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Project: 01-2511

August 30, 2006

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

Subject: Site Located at 3820 Manila Avenue, Oakland, California

Former Glovatorium Facility

Dear Mr. Wickham:

SOMA's "Second Semi-Annual 2006 Groundwater Monitoring Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. 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/enclosure

Dr. Bruce Page, Bruce W. Page Consulting w/enclosure

Mr. Peter W. McGaw, ARCHER NORRIS w/enclosure

Mr. Stuart Depper



Second Semi-Annual 2006 Groundwater Monitoring Report The Former Glovatorium Facility

3820 Manila Avenue Oakland, California

August 30, 2006

Project 2511

Prepared for:

LOEB & LOEB LLP

10100 Santa Monica Boulevard, Suite 2200

Los Angeles, California 90067-4164

Prepared by:

SOMA Environmental Engineering, Inc. 6620 Owens Drive, Suite A Pleasanton, California 94588

Certification

This report has been prepared by SOMA Environmental Engineering, Inc. for the Law Offices of LOEB & LOEB LLP, to comply with the Alameda County Department of Environmental Health's requirements for the groundwater monitoring event, and to provide information necessary to defend claims brought against the owners by Earl Thompson and Grace Johnson.

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



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1.0 INTRODUCTION

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) for the Law Offices of LOEB & LOEB LLP on behalf of their client, the owners of the former Glovatorium. The property, the former Glovatorium, is located at 3820 Manila Avenue (formerly known as 3815 Broadway), Oakland, California (the "Site"), as illustrated in Figure 1. The Site is located in an area consisting primarily of commercial and residential developments.

This report summarizes the results of the groundwater monitoring event conducted at the Site on July 5 and 6, 2006, and included the laboratory results of the groundwater samples.

In addition to the above laboratory analyses, the natural attenuation study, which was initiated by Levine-Fricke Recon (LFR) in the Third Quarter of 2000, continued during this monitoring event. The objective of the natural attenuation study was to evaluate whether perchloroethylene (PCE) and other volatile organic compounds (VOCs) found in the groundwater were biodegrading. Therefore, groundwater samples collected during this monitoring event were analyzed for common electron acceptors and other geochemical indicators. The results of these analyses are described in this report.

All activities were performed in accordance with the general guidelines of the Regional Water Quality Control Board (RWQCB) and the Alameda County Environmental Health Services (ACEHS). Appendix A details the procedures used by SOMA during this monitoring event.

This work is needed to determine the nature and extent of the environmental contamination and whether contamination is affecting the neighboring Thompson property. This information is needed to defend against the claim Mr. Thompson brought against the owners of the Glovatorium, the Deppers. This work may also provide data that can help determine when the releases occurred, which is significant in defending against the claims brought by a former owner of the property, Ms. Johnson.

1.1 Site Description

The Site is located between Manila Avenue and Broadway, near the intersection of 38th Street in Oakland, California. The surface elevation ranges from approximately 78 to 84 feet above mean sea level (msl).

A 54-inch inside-diameter storm drain culvert passes under the property, from Manila Avenue on the west to 38th Street on the south (see 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 in a westerly direction from the on-site building and discharges into the sanitary sewer line, which runs north to south along Manila Avenue. Figure 2 shows the location of the storm drain and sanitary sewer system.

There were six underground storage tanks (USTs) at the Site. Two USTs were located under the sidewalk on 38th Street and four USTs were located inside the building. The volumes of the USTs have been variously reported as ranging from 800 gallons to 5,000 gallons. They reportedly contained Stoddard solvent, fuel oil and possibly waste oil. In August 1997, the six USTs were abandoned in-place by backfilling with either cement-sand slurry or pea gravel. In addition, there are three USTs owned by Earl Thompson, Sr., under the sidewalk on 38th Street, see Figure 2.

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

1.2 Background

Geosolv, LLC (Geosolv) initiated the first soil and groundwater investigation at the Site in August 1997. Geosolv, using the direct push method, drilled fourteen soil borings to the approximate depths of 10 to 24 feet bgs. Seven of the soil borings (B-2, B-3, B-7 through B-10 and B-13; see Figure 2) were converted into temporary groundwater monitoring wells, where grab groundwater samples were collected. In September 1998, Geosolv conducted further soil and groundwater investigations by drilling twelve additional soil borings to the approximate depths of 19 to 25 feet bgs. All of the twelve soil borings were converted into temporary groundwater sampling points, and are labeled E-15 through E-26. After collecting grab groundwater samples from the temporary "E" sampling points, they were abandoned and grouted. Figure 2a shows the locations of the soil borings.

In July 1999, an investigation of potential groundwater preferential flow paths was initiated by LFR. LFR drilled ten soil borings (GW-1 through GW-8, GW-5A, and GW-6A) primarily along the 54-inch diameter storm drain and sanitary sewer systems to depths ranging from 8 to 20 feet bgs. During drilling operations, soil samples were collected from various depth intervals. In August 1999, LFR collected grab groundwater samples from seven of the nine "GW" wells. Wells GW-1 to GW-6A are shown in Figure 2.

In January, April, October, and November 2000, LFR conducted groundwater monitoring events at the Site. In July and August 2000, LFR installed four groundwater monitoring wells, namely LFR-1 through LFR-4, as shown in Figure 2. Well completion details for the LFR wells and the Geosolv sampling points are presented in Table 1.

In January 2001, LFR conducted a second groundwater monitoring event that suggested the occurrence of strong anaerobic biodegradation activities and dechlorination of PCE beneath the Site. On April 26 to 27, 2001, SOMA began their initial groundwater monitoring events at the Site. The results of the Second Quarter 2001 monitoring event indicated a strong occurrence of the dechlorination process of PCE in the subsurface. In SOMA's June 2001 workplan, a recommendation was made to replace the existing small diameter monitoring wells, B-7 and B-10, with larger diameter wells, to better evaluate the bioattenuation parameters.

On October 4, 11, and 12, 2001, SOMA installed monitoring wells, SOMA-1 through SOMA-5. These wells are shown in Figure 2. During the installation of the wells, boreholes were continuously logged and soil samples were collected at 5-foot depth intervals to delineate the vertical extent of the soil and groundwater contamination.

Phase I of SOMA's workplan included installing additional groundwater monitoring wells, soil and groundwater sampling, conducting hydraulic testing, and a sensitive receptor survey. Phase II of the workplan included defining the Site's regulatory status by conducting groundwater flow, chemical fate and transport modeling, and a Risk-Based Corrective Action (RBCA). SOMA's "Report on Conducting Additional Field Investigation to Evaluate the Site's Conceptual Model," dated January 3, 2002, describes the results of the investigations conducted in Phase I.

The modeling aspect of Phase II was conducted using the results collected in Phase I and the analytical data from quarterly monitoring events. The main objective of the groundwater flow and chemical transport modeling was to predict groundwater chemical concentrations down-gradient from the Site, beneath the nearest residential neighboring property, in order to assess the Site's regulatory status and restore groundwater quality conditions to an acceptable level per the RBCA recommendations.

Groundwater flow, chemical transport, and bioattenuation modeling for the Site was conducted by SOMA in the first quarter of 2003. The modeling results confirmed the occurrence of biodegradation beneath the Site and indicated that the bioattenuation processes would be able to remove PCE in the groundwater in approximately seven to ten years, TCE in approximately three to nine years, and cis-1,2-DCE in approximately four to thirteen years. SOMA's March 7, 2003 report entitled "Groundwater Flow, Chemical Transport and Bioattenuation Modeling" describes the details of this study.

Based on the approval of the ACEHS, since the First Quarter 2003 groundwater monitoring events have been conducted on a semi-annual basis.

1.3 Site Geology and Hydrogeology

The Site is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland hills. Surface sediments in the Site's vicinity consist of Holocene alluvial deposits that are 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 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 tend 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.

Based on SOMA's October 2001 field investigation, no major water-bearing zone at a deeper depth was encountered. However, as the lithological logs of the newly installed groundwater monitoring wells indicate, the water-bearing zone is composed of fine-grained, clayey silt sediments separated by very low permeability intervening clay layers, which in some locations are unsaturated. For instance, SOMA-5, which has been screened within a significantly thick clay layer beneath the first water-bearing zone, from 21 to 26 feet bgs using the dual tubing method, was a dry well until the First Quarter 2002 sampling event. Due to the presence of unsaturated and low permeable intervening clay layers between the shallow and deep layers, there is a significant vertical downward gradient between the shallow and deep wells.

Based on the quarterly monitoring activities, the depths of groundwater has ranged from 4 to 14 feet bgs at gradients ranging from 0.019 ft/ft to 0.035 ft/ft. The groundwater flow has been predominantly northeast to southwest across the Site. The results of the slug tests indicate that the hydraulic conductivity of the saturated sediments range 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.

2.0 Results

This section describes the results of the groundwater monitoring event. It includes groundwater flow conditions, the status of the groundwater contamination, and the occurrence of bioattenuation in the subsurface.

2.1 Groundwater Flow Condition

Table 2 presents the calculated groundwater elevations in each well. Depths to water and the elevation at the top of the well casings were used to calculate the groundwater elevations. Groundwater elevations ranged from 62.47 feet in B-8 to 78.70 feet in SOMA-5. Refer to Table 2 for detailed groundwater elevation trends.

In evaluating the groundwater flow direction and gradient, water level data from all "B" wells, GW-4, SOMA-1, SOMA-2, SOMA-3, SOMA-4, and SOMA-5 were not utilized for the following reasons:

- 1. No accurate information about the construction details of the "B" wells, which were installed by Geosolv, is available; therefore water level data from these wells are questionable.
- 2. GW-4 was installed adjacent to the storm drain system in order to evaluate whether the storm drain system is leaking. This well was installed in the shallow formation and may partially penetrate into the underlying water-bearing zone. Therefore, the water level elevation recorded inside GW-4 may not be representative of the underlying water-bearing zone.
- 3. SOMA-1, SOMA-3 and SOMA-5 have been completed in the deeper zone, and due to the strong vertical gradient, the water level elevation in the deeper zone is significantly lower than the shallow water-bearing zone.
- 4. Due to the presence of free product in SOMA-4, the recorded water level elevation in this well is not representative of the shallow water-bearing zone.

Figure 3 displays a contour map of the groundwater elevations. The groundwater flows from the northeast to southwest at an average gradient of 0.024 ft/ft. The direction of the groundwater flow and gradient are consistent with the previous monitoring event. The groundwater flow and gradient are consistent with the previous monitoring event.

The field measurements of some physical and chemical parameters of the groundwater samples are presented in detail in the field notes in Appendix B, and are summarized in Table 3, along with their historical values. Water temperatures ranged from 15.80°C in B-10 to 20.10°C in LFR-3. The variation in temperature may reflect the changes in air temperature during sampling. Measurements of pH ranged from 6.56 in LFR-3 to 7.81 in SOMA-5. The EC measurements ranged from 454 μ S/cm in SOMA-5 to 1,270 μ S/cm in LFR-1.

2.2 Groundwater Quality

Table 4 displays the results of the laboratory analyses for total petroleum hydrocarbons as stoddard solvents, total petroleum hydrocarbons as gasoline

(TPH-g), Methyl tertiary Butyl Ether (MtBE) and benzene, toluene, ethylbenzene, total xylenes (BTEX). TPH-ss was below the laboratory reporting limit in wells GW-2, MW-11, LFR-1, LFR-3, and SOMA-1. Detectable TPH-ss levels ranged from 91 μ g/L in GW-3 to 25,000 μ g/L in SOMA-2. The groundwater sample collected from well GW-3 exhibited a stoddard solvent pattern that did not resemble the standard pattern. Furthermore, an unknown chromotagraphical single peak or peaks were observed during laboratory testing. The contour map of TPH-ss concentrations in the groundwater is illustrated in Figure 4.

TPH-g was below the laboratory reporting limit in wells GW-2, MW-11, LFR-1, LFR-3, and SOMA-1. Detectable TPH-g concentrations ranged from 140 μ g/L in GW-3 to 40,000 μ g/L in SOMA-2. The groundwater sample from both GW-3 and SOMA-2 exhibited a fuel pattern that did not resemble the standard gasoline pattern. The groundwater sample from well GW-3 also exhibited an unknown chromotagraphical single peak or peaks during laboratory testing. The groundwater sample in well SOMA-2 also may have been affected by the presence of heavier weight hydrocarbons. For further details on the variances in the analytical results refer to the lab report in Appendix C. The contour map of TPH-g concentrations in the groundwater is illustrated in Figure 5.

MtBE was below the laboratory reporting limit throughout the Site, with the exception of the samples collected from wells MW-11, LFR-4, SOMA-1 and SOMA-3. MtBE was detected in wells MW-11, LFR-4, SOMA-1 and SOMA-3 at 1 ug/L, 8.1 ug/L, 310 ug/L, and 500 ug/L respectively. The contour map of MtBE concentrations in the groundwater is illustrated in Figure 6. However, there is no known on-site source of MtBE.

In general, all BTEX constituents were below the laboratory reporting limit throughout the Site, with the exception of the samples collected from wells LFR-4 and SOMA-2. In well SOMA-2, toluene was detected at 61 ug/L; all other BTEX constituents were non-detectable. In well LFR-4, benzene, ethylbenzene, and total xylenes were detected at 59 ug/L, 8.1 ug/L, and 6 ug/L, respectively. No isoconcentration figure was drawn for benzene due to the overall low or non-detectable levels throughout the Site.

Refer to Table 4 for detailed total petroleum hydrocarbon, stoddard solvent, MtBE and BTEX groundwater concentration trends.

Table 5 shows the historical concentrations of VOCs in the groundwater. PCE was below the laboratory reporting limit in the groundwater samples collected from wells MW-11, LFR-2, LFR-4, SOMA-2, and SOMA-5. Detectable PCE concentrations ranged from 7.8 μ g/L in well LFR-1 to 400 μ g/L in well GW-3. The contour map of PCE concentrations in the groundwater is illustrated in Figure 7.

Trichloroethene (TCE) was below the laboratory reporting limit in the groundwater samples collected from wells GW-3, MW-11, LFR-2 to LFR-4,

SOMA-2, and SOMA-5. Detectable TCE concentrations ranged from 2.8 μ g/L in well SOMA-1 to 380 μ g/L in B-10. The contour map of TCE concentrations in the groundwater is illustrated in Figure 8.

