sample name, final vacuum, and the canister and flow controller serial numbers;
- Store the sample in a container that blocks sunlight and do not subject the sample to significant changes in pressure and temperature (avoid airline shipping of sample containers);
- Remove the drilling rod and sampling apparatus and backfill the borehole with Portland cement mixed at 6 gallons of water per 94-pound bag of cement.

FOOTNOTES:

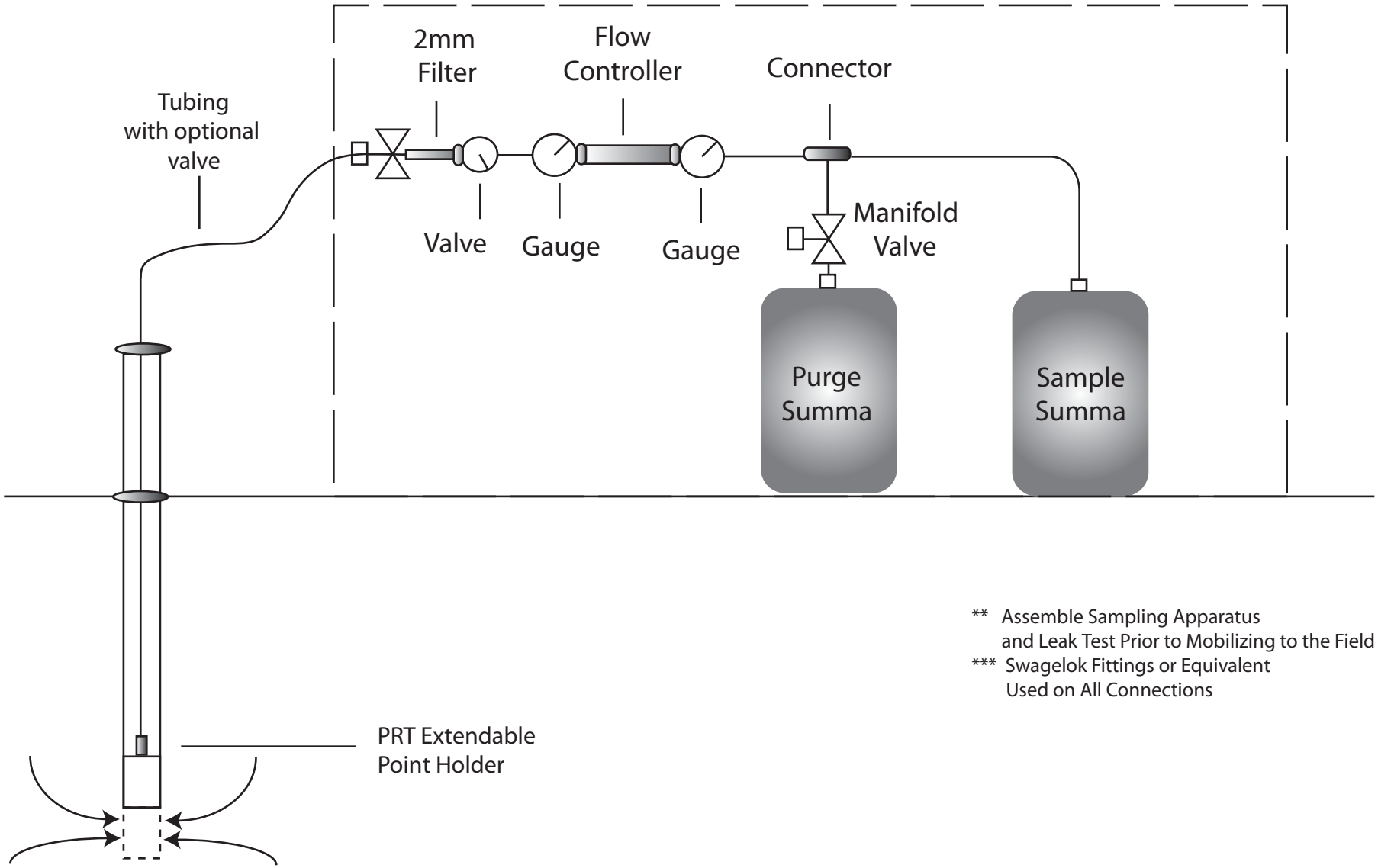
1 - Hard drilling conditions may shear off the PRT fitting during drilling. In these conditions you must install the PRT fitting/valve assembly after reaching the target drilling depth, but before lifting the drilling rod 6 inches.

2 - Isopropyl alcohol moistened gauze must be added to all fitting connections if the reduction in sample canister gauge vacuum indicates sample collection will exceed one hour.

GENERAL NOTES:

Assemble and leak check the sampling apparatus prior to mobilizing to the field.

Use Swagelok® type fittings or equivalent for all connections. Wear a new pair of gloves when you assemble the sampling apparatus to limit potential cross-contamination.



** Assemble Sampling Apparatus
and Leak Test Prior to Mobilizing to the Field
*** Swagelok Fittings or Equivalent
Used on All Connections

Soil Vapor Sampling Diagram

SOMA
ENVIRONMENTAL ENGINEERING, INC.