Cis-1,2-dichloroethene (cis-1,2-DCE) was below the laboratory reporting limit in the groundwater samples collected from wells GW-3, MW-11, LFR-2, and LFR-3. Detectable cis-1,2-DCE concentrations ranged from 0.7 μ g/L in well GW-2 to 14,000 ug/L in well B-10. This demonstrates that biodegradation is occurring (see discussion below). The contour map of cis-1,2-DCE concentrations in the groundwater is illustrated in Figure 9.

Trans-1,2-dichloroethene (trans-1,2-DCE) was below the laboratory reporting limit throughout the Site, with the exception of the sample collected from well SOMA-2. Trans-1,2-DCE was detected in well SOMA-2 at 46 ug/L. Vinyl chloride (VC) was below the laboratory reporting limit throughout the Site, with the exception of the sample collected from well LFR-4; VC was detected at 0.7 ug/L in this well. 1,2-Dichloropropane (1,2-DCP) was below the laboratory reporting limit throughout the Site, with the exception of the sample collected from well SOMA-1. 1,2-DCP was detected in well SOMA-1 at 3.7 ug/L. In general, due to the low or non-detectable levels of these constituents throughout the Site no iso-concentration figures were drawn for trans-1,2-DCE, VC, and 1,2-DCP.

Refer to Table 5 for detailed PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, vinyl chloride, and 1,2-DCP groundwater concentration trends.

Appendix C includes the chain-of-custody forms and laboratory reports for the Second Semi-Annual 2006 groundwater monitoring event.

2.3 Bioattenuation Parameter Analysis Results

To evaluate whether intrinsic bioremediation processes are active at the Site a bioattenuation study was conducted during this monitoring event. The results of this study indicated that PCE and other dissolved organic compounds are biodegrading beneath the Site. For example, PCE levels in LFR-1 have dropped from 2,800 ug/L in 2000 to 7.8 ug/L. PCE levels in SOMA-2 have dropped from 1,400 ug/L in 2001 to less than 42 ug/L (lab reporting limit). SOMA's field crew measured the bioattenuation parameters in-situ. Dissolved methane, ethane, and ethene were measured in the laboratory. The field measurements were measured in-situ, within the well, to avoid introducing oxygen into the groundwater sample, which could result in erroneous readings.

Naturally occurring biological processes can enhance the removal rate of contaminants in the subsurface. During the degradation process, indigenous bacteria that exist in the subsurface utilize the energy released from the transfer of electrons to drive the redox reactions that remove organic mass from contaminated groundwater. The more positive the redox potential of an electron acceptor, the more energetically favorable is the reaction utilizing that electron

acceptor. Based on thermodynamic considerations, the most energetically preferred electron acceptor for redox reactions is dissolved oxygen (DO), followed by nitrate, manganese, ferric iron, sulfate, and carbon dioxide, in descending order of preference. Evaluating the distribution of these electron acceptors can provide evidence of where and to what extent chlorinated and aliphatic hydrocarbon biodegradation is occurring. The by-products of the biodegradation processes are nitrite, ferrous iron, alkalinity, sulfide, methane, and carbon dioxide. The groundwater samples were tested to evaluate the extent of bioattenuation processes beneath the Site. Table 6 summarizes these bioattentuation parameters.

Dissolved Oxygen. DO is the most favored electron acceptor used by microbes for the biodegradation of organic compounds. A DO concentration less than 0.5 mg/L indicates anaerobic conditions. DO levels ranged from 5.47 mg/L in well LFR-3 to 10.62 mg/L in B-10. The contour map of DO concentrations in the groundwater is illustrated in Figure 10.

It should be noted that due to the limitation of the drilling equipment, SOMA-3 is still a ¾ inch diameter well that was installed in the deeper zone, within the suspected chemical source area, which is inside the building. Although DO was measured in wells B-10, GW-2, SOMA-3, and SOMA-5, the results might not be representative of the overall subsurface condition. The purge cycles were limited due to the ¾-inch diameter well constructions at these locations. A low local recharge rate was also observed in well MW-11, which decreased the purge volume in this well.

Nitrate. After DO has been depleted, nitrate may be used as an electron acceptor for anaerobic biodegradation. Nitrate concentrations less than 1.0 mg/L may indicate that reductive dechlorination is occurring. Nitrate was below the minimal equipment tolerance level throughout the Site.

Manganese. After DO and nitrate have been depleted, manganese may be used as an electron acceptor for anaerobic biodegradation. Therefore, increased dissolved manganese concentrations in the groundwater are indicative of reductive dechlorination. Detectable manganese concentrations ranged from 0.3 mg/L in GW-2 to 7.4 mg/L in SOMA-2. Manganese was not detected in wells B-10 and SOMA-5. The contour map of dissolved manganese concentrations in the groundwater is illustrated in Figure 11.

Sulfate. After DO, nitrate, and manganese have been depleted, sulfate may be used as an electron acceptor for anaerobic biodegradation. This process is termed sulfate reduction, and results in the production of sulfide. Sulfate concentrations less than 20 mg/L are indicative of reductive dechlorination (EPA 1998). Sulfate was not detected in B-10, LFR-2, LFR-4, SOMA-2, SOMA-3, and SOMA-5. Detectable sulfate levels ranged from 6 mg/L in LFR-1 to the equipment's maximum allowable tolerance level of 80 mg/L in well MW-11. The

contour map of sulfate concentrations in the groundwater is illustrated in Figure 12.

Ferrous Iron. Increased ferrous iron accompanies anaerobic degradation. Ferric iron can be used as an electron acceptor during anaerobic biodegradation. During this process, ferric iron is reduced to ferrous iron, which may be soluble in water. Ferrous iron concentrations can thus be used as an indicator of anaerobic biodegradation. Ferrous iron was not detected in wells GW-2, GW-3, MW-11, LFR-1, LFR-3, and SOMA-1. Detectable ferrous iron concentrations ranged from 0.37 mg/L in well SOMA-3 to the equipment's maximum allowable tolerance level of 3.30 mg/L in wells B-10, LFR-2, LFR-4, and SOMA-2. The contour map of ferrous iron concentrations in the groundwater is illustrated in Figure 13.

Methane. The presence of methane in groundwater is indicative of strongly reduced conditions and suggests reductive dechlorination by the process of methanogenesis. Methane was below the laboratory reporting limit in wells GW-2, GW-3, MW-11, LFR-1, and LFR-3. Detectable methane concentrations ranged from 1.10 mg/L in SOMA-1 to 14 mg/L in SOMA-2. Higher concentrations of methane indicate conditions that are conducive to anaerobic biodegradation. The contour map of methane concentrations in the groundwater is illustrated in Figure 14.

Oxygen Reduction Potential (ORP). The ORP of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. ORP may range from greater than 800 mV to less than -400 mV, with lower values expected in areas where anaerobic processes are occurring. ORP measurements obtained in this sampling event ranged from -136 mV in LFR-2 to +99 mV in LFR-1.

Negative ORP values, detected in wells B-10, LFR-2, LFR-4, SOMA-2, SOMA-3, and SOMA-5, indicate that conditions in and near the apparent source area are conducive to anaerobic biodegradation. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

Refer to Table 6 for detailed bioattentuation parameter trends.

2.4 Other Parameters

As outlined in Table 3:

Alkalinity: Alkalinity is a general water quality parameter. High alkalinity levels are a result of interaction between carbon dioxide (a product of several biodegradation processes) and aquifer minerals. Due to the inconclusive nature of data collected during previous groundwater monitoring events in connection

with the bioattenuation process, no alkalinity data was collected during the current and previous groundwater monitoring events.

Chloride: Chloride is the final product of the reduction of chlorinated solvents, and also a general water quality parameter. Due to the inconclusive nature of data collected during the previous groundwater monitoring events in connection with the bioattenuation process, no chloride data was collected during this and previous groundwater monitoring events.

Carbon Dioxide: Carbon dioxide is a product of several biodegradation processes. Due to the inconclusive nature of data collected during the previous groundwater monitoring events in connection with the bioattenuation process, no carbon dioxide data was collected during the recent groundwater monitoring events.

Iron: Ferric iron may be used as an electron acceptor during anaerobic biodegradation. During this process, ferric iron is reduced to ferrous iron that may be soluble in water. Ferric iron concentrations may be obtained by subtracting ferrous iron concentrations from total iron concentrations. Total iron was not detected in GW-2, GW-3, MW-11, LFR-1, and LFR-3. Detectable total iron concentrations ranged from 0.30 mg/L in SOMA-1 to the equipment's maximum allowable tolerance level of 3.30 mg/L in wells B-10, LFR-2, LFR-4, SOMA-2, and SOMA-5.

Nitrite: Nitrate may reduce to nitrite during the process of anaerobic biodegradation. Nitrite was below the equipment's minimal tolerance level throughout the Site, with the exception of wells B-10 and SOMA-1. Nitrite was detected in wells B-10 and SOMA-1 at 0.122 mg/L and 0.011 mg/L, respectively.

Sulfide: When sulfate is used as an electron acceptor for anaerobic biodegradation it is reduced to sulfide. Due to the inconclusive nature of data collected during the previous groundwater monitoring events in connection with the bioattenuation process, sulfide data was not collected during the current groundwater monitoring event.

pH, Temperature, and Conductivity: The pH of groundwater has an effect on the activity of microbial populations in the groundwater, with optimal pH values ranging from 6 to 8 standard units for microbes capable of degrading PCE and other chlorinated aliphatic hydrocarbons. The groundwater temperature affects the metabolic activity of bacteria, and groundwater conductivity is directly related to the concentration of ions in solution. The pH, temperature, and conductivity values are included in Table 3.

3.0 FREE PRODUCT REMOVAL ACTIVITIES

Prior to the installation of a skimmer pump in SOMA-4, on January 28, 2004 there was over 9 feet of free product on the surface of the groundwater in this well. On February 6, 2004, SOMA installed a flexible axial peristaltic pump (FAP system) in SOMA-4 to remove free product.

Figure 15 illustrates the historical free product thickness measured in both wells SOMA-4 and B-8. Since the installation of the FAP system in February 2004, free product has significantly decreased in well SOMA-4. The thickness of free product in SOMA-4 has significantly reduced since June 2003.

In August 2004, SOMA converted borings B-3 and B-8 into wells for the purpose of removing free product from these locations. The FAP system was installed in SOMA-4 and B-8 to remove free product from these locations. As of June 27, 2006, approximately 1,585 gallons of free product and contaminated groundwater have been removed from wells SOMA-4 and B-8, and transported off-site by NRC. SOMA has continued to conduct the free product program for these wells, which includes actively checking the free product levels in these wells and removing it. Table 7 shows the field observations for wells SOMA-4 and B-8.

4.0 CONCLUSIONS AND RECENT ACTIVITIES

Based on the data obtained during the Second Semi-Annual 2006 groundwater monitoring event, our conclusions are as follows:

- 1. All analyzed constituents in the furthest down-gradient well, LFR-3, with the exception PCE (which was detected at 23 ug/L) were below the laboratory reporting limit. Furthermore, all analyzed constituents in the furthest up-gradient well, MW-11, with the exception of a trace MtBE concentration (1.0 ug/L), were below the laboratory reporting limit.
- 2. The data collected to date regarding the distribution of PCE and other VOCs in the groundwater demonstrate that PCE has degraded into some of its breakdown products. PCE levels in the source area have declined. For example, the level of PCE in SOMA-2 has dropped from 1,400 ug/L in 2001 to less than 42 ug/L. PCE typically degrades into TCE, then cis-1,2-DCE and then trans-1,2-DCE (at much lower concentrations than cis-1,2-DCE), then to vinyl chloride, ethane and ethene and finally carbon dioxide, water, and chloride. This sequence of degradation would be anticipated where the biological reductive dehalogenation of PCE is occurring. Some of these breakdown products and relative concentrations are present at the Site.
- 3. The presence of TCE in wells B-10, GW-2, LFR-1, SOMA-1, and SOMA-3, during the current sampling event, demonstrates that PCE degradation is

- occurring. The presence of concentrations of cis-1,2-DCE in wells B-10, GW-2, LFR-1, LFR-4, SOMA-1, SOMA-2, SOMA-3, and SOMA-5 is also indicative of biodegradation.
- 4. The results of DO, nitrate, manganese, sulfate, ferrous iron, methane, and ORP measurements demonstrate that conditions in the apparent source area are conducive to the reductive dechlorination processes.
- 5. In general, the apparent source area still appears to be in the region of wells SOMA-2, SOMA-3, SOMA-5, and B-10.
- 6. The PCE level found in LFR-3 (23 ug/L) was relatively low, and was below the level found in well GW-3 (400 ug/L). This is consistent with the results of the modeling study, which predicted that low levels of PCE could appear in the most downgradient monitoring well. However, based on the simulated results, the PCE plume in SOMA-2 and LFR-1 will gradually disappear in seven years. This is due to the natural bioattenuation of PCE caused by advection and dispersion processes.

SOMA recommends the following items:

- Continuing the free product program for wells B-8 and SOMA-4; and
- Continued sampling of temporary well B-10 during the semi-annual monitoring events.

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TABLES

Table 1
Construction Data for Temporary Sampling Points and Monitoring Wells
Former Glovatorium Site
3815 Broadway, Oakland, California

Location	Date Installed	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Total Depth (feet)	Screen Interval Depth (feet)	Screen Interval Elevation (feet)
	Tempo	rary Sampling	Points Installed	d by Geosolv	, LLC	
B-2	19-Aug-97	82.20	82.09	21	5 to 21	77.2 to 61.2
B-3 ¹	19-Aug-97	82.60	82.57	18	5 to 18	77.6 to 64.6
B-7	20-Aug-97	77.33	76.96	17.5	5 to 17.5	72.3 to 59.8
B-8	20-Aug-97	82.06	81.82	24	9 to 24	73.1 to 58.1
B-9	21-Aug-97	77.57	77.37	19.5	4.5 to 19.5	73.1 to 58.1
B-10	21-Aug-97	81.65	81.50	19	4 to 9	77.7 to 62.7
B-13	22-Aug-97	85.12	84.58	20	5 to 20	80.1 to 65.1
	Te	emporary Sam	pling Points Ins	talled by LFR		
GW-1	16-Jul-99	80.24	79.94	8	3 to 8	77.2 to 72.2
GW-2	16-Jul-99	79.44	79.14	20	10 to 20	69.4 to 59.4
GW-3	15-Jul-99	78.48	77.92	20	10 to 20	68.5 to 58.5
GW-4	16-Jul-99	82.55	82.37	12	7 to 12	75.6 to 70.6
GW-5	15-Jul-99	81.31	81.01	13	8 to 13	73.3 to 68.3
GW-6 ²	15-Jul-99	81.91	81.65	13.5	7.5 to 13.5	74.4 to 68.4
GW-6A ²	16-Jul-99	81.93	81.61	15	5 to 15	76.9 to 66.9
GW-7 ²	15-Jul-99	81.30	NS	20	10 to 20	71.3 to 61.3
GW-8 ²	16-Jul-99	80.28	80.10	20	10 to 20	70.3 to 60.3
	Ten	nporary Sampl	ing Points Insta	lled by TOSC	0	
MW-8	unknown	NS	87.44	unknown	unknown	unknown
MW-9	unknown	NS	86.56	unknown	unknown	unknown
MW-11	unknown	NS	84.13	unknown	unknown	unknown
	Gro		nitoring Wells In	stalled by LF		
LFR-1	28-Jul-00	NS	79.97	19	9 to 19	unknown
LFR-2	27-Jul-00	NS	81.89	19	9 to 19	unknown
LFR-3	27-Jul-00	NS	77.96	22	12 to 22	unknown
LFR-4	28-Jul-00	NS	81.65	19	9 to 19	unknown
			toring Wells Ins	•		
SOMA-1	4-Oct-01	82.31	81.64	40	25 to 40	42.31 to 57.71
SOMA-2	11-Oct-01	81.62	81.39	20	10 to 20	61.62 to 71.62
SOMA-3	11-Oct-01	81.65	81.42	30	21 to 26	60.65 to 71.51
SOMA-4	12-Oct-01	81.51	81.09	20	10 to 20	61.51 to 71.51
SOMA-5	12-Oct-01	61.68	81.50	26	21 to 26	55.68 to 60.68

Notes:

NS = Not surveyed.

Top of casing surveyed on south side on January 21, 2000, because the casing was broken.

² GW-7 was abandoned on July 15, 1999, in accordance with LFR's workplan dated May 6, 1999. GW-6 and GW-8 were abandoned on July 26, 2000, in accordance with LFR's workplan dated June 14, 2000.

Table 2
Historical Groundwater Elevation Data (feet)
Former Glovatorium Site
3815 Broadway, Oakland, California

Date	B-2	B-3	B-7	B-8	B-9	B-10	B-13
05-Jul-06	74.24	74.86	68.78	62.47	68.81	72.70	75.66
05-Jan-06	79.72	77.85	71.76	74.02	71.28	74.91	NM
05-Jul-05	74.49	75.23	69.05	NM	69.05	72.91	DRY
1-Feb-05	75.67	76.19	72.85	NM	69.76	73.54	75.90
03-Aug-04	73.52	73.46	68.03	73.90	68.22	72.13	75.57
29-Jan-04	74.99	75.31	70.01	NM	69.24	73.07	75.66
29-Jul-03	73.99	73.83	68.53	72.39	68.67	72.58	75.80
18-Feb-03	75.83	75.55	69.94	73.01	70.00	73.87	75.77
22-Oct-02	73.29	73.06	67.98	71.43	68.10	72.09	NM
17-Jul-02	74.02	73.82	NM	72.37	68.59	72.51	NM
16-Apr-02	75.16	75.34	69.41	73.54	69.38	73.21	NM
31-Jan-02	77.35 ^(FP)	77.16 (FP 0.5')	70.79	75.03 ^(FP 0.5')	70.43	74.14	77.53 ^(FP 0.7')
18-Oct-01	73.26 ^(0.25' FP)	73.24 ^(1' FP)	67.89	69.51 ^(2.1' FP)	67.98	71.96	DRY
26-Jul-01	73.86	73.17	68.69	70.41	68.73	72.61	DRY
26-Apr-01	75.26	74.00	69.60	73.19	69.80	73.61	
29-Jan-01	74.63	75.06	69.11	74.23	69.33	73.20	
2-Nov-00							
31-Oct-00							
30-Oct-00	74.34	74.84 ^(FP)	69.01	73.32	69.42	73.35	DRY
10-Aug-00							
9-Aug-00	73.9 ^(FP)	74.55 ^(FP)	68.61	72.8 ^(FP)	68.82	72.65	75.23
27-Apr-00	75.41 ^(FP)	75.86 ^(FP)	69.85 ^(FP)	74.14 ^(FP)	69.96	73.70	75.87
25-Jan-00							
24-Jan-00	75.93 ^(FP)	75.83	69.66 ^(FP)	72.84	70.25 ^(FP)	74.15 ^(FP)	
21-Jan-00							76.32
20-Jan-00	(EB)	(0)	(ED:	(ED)	(ED:	(FD)	
19-Jan-00	73.97 ^(FP)	73.22 ⁽²⁾	68.6 ^(FP)	71.81 ^(FP)	68.91 ^(FP)	73.02 ^(FP)	74.18
27-Aug-99	(4)			(4)	(4)	(0)	(0)
18-Feb-98	78.16 ⁽¹⁾	78.04 ⁽¹⁾	71.57 (1)	76.64 ⁽¹⁾	71.44 ⁽¹⁾	75.13 ⁽¹⁾	78.51 ⁽¹⁾
26-Oct-97	72.66 ⁽¹⁾	73.64 ⁽¹⁾	68.09 ⁽¹⁾	71.11 ⁽¹⁾	68.39 ⁽¹⁾	72.26 ⁽¹⁾	73.02 ⁽¹⁾

Table 2
Historical Groundwater Elevation Data (feet)
Former Glovatorium Site
3815 Broadway, Oakland, California

Date	GW-1	GW-2	GW-3	GW-4	GW-5	GW-6A	GW-8	MW-8	MW-9	MW-11
05-Jul-06	71.94	69.74	66.49	70.37	68.96	68.01	NM	77.74	77.72	72.47
05-Jan-06	72.13	70.29	68.06	75.08	70.59	69.01	NM	80.66	79.96	71.51
5-Jul-05	DRY	69.38	67.03	73.57	69.53	68.03	NM	77.81	77.73	70.21
1-Feb-05	72.13	68.72	67.91	74.40	69.89	68.04	NM	78.46	78.42	71.68
3-Aug-04	72.13	68.19	67.54	72.54	69.46	67.93	NM	NM	NM	73.22
29-Jan-04	NM	68.37	68.05	74.69	68.71	68.00	NM	77.82	78.76	74.08
29-Jul-03	NM*	68.69	67.67	72.61	68.82	67.97	NM	77.44	77.11	73.78
18-Feb-03	NM*	69.02	68.26	74.75	70.35	67.97	NM	78.82	78.59	74.68
22-Oct-02	NM*	67.92	67.78	71.70	68.67	67.85	NM	76.89	76.51	73.12
17-Jul-02	NM*	68.61	67.78	72.65	68.76	67.95	NM	77.27	77.12	73.90
16-Apr-02	NM	69.76	68.14	74.11	68.68	68.07	NM	77.97	NM	74.98
31-Jan-02	-	69.77	68.28	74.83	68.78	68.06		78.86	79.41	75.48
18-Oct-01	NM	67.91	67.67	74.22	68.41	67.81		76.81	76.46	72.97
26-Jul-01	NM	68.55	67.84	73.85	68.77	68.00		77.40	77.03	73.73
26-Apr-01	NM	69.41	67.93	74.59	68.43	68.43				74.81
29-Jan-01	71.99	68.62	67.89	74.92	68.61	67.90		78.14	77.95	73.79
2-Nov-00								78.38	78.31	
31-Oct-00										
30-Oct-00		68.45	67.95	74.55	68.64	68.16				73.62
10-Aug-00								77.26	77.14	
9-Aug-00	DRY	69.11	66.54	DRY	68.71	67.88				74.12
27-Apr-00	DRY	70.59	68.16	73.97	68.70	68.00	71.34	79.15	77.25	75.35
25-Jan-00										73.48
24-Jan-00										
21-Jan-00		68.32		74.33						
20-Jan-00			67.93		68.61		70.42			
19-Jan-00	DRY	68.24	67.86	74.71	68.61	67.63	70.44			
27-Aug-99	DRY	68.46	67.66	NM	68.71	67.71	70.60			
18-Feb-98										
26-Oct-97										

Table 2
Historical Groundwater Elevation Data (feet)
Former Glovatorium Site
3815 Broadway, Oakland, California

Date	LFR-1	LFR-2	LFR-3	LFR-4	SOMA-1	SOMA-2	SOMA-3	SOMA-4	SOMA-5
05-Jul-06	70.36	71.29	67.60	69.33	68.99	72.59	71.02	71.11	78.70
05-Jan-06	70.97	74.56	69.04	NM	70.11	74.60	71.99	FP	76.78
5-Jul-05	70.26	71.52	67.45	69.31	68.55	72.78	70.65	FP	78.66
1-Feb-05	70.61	72.64	68.09	NM	69.08	73.20	71.05	NM	78.92
3-Aug-04	70.13	70.70	66.42	NM	67.24	69.34	72.03	NM	62.18
28-Jan-04	70.41	NM	67.44	69.13	68.33	70.35	73.00	FP	58.50
29-Jul-03	70.18	70.96	66.71	68.37	67.84	69.84	72.48	FP	57.18
18-Feb-03	70.63	73.08	67.61	69.44	68.77	70.74	73.77	NM	56.59
22-Oct-02	70.00	70.48	66.13	67.85	66.92	69.00	72.01	NM	59.43
17-Jul-02	70.18	70.98	67.67	68.33	67.62	72.40	69.64	NM	59.53
16-Apr-02	70.36	71.71	67.60	69.27	68.85	73.06	70.90	68.56	59.48
31-Jan-02	70.56	71.92	67.72	NM	69.36	73.98	71.46	69.79 ^(FP 2.5')	57.38
18-Oct-01	70.04	70.53	66.09	67.74	67.89	71.86	68.32	69.77	NM
26-Jul-01	70.16	70.92	66.56	68.33					
26-Apr-01	70.23	71.90	67.62	68.87					
29-Jan-01	70.44	72.04	66.96	67.92					
2-Nov-00									
31-Oct-00				68.14					
30-Oct-00	70.22	71.62	66.99						
10-Aug-00									
9-Aug-00	70.16	69.99	66.76	68.39					
27-Apr-00									
25-Jan-00									
24-Jan-00									
21-Jan-00									
20-Jan-00									
19-Jan-00									
27-Aug-99									
18-Feb-98									
26-Oct-97									

Notes:

NM: not measured

FP= Floating product or sheen was observed.

¹⁼ Survey elevation and water-level measurement taken at concrete surface. Elevations and water levels without a "1" were measured from top of casing.

²⁼ Top of the casing was re-surveyed because it was broken.

^{*} Monitoring well GW-1 was dry

Former Glovatorium Site

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	рН	Temp (°C)	Electrical Conductivity (µS/cm)
Temporary Sa	ampling Points	Installed by	Geosolv, L	LC								
B-7	11-Aug-00	760	39	202				<0.0005	<0.0005	6.86	17.55	1279
B-7 field	11-Aug-00					-1.00	0.05					
	31-Oct-00	760	42	200	14.00	<0.1	<2.0					
B-7 field	31-Oct-00				17.22	-1.00	-1.00			6.16	16.05	1454
	31-Jan-00	720	43	170	12.00	<0.1	<2.0					
B-7 field	31-Jan-00									6.79	13.90	1424
	26-Apr-01				>3.3	0.24				6.59	16.30	1340
	26-Jul-01				15.30	0.02				6.39	15.97	1400
B-10 field	10-Aug-00					0.02	0.06					
B-10	31-Oct-00	500	76	120	6.60	<0.1	<2.0					
	31-Oct-00				8.35	0.00	0.00			6.21	16.62	1051
	31-Jan-01	480	81	72	6.10	<0.1	<2.0					
	31-Jan-01				1.44	0.07				6.81	14.66	1117
	11-Jun-01				1.31					6.65	16.70	1090
	26-Jul-01				6.50	0.00				6.38	16.09	1160
	10-Aug-01	520	74	145	6.00	<0.05	<0.04	<0.0005	0.00	6.86	16.80	1130
	6-Jul-05	NM	NM	NM	3.30	0.348	NM	<0.005	<0.005	6.70	16.55	1420
	9-Jan-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.68	16.48	1410
	6-Jul-06	NM	NM	NM	3.30	0.122	NM	<0.005	<0.005	7.19	15.80	1170
Temporary Sa	ampling Points	Installed by	LFR									
GW-2	01-Nov-00									6.31	18.97	1218
	30-Jan-01			63								
GW-2 field	31-Jan-01									6.82	13.75	846
	26-Apr-01				0.02					6.80	19.50	874
	26-Jul-01				0.03	0.02				6.74	20.30	803
	19-Oct-01	NM	NM	NM	NM	NM	NM	NM	NM	6.84	21.30	786

Former Glovatorium Site

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	рН	Temp (°C)	Electrical Conductivity (µS/cm)
GW-2 cont.	31-Jan-02	NM	NM	NM	1.05	0.01	NM	NM	NM	6.70	17.70	797
	16,17-Apr-02	NM	NM	NM	0.65	0.02	NM	NM	NM	6.38	17.00	707
	17,18-Jul-02	NM	NM	NM	1.39	0.00	NM	NM	NM	6.35	17.75	798
	23-Oct-02	NM	NM	NM	0.12	0.04	NM	NM	NM	6.73	19.78	670
	19-Feb-03	NM	NM	NM	0.10	0.02	NM	NM	NM	6.86	18.10	607
	29-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	7.26	20.10	651
	29-Jan-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.72	18.00	542
	4-Aug-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.85	19.92	561
	2-Feb-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.82	18.34	503
	6-Jul-05	NM	NM	NM	0.00	0.00	NM	<0.005	<0.005	6.78	19.07	529
	6-Jan-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.88	17.89	510
	6-Jul-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.99	17.80	657
GW-3	11-Aug-00	340	25	54				<0.0005	<0.0005	7.05	21.43	860
GW-3 field	11-Aug-00					0.05	-1.00					
GW-3 field	1-Nov-00									6.52	18.83	967
	1-Feb-01			54								
GW-3 field	29-Jan-01									6.89	17.29	602
	11-Jun-01				0.00	0.70				5.68	16.20	673
	26-Jul-01				0.14	0.00				6.53	22.25	547
	19-Oct-01	NM	NM	NM	0.00	NM	NM	NM	NM	6.84	22.56	590
	31-Jan-02	NM	NM	NM	0.14	0.01	NM	NM	NM	6.70	18.40	593
	16,17-Apr-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.64	16.61	526
	17,18-Jul-02	NM	NM	NM	1.08	0.01	NM	NM	NM	6.32	17.10	545
	23-Oct-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.36	19.80	425
	19-Feb-03	NM	NM	NM	0.08	0.01	NM	NM	NM	6.77	17.80	412
	29-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	7.07	19.40	490
	29-Jan-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.65	18.20	450
	3-Aug-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.74	20.20	436
	2-Feb-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.28	19.39	445
	6-Jul-05	NM	NM	NM	0.00	0.00	NM	<0.005	<0.005	6.90	18.99	415
	6-Jan-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.89	18.75	471
	6-Jul-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.90	17.30	560

Table 3 Historical Analytical Results and Field Measurements for

Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples Former Glovatorium Site

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	pН	Temp (°C)	Electrical Conductivity (μS/cm)
GW-4	30-Jan-01									6.60	13.48	479
	26-Jul-01				2.00	0.04				6.45	19.44	827
	19-Oct-01	NM	NM	NM	11.00	NM	NM	NM	NM	6.79	18.36	732
	31-Jan-02	NM	NM	NM	12.70	0.01	NM	NM	NM	6.50	12.00	414
	16,17-Apr-02	NM	NM	NM	6.40	0.03	NM	NM	NM	6.34	13.98	467
	17,18-Jul-02	NM	NM	NM	>3.3	0.03	NM	NM	NM	6.49	21.93	572
	23-Oct-02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.67	13.60	466
	30-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	7.30	18.70	430
	29-Jan-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.85	13.00	534
	3-Aug-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.96	22.62	509
	1-Feb-05	NM	NM	NM	3.30	0.00	NM	NM	NM	6.80	13.25	382
	6-Jul-05	NM	NM	NM	3.30	0.028	NM	<0.005	<0.005	6.98	18.71	403
	5-Jan-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.72	17.98	610
	ells Owned by		T								1	
MW-11	10-Aug-00	360	110	216	0.13	<0.05	<0.04	<0.0005	<0.0005	6.47	21.00	1
MW-11 field	10-Aug-00					0.04	0.00					
	1-Nov-00	300	120	190	<0.05	<0.1	<2.0					,
MW-11 field	1-Nov-00		400	450	0.01	0.00	-1.00			5.83	20.13	1
	31-Jan-01	330	130	150	<0.05	<0.1	<2.0					,
MW-11 field	31-Jan-01									6.35	13.67	1
	26-Apr-01				0.01					5.67	18.00	1210
	26-Jul-01		l		0.00	0.02	l	l		6.02	19.85	1120
	19-Oct-01	NM	NM	NM	0.00	NM	NM	NM	NM	6.41	21.25	130
	31-Jan-02	NM	NM	NM	0.05	0.04	NM	NM	NM	6.60	18.50	1090
	16,17-Apr-02	NM	NM	NM	0.00	0.00	NM	NM	NM	5.87	18.70	1150
	17,18-Jul-02 23-Oct-02	NM NM	NM NM	NM NM	0.00 0.00	0.02 0.04	NM NM	NM NM	NM NM	6.27 6.62	18.37 20.81	1180 1220
	18-Feb-03	NM	NM	NM	0.00	0.04	NM	NM	NM	6.49	19.50	1170
	30-Jul-03	NM	NM	NM	0.00	0.04	NM	NM	NM	6.92	19.70	941
	29-Jan-04	NM	NM	NM	0.00	1.80	NM	NM	NM	6.61	19.00	1000
	3-Aug-04	NM	NM	NM	0.00	0.00	NM	NM	NM	8.86	21.70	825
	1-Feb-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.43	20.55	856
	5-Jul-05	NM	NM	NM	0.00	0.00	NM	<0.005	<0.005	6.16	20.25	1130
	5-Jan-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.39	20.61	817
	5-Jul-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.61	19.10	1120

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	рН	Temp (°C)	Electrical Conductivity (µS/cm)
Monitoring W	ells installed by	/ LFR										
LFR-1	11-Aug-00	250	110					<0.0005	<0.0005	6.97	19.73	936
LFR-1 field	09-Aug-00			51		0.02	-1.00					
	30-Oct-00	240	100	25	<0.05	<0.1	<2					
LFR-1 field/sp	30-Oct-00				0.01/0.01	0.031/0.036	0.001/0.001	İ		6.38	17.94	697
LFR-1-spl	30-Oct-00	220	100	40	<0.05	<0.1	<2	I				
·	29-Jan-01	150	76	28	<0.05	<0.1	<2					
LFR-1 field	29-Jan-01				0.00	0.04				6.82	15.00	870
LFR-1 Dup	29-Jan-01	150	75	26	<0.05	<0.1	<2					
·	26-Apr-01				0.00					5.76	16.80	980
	26-Jul-01				0.05	0.01				6.48	19.38	772
	26-Jul-01	NM	NM	NM	0.42	NM	NM	NM	NM	6.73	20.83	661
	31-Jan-02	NM	NM	NM	0.03	0.01	NM	NM	NM	6.50	16.50	879
	16,17-Apr-02	NM	NM	NM	0.75	0.02	NM	NM	NM	5.88	16.37	1120
	17,18-Jul-02	NM	NM	NM	0.22	0.01	NM	NM	NM	6.40	17.02	832
	23-Oct-02	NM	NM	NM	0.30	0.00	NM	NM	NM	6.54	20.09	803
	18-Feb-03	NM	NM	NM	0.40	0.00	NM	NM	NM	6.47	16.90	607
	30-Jul-03	NM	NM	NM	0.02	0.00	NM	NM	NM	6.92	19.20	1330
	29-Jan-04	NM	NM	NM	0.00	5.10	NM	NM	NM	6.62	18.00	830
	4-Aug-04	NM	NM	NM	0.47	0.00	NM	NM	NM	6.39	19.01	1260
	2-Jan-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.73	17.80	744
	6-Jul-05	NM	NM	NM	0.09	0.002	NM	<0.005	<0.005	6.69	18.26	1360
	6-Jan-06	NM	NM	NM	0.03	0.000	NM	<0.005	<0.005	6.31	19.06	1260
	6-Jul-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.59	17.10	1270
LFR-2	11-Aug-00	590	33	174				<0.0005	0.00	7.15	19.87	1088
LFR-2 field	11-Aug-00				2.95	-1.00	0.01					
	02-Nov-00	550	40	180	6.20	<0.1	<2					
LFR-2 field	02-Nov-00				7.45	0.01	0.00			6.19	19.67	1306
	30-Jan-01	480	21	130	4.60	<0.1	<2					
LFR-2 field	30-Jan-01				1.04	0.01				6.60	12.73	945
	27-Apr-01				2.97					5.64	16.40	921
	26-Jul-01				4.60	0.01				6.31	18.66	970
	18-Oct-01	NM	NM	NM	8.20	NM	NM	NM	NM	6.78	19.56	109

Former Glovatorium Site

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	pН	Temp (°C)	Electrical Conductivity (μS/cm)
LFR-2 cont.	31-Jan-02	NM	NM	NM	1.97	0.05	NM	NM	NM	6.50	16.60	644
	16,17-Apr- 02	NM	NM	NM	7.60	0.06	NM	NM	NM	6.19	16.43	845
	17,18-Jul-02	NM	NM	NM	8.80	0.00	NM	NM	NM	6.52	16.24	986
	23-Oct-02	NM	NM	NM	3.30	0.06	NM	NM	NM	6.84	18.09	812
	18-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.50	16.90	617
	30-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	7.15	17.30	861
	29-Jan-04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	4-Aug-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.76	17.39	795
	1-Feb-05	NM	NM	NM	2.25	0.00	NM	NM	NM	6.46	17.68	559
	5-Jul-05	NM	NM	NM	3.30	0.00	NM	<0.005	<0.005	6.56	18.18	712
	5-Jan-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.58	18.23	721
	6-Jul-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.91	17.90	679
LFR-3	10-Aug-00	310	85	162	<0.1	0.15	0.04	<0.0005	<0.0005	6.57	19.92	951
LFR-3 split	10-Aug-00	300	85	152				<0.0005	<0.0005			
LFR-3 field	10-Aug-00					0.06	-1.00					
	01-Nov-00	350	66	160	<0.05	<0.1	<2					
LFR-3 field	01-Nov-00				0.01	0.01	0.00			6.16	17.71	1164
	30-Jan-01	250	31	71	<0.05	<0.1	<2					
LFR-3 field	30-Jan-01				0.03					6.64	17.29	541
	11-Jun-01				0.01					5.43	18.00	613
	26-Jul-01				0.70	0.03				6.25	20.50	602
	18-Oct-01	NM	NM	NM	0.12	NM	NM	NM	NM	6.50	21.39	645
	31-Jan-02	NM	NM	NM	0.06	0.02	NM	NM	NM	6.30	19.10	566
	16,17-Apr-02	NM	NM	NM	1.20	0.04	NM	NM	NM	5.78	18.68	566
	17,18-Jul-02	NM	NM	NM	0.08	0.01	NM	NM	NM	6.17	18.42	585
	23-Oct-02	NM	NM	NM	1.35	0.00	NM	NM	NM	6.32	20.65	457
	19-Feb-03	NM	NM	NM	0.74	0.00	NM	NM	NM	6.34	19.30	497
	30-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	6.87	19.80	457
	29-Jan-04	NM	NM	NM	1.70	0.00	NM	NM	NM	6.60	20.00	393
	3-Aug-04	NM	NM	NM	0.34	0.00	NM	NM	NM	6.24	19.96	415
	2-Feb-05	NM	NM	NM	0.12	0.00	NM	NM	NM	6.17	20.06	381
	5-Jul-05	NM	NM	NM	3.30	0.205	NM	<0.005	<0.005	6.39	20.01	463
	9-Dec-05	NM	NM	NM	NM	NM	NM	<0.005	<0.005	NM	NM	NM
	6-Jan-06	NM	NM	NM	2.16	0.001	NM	<0.005	<0.005	6.27	20.42	461
	5-Jul-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.56	20.10	640

Former Glovatorium Site

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	рН	Temp (°C)	Electrical Conductivity (μS/cm)
LFR-4	11-Aug-00	630	71	161				<0.0005	<0.0005	6.90	20.11	1240
LFR-4 FB	10-Aug-00							<0.0005	<0.0005			
LFR-4 field	11-Aug-00				0.22	0.02	0.00					
	31-Oct-00	490	28	130	1.00	<0.1	<2					
LFR-4 field	31-Oct-00				0.67	0.02	0.00			6.21	18.11	830
	01-Feb-01	460	25	120	1.30	<0.1	<2					
LFR-4 field	01-Feb-01				1.43	0.02				6.55	15.28	916
	27-Apr-01				1.44					5.79	18.30	1060
	26-Jul-01				0.95	0.00				6.26	19.23	866
	16,17-Apr-02	NM	NM	NM	5.10	0.03	NM	NM	NM	6.19	18.04	925
	17,18-Jul-02	NM	NM	NM	>3.3	0.01	NM	NM	NM	5.92	17.28	878
	23-Oct-02	NM	NM	NM	3.30	0.00	NM	NM	NM	6.69	19.90	602
	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.38	19.10	994
	29-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.94	19.00	994
	29-Jan-04	NM	NM	NM	0.71	0.00	NM	NM	NM	6.53	19.50	689
	5-Jul-05	NM	NM	NM	3.30	0.00	NM	<0.005	<0.005	6.49	19.20	772
	5-Jan-06	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5-Jul-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.75	18.90	912
Monitoring W	ells installed by	SOMA										
SOMA-1	19-Oct-01	NM	NM	NM	0.75	NM	NM	NM	NM	6.77	18.15	146
	31-Jan-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.70	17.50	1160
	16,17-Apr-02	NM	NM	NM	0.17	0.03	NM	NM	NM	6.01	17.98	1280
	17,18-Jul-02	NM	NM	NM	0.11	0.01	NM	NM	NM	6.52	16.21	1270
	23-Oct-02	NM	NM	NM	0.24	0.01	NM	NM	NM	6.60	17.77	1270
	19-Feb-03	NM	NM	NM	0.00	0.01	NM	NM	NM	6.33	17.40	1350
	30-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	6.90	17.80	1300
	29-Jan-04	NM	NM	NM	2.10	0.00	NM	NM	NM	6.51	17.60	959
	3-Aug-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.42	17.89	956
	1-Feb-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.26	17.70	985
	5-Jul-05	NM	NM	NM	0.19	0.00	NM	<0.005	<0.005	6.36	19.36	1220
	5-Jan-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.54	18.02	926
	5-Jul-06	NM	NM	NM	0.30	0.011	NM	<0.005	<0.005	6.68	18.40	1150

Former Glovatorium Site

3815 Broadway, Oakland, California

Well Name	Date Sampled	Alkalinity (mg/L)	Chloride (mg/L)	Carbon Dioxide (mg/L)	Total Iron (mg/L)	Nitrite (mg/L)	Sulfide (mg/L)	Ethane (mg/L)	Ethene (mg/L)	рН	Temp (°C)	Electrical Conductivity (μS/cm)
SOMA-2	19-Oct-01	NM	NM	NM	44.00	NM	NM	NM	NM	6.87	16.93	122
	31-Jan-02	NM	NM	NM	10.50	0.34	NM	NM	NM	6.90	15.20	1140
	16,17-Apr-02	NM	NM	NM	8.70	0.01	NM	NM	NM	6.30	15.25	1170
	17,18-Jul-02	NM	NM	NM	>3.3	0.00	NM	NM	NM	6.86	14.19	1170
	23-Oct-02	NM	NM	NM	3.30	0.00	NM	NM	NM	6.97	16.47	1380
	19-Feb-03	NM	NM	NM	2.93	0.01	NM	NM	NM	6.86	15.70	1420
	29-Jul-03	NM	NM	NM	1.37	0.00	NM	NM	NM	7.91	16.80	1290
	28-Jan-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.65	16.60	835
	4-Aug-04	NM	NM	NM	0.34	0.00	NM	NM	NM	6.78	16.76	1180
	2-Feb-05	NM	NM	NM	3.30	0.00	NM	NM	NM	6.52	15.96	1310
	6-Jul-05	NM	NM	NM	3.30	0.00	NM	<0.005	<0.005	6.64	16.12	1290
	9-Jan-06	NM	NM	NM	3.30	0.001	NM	<0.005	<0.005	6.92	16.30	982
	6-Jul-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	7.08	16.00	1170
SOMA-3	19-Oct-01	NM	NM	NM	0.40	NM	NM	NM	NM	6.91	17.09	158
	31-Jan-02	NM	NM	NM	0.78	0.38	NM	NM	NM	6.50	14.90	1320
	16,17-Apr-02	NM	NM	NM	1.03	0.00	NM	NM	NM	6.23	15.83	1260
	17,18-Jul-02	NM	NM	NM	>3.3	0.00	NM	NM	NM	6.77	15.03	1290
	23-Oct-02	NM	NM	NM	3.30	0.03	NM	NM	NM	7.02	16.44	970
	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.87	15.80	1350
	29-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	7.27	16.20	1200
	29-Jan-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.75	16.20	925
	4-Aug-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.79	16.43	956
	2-Feb-05	NM	NM	NM	0.15	0.00	NM	NM	NM	6.62	16.64	968
	6-Jul-05	NM	NM	NM	1.12	0.00	NM	<0.005	<0.005	6.56	16.79	935
	6-Jan-06	NM	NM	NM	0.49	0.000	NM	<0.005	<0.005	6.38	16.84	1120
	6-Jul-06	NM	NM	NM	0.53	0.000	NM	<0.005	<0.005	7.11	16.00	1020
SOMA-4	Oct-19-01	NM	NM	NM	0.26	NM	NM	NM	NM	6.53	16.88	145
	23-Oct-02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	19-Feb-03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	29-Jul-03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5-Jul-05	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	5-Jan-06	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
SOMA-5	4-Aug-04	NM	NM	NM	3.30	0.00	NM	NM	NM	7.14	16.98	773
	2-Feb-05	NM	NM	NM	3.30	0.00	NM	NM	NM	7.20	15.99	549
	6-Jul-05	NM	NM	NM	3.30	0.00	NM	<0.005	<0.005	6.75	16.99	1150
	9-Jan-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.78	16.72	1200
	6-Jul-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	7.81	16.30	454

Notes

Samples with "field" in the well ID indicate that the results are from field measurements obtained using a Hach spectrometer or a Hydrolab Quanta flow-through instrument.

since April 2001, field measurements have been performed using a Hach Calorimeter NM= not measured

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

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)
		Temp	orary Sampling	Points Installe	ed 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 ³	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-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 °	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
B-13	24-Jan-00	1.7 ^J	3 YJ	<0.01	<0.0025	<0.0025	<0.0025	0.0200
		T	emporary Sam	pling Points In	stalled 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

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

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)
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
	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
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

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

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)
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
	T							
GW-5	27-Aug-99	<0.05	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001
	20-Jan-00	<0.05 0.05 ^Y	0.057 ^Y 0.096 ^Y	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00			<0.002	<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 0.087 ^Y	0.0022	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	<0.05		<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

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

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)
			Monitoring	Wells Owned b	y 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
	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
			Monitoring	Wells Installe	d 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

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

/ell 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)
	 							
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 ^{H Y}	<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
	, , , , , , , , , , , , , , , , , , , ,		<u> </u>	101000	100000			
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
	2-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
		<0.05				1	1	<0.0005
		<0.05		1				<0.0005
		<0.05 <0.05					1	<0.0005
	9-Dec-05 6-Jan-06 5-Jul-06	<0.	05	05 <0.05	05 <0.05 <0.0005	05 <0.05 <0.0005 <0.0005	05 <0.05 <0.0005 <0.0005 <0.0005	05 <0.05 <0.0005 <0.0005 <0.0005 <0.0005

Table 4 Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples Former Glovatorium Site

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)
	 							
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
			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
	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
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
	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

Table 4

Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples

Former Glovatorium Site 3815 Broadway, 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)
SOMA-2 cont.	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 6-Jul-06	67 25	93 ^{HY} 40 ^{HY}	<0.042 <0.042	<0.042 <0.042	0.054 0.061	<0.042 <0.042	<0.042 <0.042
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
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
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	0.450 ^{YZ}	0.720 ^{YZ}	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:

- Analysis was carried out npast the hold date, no analytical problems were encountered
- Presence of this compound confirmed by second column, however, the confirmation concentration different from reported results by more than a factor of two.
- Heavier hydrocarbons than the standard are present in the sample.
- J Result is estimated.
- Lighter hydrocarbons contributed to the quantitation
- NA = Not analyzed, LFR-4 was not analzed during the Second Quarter 2002 due to the well being inaccessible.
- Not Analyzed. Well LFR-4 inaccessible during the Third Quarter 2004 Monitoring Event.
- Sample exhibits fuel pattern which does not resemble standard.
- Z Sample exhibits unknown single peak or peaks.

FP: Free product detected in SOMA 4.

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.

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)
		Tempora	ry Sampling Po	ints 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-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
B-13	24-Jan-00	0.020	0.029	0.13	0.005	< 0.0005	< 0.0005

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)
		Tem	porary Samplin	g Points Installe	ed 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
GW-2 cont.	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
	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
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

Vell 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)
GW-4	19-Jul-99	< 0.0005	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
	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
	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
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
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

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)
			Monitoring wel	Is owned by TO	SCO		
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
	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

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)
			Monitoring we	lls 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
LFR-2	11-Aug-00	< 0.0005	< 0.0005	0.035	< 0.0005	0.005	< 0.0005
	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

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)
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
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

Table 5 Historical Analytical Results For Volatile Organic Compound Analyses in Groundwater Samples

at the Former Glovatorium Site 3815 Broadway, Oakland, California

Well Name	Date Sampled	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	1,2-DCP
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
				Is installed by S			
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 <0.025	0.0059
	3-Aug-04	0.019	<0.013	0.038	<0.013		<0.013
	1-Feb-05	0.022	<0.017	0.028	<0.017 <0.0017	<0.033	<0.017 0.0046
	5-Jul-05 5-Jan-06	0.041 0.019	0.0026 0.0013	0.051 0.028	<0.0017	<0.0017 <0.0005	0.0046
	5-Jul-06	0.019	0.0013	0.028	<0.003	<0.003	0.0026 0.0037
	3-Jul-06	0.037	0.0026	0.037	<0.002	<0.002	0.0037
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						
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 <0.170	<0.017 <0.170	0.44	<0.017 <0.170	<0.033 <0.330	<0.017 <0.170
	22,23-Oct-02 19-Feb-03	<0.170	<0.170	5.90 4.10	<0.170	<0.250	<0.170
	29-Jul-03	0.150	0.220	4.70	<0.130	<0.250	<0.130
	29-Jul-03 29-Jan-04	<0.310	<0.310	7.70	<0.310	<0.630	<0.130
	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
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
	18-Feb-03	FP	FP	FP	FP	FP	FP
	29-Jul-03	FP	FP	FP	FP	FP	FP
0.017: -		0.00-				0.010	
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

Notes:

NA: Not Analyzed. Well LFR-4 was inaccessible during the Third Quarter 2004 Monitoring Event.

<: Not detected above the laboratory reporting limits.

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

FP: Not Analyzed due to Free Product

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
B-7	11-Aug-00						11.0	193	
B-7-field	11-Aug-00	0.63		-1.0	3.0				
	31-Oct-00	0.62	2.6	< 0.10	< 1.0	11.00	2.4		-3
B-7-field	31-Oct-00	0.25		0.4	-1.0	15.85		-63	
	1-Feb-01	0.78	2.2	0.8	<1.0	15.00	13.0		
B-7-field	31-Jan-01	0.48						28	
B-7 Field	26-Apr-01	0.60	1.7	2.5	5.0	>3.3	7.6	-28	
B-7 Field	26-Jul-01	1.98	7.3	0.0	8.0	11.60	7.0	-40	
B-8 field	31-Jan-01	0.45						58	
B-10	10-Aug-00			< 0.05	< 0.05	5.70	10.0	213	
B-10-field	10-Aug-00	0.44		-1.0	-2.0				
	31-Oct-00	2.40	1.4	< 0.10	< 1.0	5.90	6.7		0.81
B-10-field	31-Oct-00	0.44		0.0	0.0	7.60		-22	
	31-Jan-01	6.40	1.3	< 0.10	<2.0	7.70	24.0		1.3
B-10-field	31-Jan-01	0.46						64	
B-10 Field	11-Jun-01	0.90	0.0	0	0	1.25	3.9	-8	NM
B-10 Field	26-Jun-01	1.87	1.3	0	3	6.20	5.6	-22	
	6-Jul-05	9.53	41.1	35	80	3.30	2.2	12	
	9-Jan-06	3.39	13.6	0	0	3.30	10.0	10	
	6-Jul-06	10.62	0.0	0	0	3.30	11	-104	
GW-2-field	1-Nov-00	2.32						77	
GW-2	1-Feb-01	3.80					0.0410		
GW-2-field	1-Feb-01	0.58						159	
	26-Apr-01	4.00	1.0	7.1	36	0.02	0.0002	152	NM
	26-Jul-01	1.93	0.0	3.9	60	0.00	0.0160	233	
GW-2 field	Not En. Sample						0.0009		
	31-Jan-02	2.80	0.0	8.0	45	0.36	0.0069	179	NM
	16,17-Apr-02	1.76	0.0	4.7	70	0.09	0.0003	198	
	17,18-Jul-02	1.39	0.6	0.0	69	0.00	0.0021	161	
	22,23-Oct-02	3.86	0.6	11.5	40	0.07	0.0007	166	

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
GW-2	19-Feb-03	7.24	0.1	10.3	49	0.03	0.0012	169	
	29-Jul-03	4.21	0.2	0.0	44	0.00	0.0007	47	
	28-Jan-04	6.02	0.0	3.3	56	0.00	0.00046	143	
	4-Aug-04	8.27	0.0	0.0	27	0.00	0.00035	115	
	2-Feb-05	8.41	0.0	0.0	40	0.00	<0.0050	76	
	6-Jul-05	10.90	0.0	5.3	51	0.00	<0.005	90	
	6-Jan-06	8.11	2.4	0.0	44	0.00	<0.005	86	
	6-Jul-06	9.71	0.3	0.0	53	0.00	<0.005	86	
GW-3	11-Aug-00						< 0.0005	395	1
GW-3-field	11-Aug-00	0.72		1.0	46				
GW-3-field	1-Nov-00	7.76						81	
	29-Jan-01	8.80					0.0120		
GW-3-field	1-Feb-01	8.99						235	
	27-Apr-01	2.90	0.0	0.7	30	0.00	0.0150	212	NM
	26-Jul-01	2.48	0.0	2.4	52	0.12	0.0083	214	
GW-3 field	18-Oct-01	3.76	0.0	5.2	4.9	0.00	0.0041	131	l nm
	31-Jan-02	3.70	0.2	1.3	52	0.00	0.0081	163	
	16,17-Apr-02	7.55	0.0	4.2	59	0.00	0.0006	133	
	17,18-Jul-02	3.50	0.0	0.0	47	0.22	0.0100	155	
	22,23-Oct-02	2.19	0.0	1.6	33	0.00	0.0007	178	
	19-Feb-03	5.28	0.4	4.0	43	0.02	0.0007	123	
	29-Jul-03	6.12	0.0	0.0	31	0.00	0.0005	96	
	28-Jan-04	4.21	0.0	0.8	61	0.00	0.00042	141	
	3-Aug-04	10.20	0.0	0.0	41	0.00	0.00028	84	
	2-Feb-05	3.97	0.5	0.0	12	0.00	<0.0050	84	
	6-Jul-05	7.96	2.9	0.5	52	0.00	< 0.005	67	
	6-Jan-06	5.22	0.0	0.0	4.0	0.00	<0.005	61	
	6-Jul-06	5.69	3.1	0.0	31.0	0.00	< 0.005	63	
GW-4-field	30-Jan-01	0.83				i		67	İ
GW-4-field	26-Jul-01	2.59	0.2	10.5	25	1.29	0.0028	-3	
GW-4-field	18-Oct-01	1.00	0.1	0.0	0	4.80	4.80	-84	NM
GW-4	31-Jan-02	0.90	0.8	0.0	0	8.00	3.50	-91	
	16,17-Apr-02	0.41	0.1	5.2	0	5.70	4.70	-2	
	17,18-Jul-02	2.38	3.0	0.0	0	>3.3	4.60	-68	
	22,23-Oct-02	NM	NM	NM	NM	NM	0.30	NM	
	19-Feb-03	7.76	0.4	5.4	0	3.30	2.30	-57	1
	30-Jul-03	5.38	6.1	0.0	0	3.30	1.30	-141	

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
GW-4	28-Jan-04	2.17	5.9	0.0	0	3.30	0.22	-73	
	3-Aug-04	10.35	0.9	0.0	0	3.30	3.20	-113	
	1-Feb-05	2.97	0.8	0.0	0	1.53	1.20	93	
	6-Jul-05	9.17	1.9	9.8	20	1.07	0.84	128	
	5-Jan-06	7.62	3.4	0.0	0.0	3.30	3.40	110	
MW-11	10-Aug-00			2.8	63	< 0.1	< 0.0005	476	
MW-11-field	10-Aug-00	2.52		4.1	67				
	1-Nov-00	4.10	< 0.010	15.0	90	< 0.1	0.0000		130
MW-11-field	1-Nov-00	4.01		3.3	73	0.00		87	
MW-11-field	1-Nov-00	3.97		27.3	74	0.00		319	
	31-Jan-01	6.30	< 0.010	15.0	94	< 1.0	0.0001		1.1
MW-11 Field	26-Apr-01	7.40	0.0	6.8	52	0.00	0.0014	229	NM
MW-11 Field	26-Jul-01	1.85	0.0	5.2	77	0.00	0.0049	233	
MW-11 Field	18-Oct-01	5.58	0.0	10.1	NM	0.00	0.0066	155	NM
	31-Jan-02	4.90	0.0	2.8	79	0.00	0.0077	218	
	16,17-Apr-02	3.18	0.0	2.8	88	0.00	0.0092	242	
	17,18-Jul-02	2.82	0.0	4.1	79	0.00	0.0088	357	
	22,23-Oct-02	4.47	0.0	3.7	69	0.00	0.0025	118	
	18-Feb-03	5.65	0.6	2.3	73	0.00	0.0022	304	
	30-Jul-03	3.80	0.1	0.0	54	0.00	0.0010	224	
	28-Jan-04	7.32	0.0	0.0	80	0.00	0.0200	130	
	3-Aug-04	10.40	0.0	0.0	77	0.00	0.0028	185	
	1-Feb-05	6.99	1.7	0.0	52	0.00	<0.0050	91	
	5-Jul-05	10.38	1.2	0.0	80	0.00	< 0.005	125	
	5-Jan-06	6.21	0.0	0.0	65	0.00	<0.005	166	
	5-Jul-06	8.35	5.9	0.0	80	0.00	<0.005	35	
LFR-1	9-Aug-00							462	
	11-Aug-00						0.0096		
LFR-1-field	9-Aug-00	3.63		5.5	30				1.5
	30-Oct-00	2.70	0.0	39.0	42	< 1.0	0.0004		
FR-1-field/split	30-Oct-00	2.95		10.3/10.0	29/29	0.01/0.01		77	1
LFR-1 split	30-Oct-00	3.40	0.0	40.0	43.0	< 1.0	0.0007		
•	29-Jan-01	5.10	<0.01	<0.10	51	<1.0	0.0001		0.43
LFR-1-field	29-Jan-01	3.78	0.0		36	0.00		383	
LFR-1 Dup	29-Jan-01	4.60	<0.01	<0.10	50	<1.0	0.0000		0.32
	26-Apr-01	3.20	0.0	12.9	16	0.00	0.0003	224	NM
	26-Jul-01	1.07	0.0	8.0	25	0.01	0.0084	238	

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
LFR-1 field	18-Oct-01	1.03	0.0	6.9	24	0.18	0.0054	119	NM
LFR-1	31-Jan-02	1.80	0.3	5.5	31	0.00	0.0062	163	
	16,17-Apr-02	1.68	0.3	1.5	38	0.39	0.0030	240	
	17,18-Jul-02	0.00	0.0	6.1	3	0.07	0.0047	209	
	22,23-Oct-02	0.00	0.4	0.0	23	0.15	0.0008	265	
	18-Feb-03	7.76	0.0	4.3	30	0.00	0.0008	260	
	30-Jul-03	0.58	0.3	0.0	10	0.00	0.0004	190	
	29-Jan-04	3.12	0.5	0.0	57	0.00	0.0011	19	
	4-Aug-04	6.26	5.8	0.0	17	0.00	0.0010	62	
	2-Feb-05	5.24	0.0	0.0	1	0.00	0.0120	93	
	6-Jul-05	8.53	0.2	2.5	40	0.00	< 0.005	110	
	6-Jan-06	5.43	3.9	0.0	5	0.00	0.025	161	
	6-Jul-06	9.93	0.4	0.0	6	0.00	< 0.005	99	
LFR-2	11-Aug-00						6.60	270	
LFR-2-field	11-Aug-00	0.48		1.5	-1.0	2.70			1200
	2-Nov-00	2.20	8.8	0.3	5.4	5.30	8.50		
LFR-2-field	2-Nov-00	0.47		0.5	-1.0	6.05		-24	
	30-Jan-01	4.40	8.9	1.0	8.3	4.60	4.60		1.1
LFR-2-field	30-Jan-01	0.61	10.7	2.9		1.02		210	
	27-Apr-01	1.40	0.4	1.6	1.0	2.66	14.00	9	NM
	26-Jul-01	0.55	0.2	0.0	0.0	4.50	10.00	-20	
LFR-2 field	18-Oct-01	0.43	0.0	0.0	0.0	6.50	11.00	-75	NM
	31-Jan-02	1.00	0.0	2.6	19.0	1.81	11.00	-14	
	16,17-Apr-02	0.00	0.0	1.7	0.0	7.20	16.00	-6	
	17,18-Jul-02	0.00	13.9	0.0	0.0	7.20	9.60	-64	
	22,23-Oct-02	0.00	10.7	0.5	0.0	3.30	4.70	-82	
	18-Feb-03	0.42	9.0	0.0	0.0	3.30	9.60	-53	
	30-Jul-03	0.00	3.0	0.0	0.0	3.30	8.70	-85	
	4-Aug-04	4.78	1.6	0.0	0.0	3.30	6.20	-93	
	1-Feb-05	1.77	12.1	0.0	0.0	1.79	11.00	69	
	5-Jul-05	4.21	18.2	0.0	0.0	3.30	11.00	-60	
	5-Jan-06	3.53	3.8	0.0	3.0	3.30	14.00	-29	
	5-Jul-06	7.70	4.3	0.0	0.0	3.30	10.00	-136	

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
LFR-3	10-Aug-00			2.4	64	< 0.1	0.0005	464	
LFR-3 split	10-Aug-00							< 0.0005	
LFR-3-field	10-Aug-00	1.30		2.4	64				850
	1-Nov-00	4.70	0.0	8.8	74	< 1.0	0.0003		
LFR-3-field	1-Nov-00	0.58		1.8	57	0.00		75	
	31-Jan-01	4.10	<0.01	1.2	58	< 1.0	0.0004		
LFR-3-field	30-Jan-01	1.75		0.0	44	0.00		195	
LFR-3 Field	11-Jun-01	1.00	0.0	0.8	28	0.00	0.0086	201	NM
LFR-3 Field	26-Jul-01	1.29	0.4	0.0	51	0.60	0.0035	228	
LFR-3 Field	18-Oct-01	0.54	0.0	0.8	30	0.11	0.0093	139	NM
	31-Jan-02	0.80	0.4	2.6	32	0.00	0.0072	212	
	16,17-Apr-02	0.19	0.4	0.0	55	0.79	0.0096	228	
	17.18-Jul-02	0.00	0.2	1.7	42	0.00	0.0068	166	
	22,23-Oct-02	0.11	0.5	0.0	36	0.00	0.0035	186	
	19-Feb-03	1.10	0.5	0.0	19	0.54	0.0069	217	
	30-Jul-03	0.17	0.1	0.0	21	0.00	0.0069	167	
	29-Jan-04	1.39	0.0	0.0	0	3.30	0.0011	64	
	3-Aug-04	5.14	3.9	0.0	8	0.00	0.0054	175	
	2-Feb-05	2.74	0.0	0.0	0	0.00	<0.005	94	
	5-Jul-05	7.59	0.5	35.0	80	3.29	<0.005	85	
	6-Jan-06	3.52	1.8	0.0	23	0.67	<0.005	151	
	5-Jul-06	5.47	1.1	0.0	40	0.00	<0.005	56	
LFR-4	11-Aug-00	-			_		0.06	402	
LFR-4-field	11-Aug-00	1.13		0.7	1	0.14			1.1
	31-Oct-00	1.90	2.2	< 0.10	2.9	1.10	3.20		
LFR-4-field	31-Oct-00	0.64		1.0		0.61		-80	
	1-Feb-01	3.20	2.8	1.5	2.8	1.80	2.20		1.5
LFR-4-field	1-Feb-01	0.55	4.5	8.0	0.0	1.50		59	
LFR-4 Field	27-Apr-01	5.60	0.0	1.7	0.0	1.37	7.00	14	l nm
LFR-4 Field	26-Jul-01	1.65	0.0	0.0	0.0	0.84	1.20	18	
	16,17-Apr-02	0.00	1.0	2.6	6.0	4.80	12.00	-4	
	17,18-Jul-02	0.79	6.8	0.0	0.0	>3.3	2.80	3	
	22,23-Oct-02	0.00	4.0	0.0	0.0	2.55	1.30	-63	
	19-Feb-03	0.50	6.8	0.0	18	3.30	4.40	-41	
	30-Jul-03	0.28	5.1	0.0	0.0	3.30	3.90	-49	
	29-Jan-04	1.64	5.0	0.0	0.0	0.52	4.00	1	
	4-Aug-04	NM	NM	NM	NM	NM	NM	NM	
	5-Jul-05	5.22	2.8	0.0	0.0	3.30	5.40	61	
	5-Jul-06	9.70	5.9	0.0	0.0	3.30	9.20	-98	

Table 6

Historical In-Situ and Ex-Situ Analyses Results for Bioattenuation Parameters in Groundwater Samples

at the Former Glovatorium Site 3815 Broadway, Oakland, California

Well Name	Date Sampled	Dissolved Oxygen (mg/L)	Dissolved Manganese (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Ferrous Iron (mg/L)	Methane* (mg/L)	ORP	Hydrogen (nanoMoles)
SOMA-1	18-Oct-01	4.19	0.3	0.2	33	0.52	0.12	151	NM
	31-Jan-02	0.40	0.0	0.0	18	0.00	0.58	141	NM
	16,17-Apr-02	0.00	0.0	0.6	31	0.10	0.82	213	
	17,18-Jul-02	0.00	0.0	1.8	28	0.05	0.44	149	
	22,23-Oct-02	0.00	0.7	0.0	4	0.00	0.68	131	
	18-Feb-03	5.12	0.4	0.0	1	0.00	0.41	258	
	30-Jul-03	0.00	0.4	0.0	1	0.00	0.99	74	
	29-Jan-04	0.29	0.5	0.0	13	0.47	0.85	133	
	3-Aug-04	4.44	0.0	0.0	25	0.00	0.50	152	
	1-Feb-05	1.57	0.1	0.0	0.0	0.00	0.83	137	
	5-Jul-05	7.58	0.5	0.0	16	0.21	1.50	72	
	5-Jan-06	5.82	0.0	0.0	6.0	0.00	0.60	156	
	5-Jul-06	6.79	1.8	0.0	13.0	0.00	1.10	66	
SOMA-2	18-Oct-01	0.57	0.0	0.4	0.0	40.00	6.60	-89	NM
	31-Jan-02	0.70	3.8	8.0	0.0	9.00	13.00	103	NM
	16,17-Apr-02	0.00	0.5	0.1	0.0	7.40	14.00	-69	
	17,18-Jul-02	0.00	5.7	0.0	0.0	>3.3	9.40	-87	
	22,23-Oct-02	0.35	1.7	2.8	15	3.30	2.20	-98	
	19-Feb-03	3.17	1.9	1.7	0.0	2.89	2.40	-72	
	30-Jul-03	2.71	1.0	0.0	0.0	0.83	1.00	-53	
	28-Jan-04	4.52	0.2	0.0	0.0	1.46	1.70	-8	
	4-Aug-04	7.06	0.4	0.0	0.0	0.31	1.40	-33	
	2-Feb-05	1.17	8.4	0.0	0.0	3.30	13.00	-95	
	6-Jul-05	5.67	1.1	0.0	0.0	3.30	11.00	-66	
	9-Jan-06	3.01	15.7	5.6	0.0	3.30	15.00	-60	
	6-Jul-06	8.92	7.4	0.0	0.0	3.30	14.00	-85	
SOMA-3	18-Oct-01	1.32	0.0	0.0	33	0.22	1.00	2	NM
	31-Jan-02	1.00	22.0	2.0	54	0.62	0.46	-71	NM
	16,17-Apr-02	2.60	0.0	0.6	42	0.77	0.41	29	
	17,18-Jul-02	0.97	10.9	0.0	23	>3.3	0.94	-51	
	22,23-Oct-02	0.30	2.7	0.1	7	3.26	4.20	-98	
	19-Feb-03	0.18	0.0	0.0	0.0	3.30	9.00	-88	
	30-Jul-03	0.00	2.0	0.0	0.0	3.30	8.70	-106	
	29-Jan-04	2.30	3.5	0.0	0.0	3.30	8.40	-85	
	4-Aug-04	5.35	0.0	0.0	0.0	3.30	6.50	-105	
	2-Feb-05	3.66	0.3	0.0	0.0	0.00	2.70	-73	
	6-Jul-05	9.65	0.7	0.0	0.0	0.77	2.50	84	
	6-Jan-06	2.20	2.9	0.0	0.0	0.40	3.10	86	
2017: :	6-Jul-06	10.52	0.5	0.0	0.0	0.37	1.40	-58	
SOMA-4	18-Oct-01	0.83	4.0	22.0	17	0.22	1.20	88	NM
SOMA-5	4-Aug-04	5.65	0.0	0.0	0.0	0.23	1.70	-143	
	2-Feb-05	2.40	1.5	0.0	0.0	3.30	3.00	-81	
	6-Jul-05	8.91	20.9	0.0	0.0	3.30	20.00	-113	
	9-Jan-06	3.24	15.2	0.0	0.0	3.30	10.00	-141	
	6-Jul-06	10.54	0.0	0.0	0.0	0.82	6.90	-129	1

Notes:

Samples with "field" in the well number indicate that the results are from field measurements obtained using a Hach spectrophotometer or a Hydrolab Quanta flow-through instrument.

since April 2001, field measurements have been obtained by a Hach Calorimeter

Since the First Quarter 2005, Curtis & Tompkins has analyzed for methane.

NM: Not Measured. Well LFR-4 was inaccessible during the Third Quarter 2004 monitoring event.

^{*)} Methane was measured by Microseep Laboratory.

Table 7
Free Product Removal Log
Former Glovatorium Site
3815 Broadway, Oakland, CA

Date Depth to Water (feet)		Depth to Free Product (feet)	Thickness of Free Product (feet)	
	SO	MA-4		
	20	002		
31-Jan-2002	11.30	8.80	2.50	
10-Apr-2002	12.45	9.58	2.87	
29-Apr-2002	13.00	9.80	3.20	
10-Sep-2002	16.75	10.26	6.49	
19-Sep-2002	16.32	10.64	5.68	
27-Sep-2002	16.59	10.65	5.94	
3-Oct-2002	16.95	11.65	5.30	
7-Oct-2002	17.40	11.01	6.39	
8-Oct-2002	17.11	10.75	6.36	
14-Oct-2002	17.51	10.53	6.98	
25-Oct-2002	16.90	10.96	5.94	
1-Nov-2002	15.59	11.70	3.89	
14-Nov-2002	16.24	11.20	5.04	
20-Nov-2002	13.44	11.90	1.54	
15-Dec-2002	12.73	12.10	0.63	
"我们是是是是	2	003	The RESPONDENCE	
18-Jul-2003	17.70	7.20	10.50	
00.1		004	0.40	
28-Jan-2004	12.00	2.90	9.10	

Table 7
Free Product Removal Log
Former Glovatorium Site
3815 Broadway, Oakland, CA

Date	Date Depth to Water (feet)		Thickness of Free Product (feet)
		MA-4	A STATE OF THE PARTY OF THE PAR
		005	
29-Jun-2005	10.40	10.10	0.30
18-Jul-2005	10.35	9.90	0.45
25-Jul-2005	10.75	10.00	0.75
1-Aug-2005	10.87	9.25	1.62
24-Aug-2005	13.47	9.95	3.52
31-Aug-2005	11.15	10.01	1.14
6-Sep-2005	12.98	10.78	2.20
12-Sep-2005	11.15	9.10	2.05
19-Sep-2005	12.90	10.80	2.10
5-Oct-2005	12.80	10.85	1.95
	2	006	
4-Jan-2006	12.50	8.60	3.90
12-Jan-2006	13.10	10.30	2.80
18-Jan-2006	13.64	10.50	3.14
24-Jan-2006	9.20	9.19	0.01
24-Jan-2006	began extrac	ting free product using	
26-Jan-2006	9.67	9.66	0.01
13-Feb-2006	10.24	10.23	0.01
27-Feb-2006	9.72	9.70	0.02
10-Mar-2006	8.90	8.70	0.20
20-Mar-2006	7.80	7.70	0.10
30-Mar-2006	8.30	8.20	0.10
6-Apr-2006	7.01	6.65	0.36
18-Apr-2006		eoTech pump from SO	
1-May-2006	7.60	7.56	0.04
10-May-2006	8.64	8.63	0.01
22-May-2006	8.53	8.40	0.13
1-Jun-2006	8.64	8.61	0.03
7-Jun-2006	8.86	8.82	0.04
27-Jun-2006	10.54	10.46	0.08

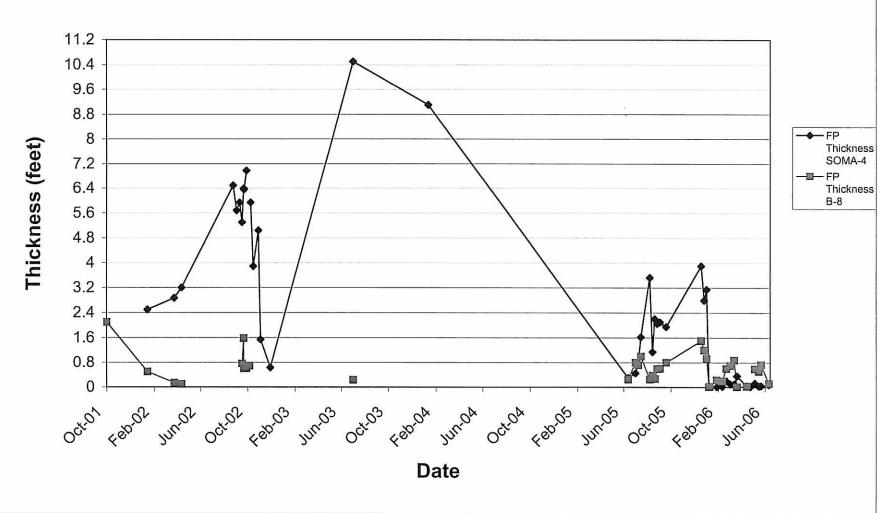
Table 7
Free Product Removal Log
Former Glovatorium Site
3815 Broadway, Oakland, CA

Date Depth to Water (feet)		Depth to Free Product (feet)	Thickness of Free Product (feet)		
		3-8			
	2	001	是是是 的人的可以可能		
18-Oct-2001	12.31	10.21	2.10		
	2	002			
31-Jan-2002	6.79	6.29	0.50		
10-Apr-2002	8.22	8.08	0.14		
29-Apr-2002	8.55	8.45	0.10		
3-Oct-2002	10.40	9.64	0.76		
7-Oct-2002	10.37	8.79	1.58		
8-Oct-2002	10.28	9.68	0.60		
14-Oct-2002	10.30	9.69	0.61		
22-Oct-2002	10.39	9.70	0.69		
	2	003			
18-Jul-2003	9.40	9.17	0.23		
	2	005			
29-Jun-2005	11.50	11.25	0.25		
18-Jul-2005	10.90	10.10	0.80		
25-Jul-2005	10.92	10.10	0.72		
1-Aug-2005	10.85	9.85	1.00		
24-Aug-2005	10.35	10.10	0.25		
31-Aug-2005	10.48	10.10	0.38		
6-Sep-2005	10.86	10.59	0.27		
12-Sep-2005	10.59	10.00	0.59		
19-Sep-2005	11.20	10.60	0.60		
5-Oct-2005	11.30	10.50	0.80		

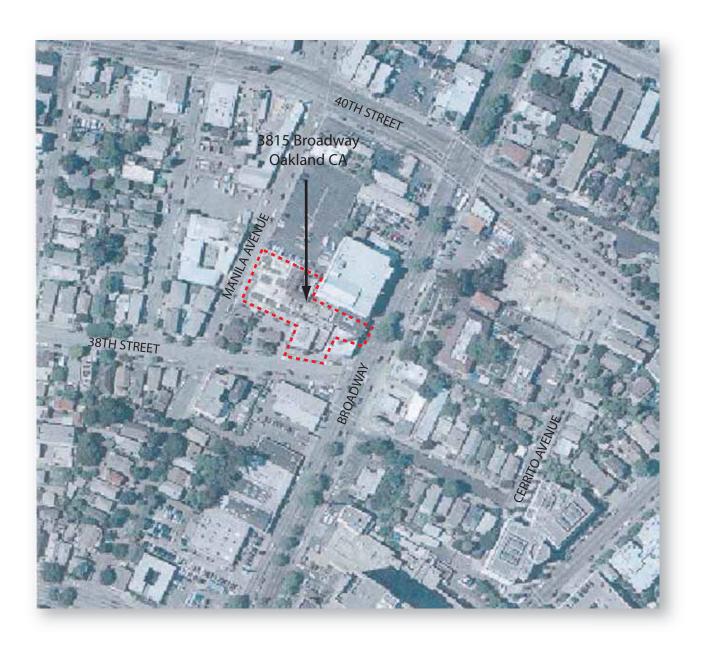
Table 7
Free Product Removal Log
Former Glovatorium Site
3815 Broadway, Oakland, CA

Date	Depth to Water (feet)	Depth to Free Product (feet)	Thickness of Free Product (feet)						
B-8									
	2	006							
4-Jan-2006	9.50	8.00	1.50						
12-Jan-2006	11.40	10.20	1.20						
18-Jan-2006	11.93	11.00	0.93						
24-Jan-2006	8.65	8.65	0.00						
26-Jan-2006	8.72	8.70	0.02						
13-Feb-2006	8.82	8.59	0.23						
27-Feb-2006	8.81	8.61	0.20						
10-Mar-2006	7.45	6.85	0.60						
20-Mar-2006	7.90	7.20	0.70						
30-Mar-2006	7.88	7.00	0.88						
6-Apr-2006	7.91	7.90	0.01						
18-Apr-2006	began extra	cting free product using	GeoTech pump						
1-May-2006	8.34	8.31	0.03						
22-May-2006	9.51	8.92	0.59						
1-Jun-2006	9.81	9.30	0.51						
7-Jun-2006	10.24	9.51	0.73						
27-Jun-2006	9.04	8.92	0.12						
27-Jun-2006	rem	oved GeoTech pump fr	om well						

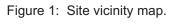


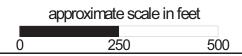


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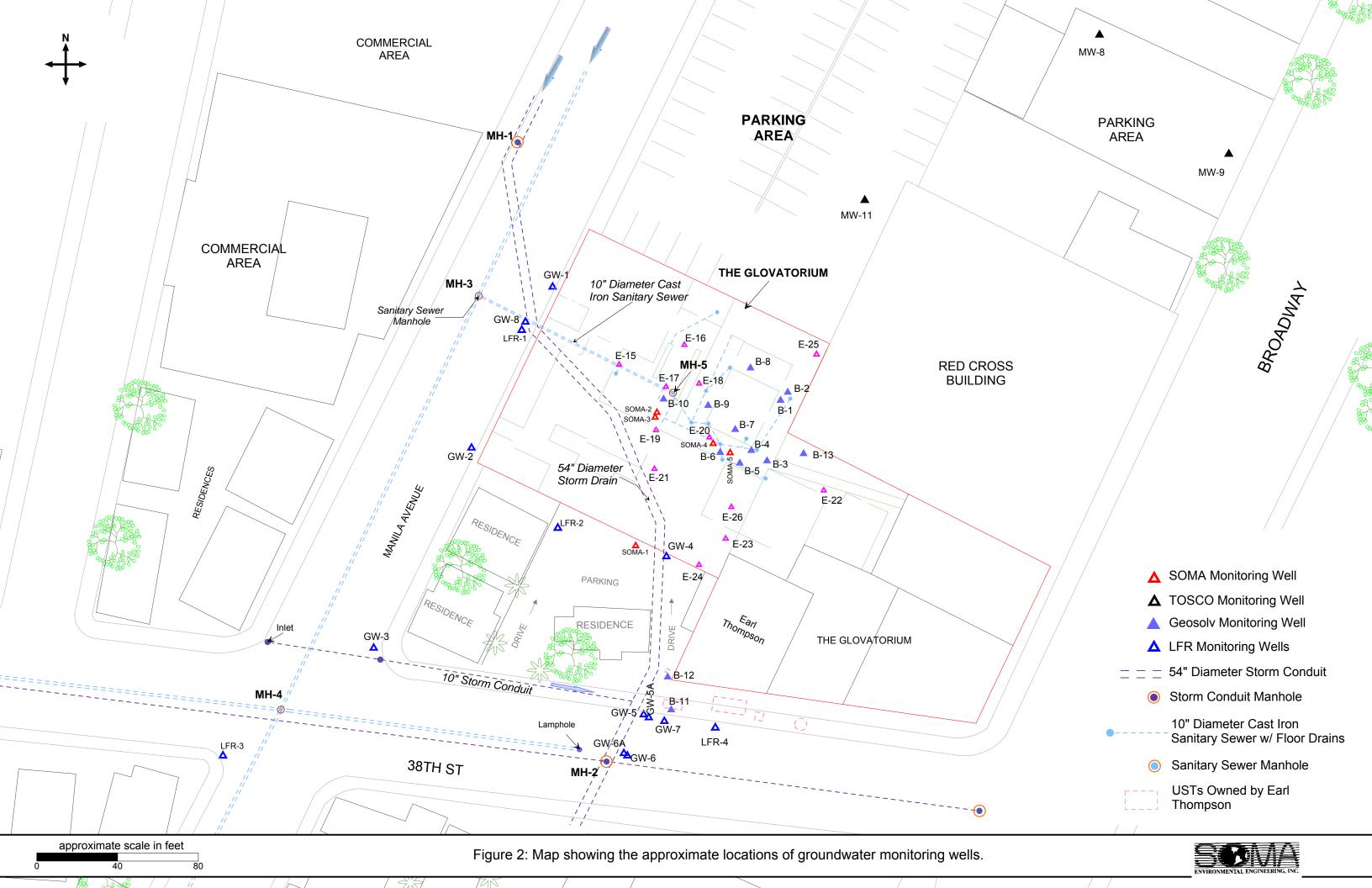


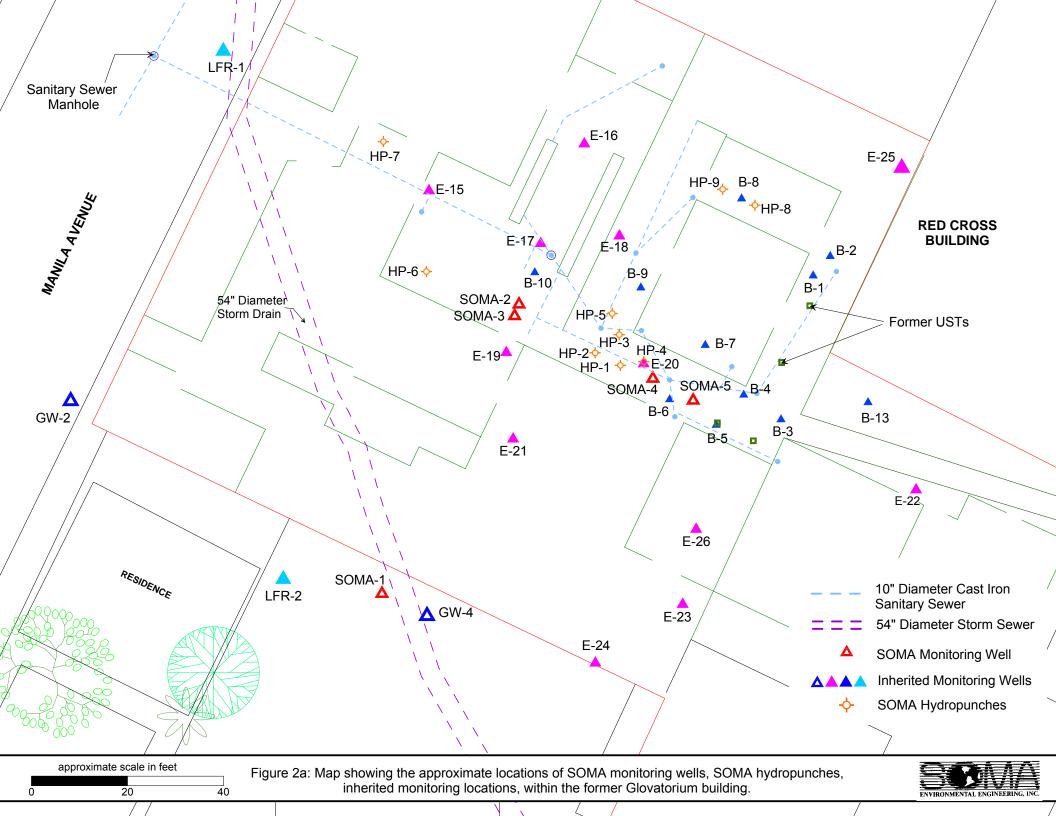


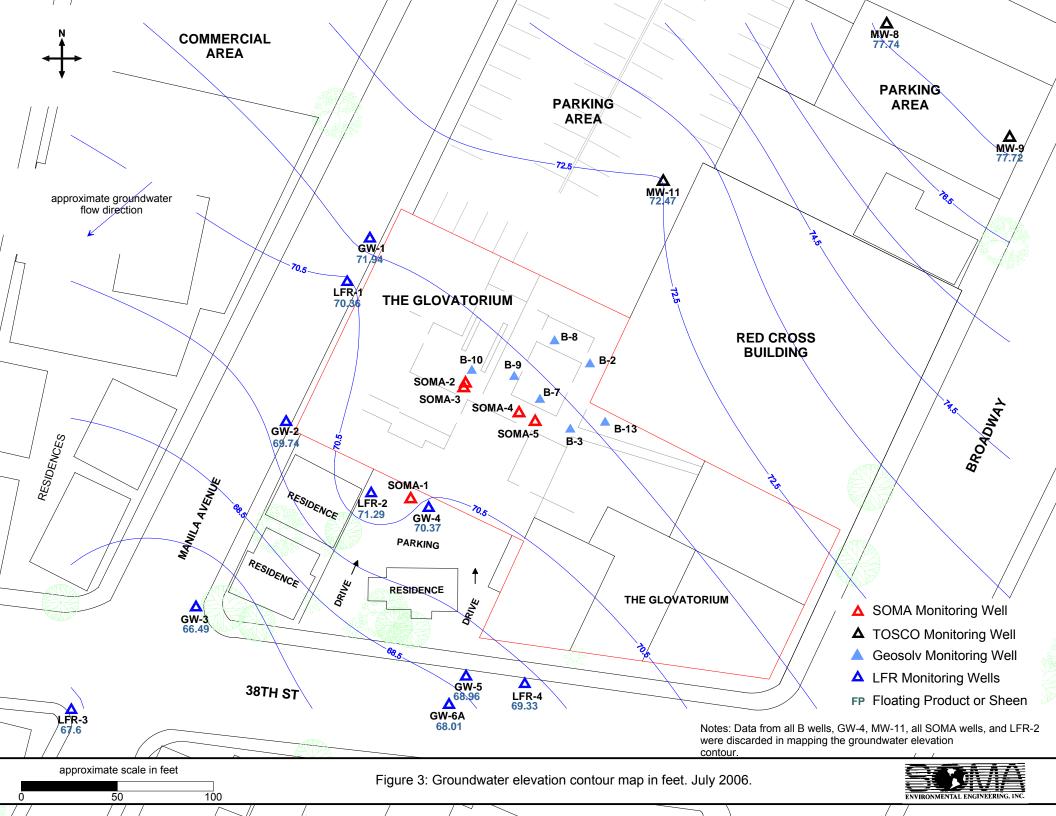


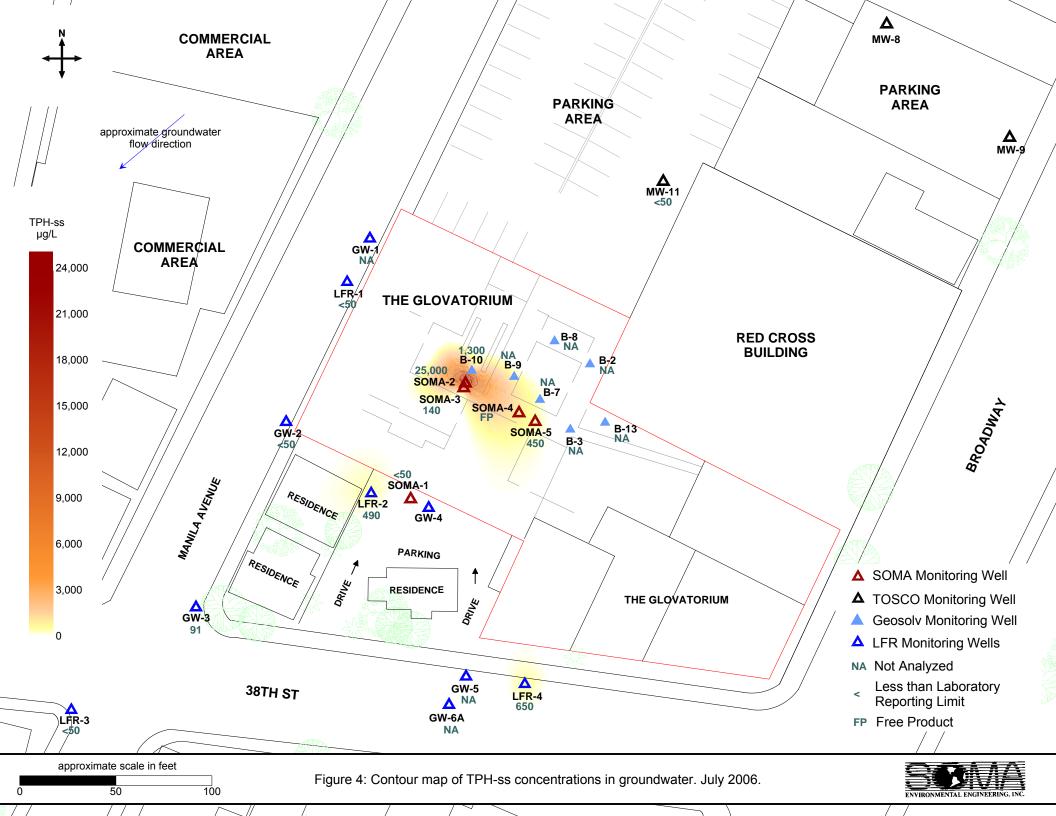


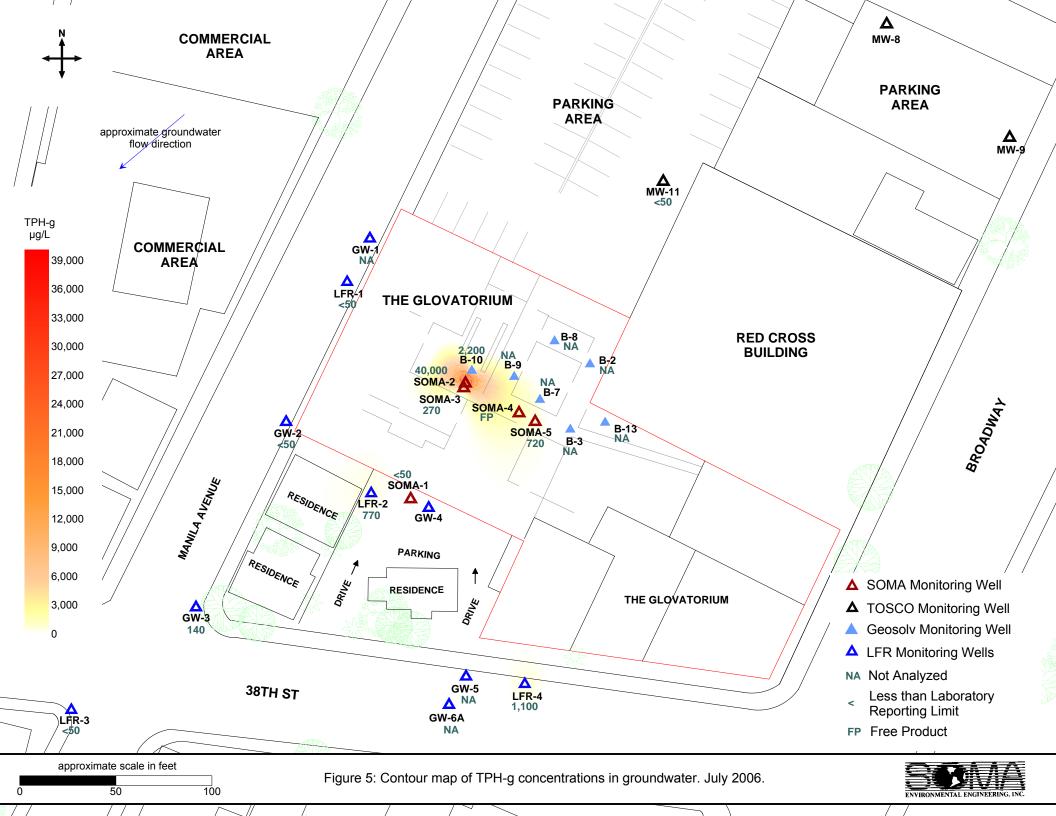


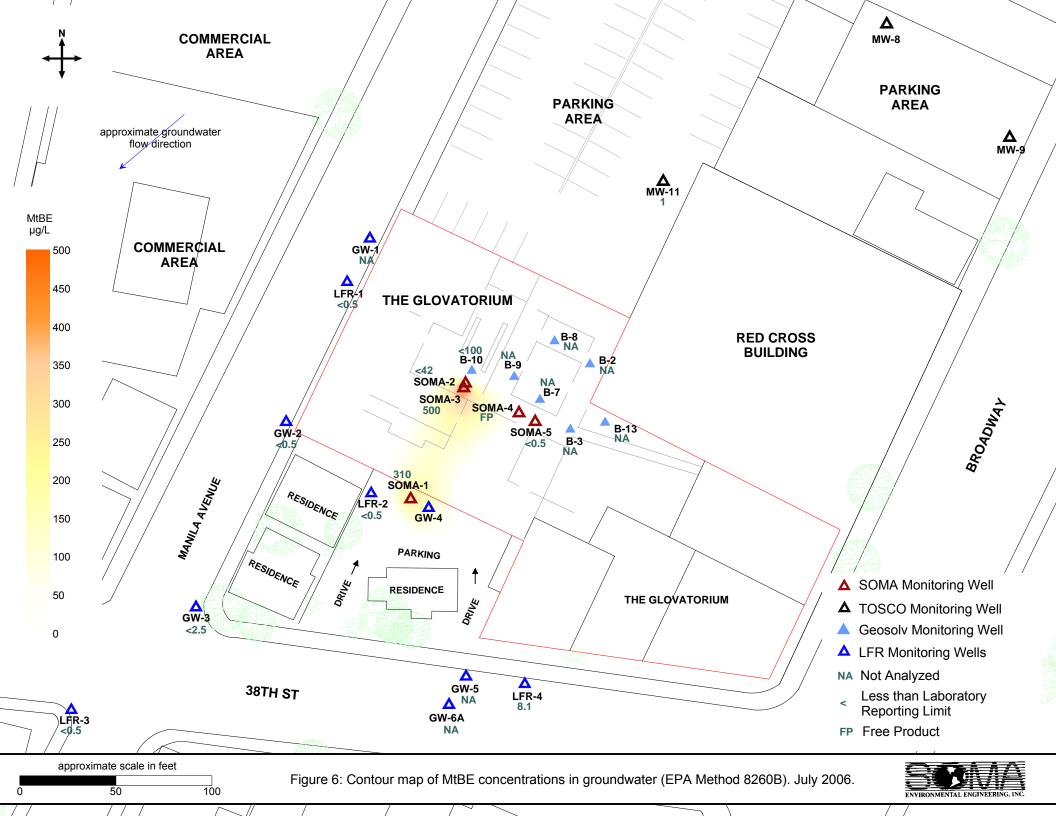


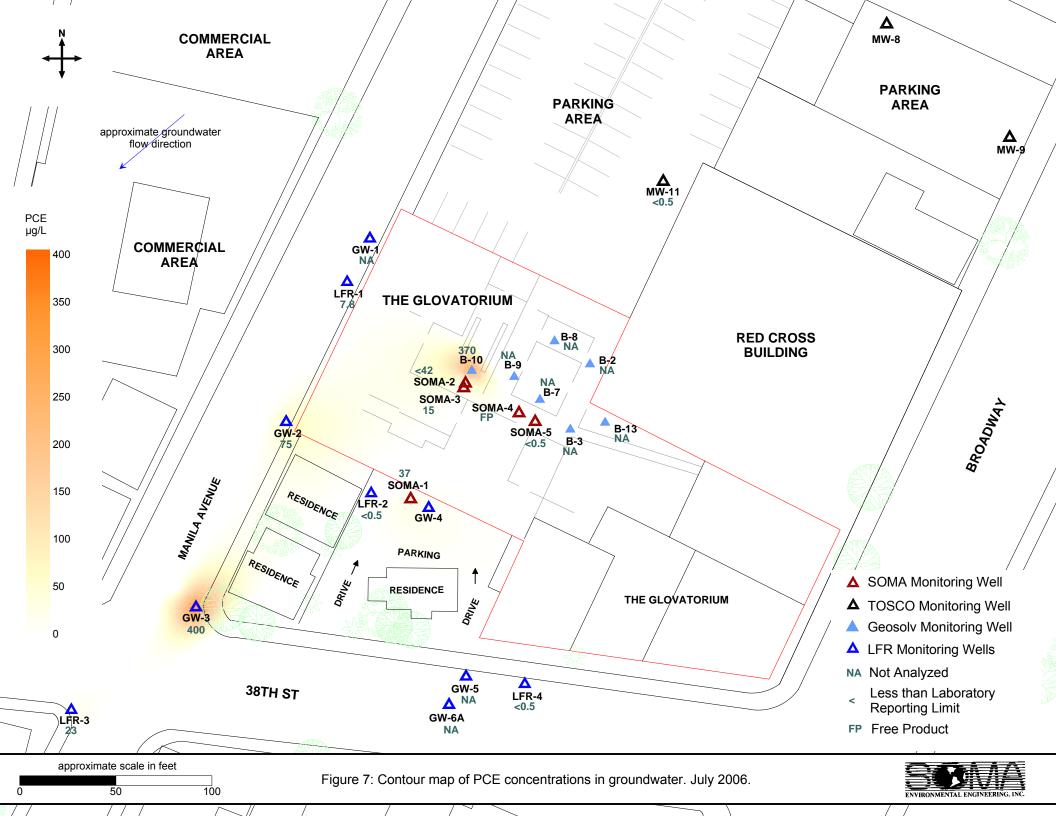


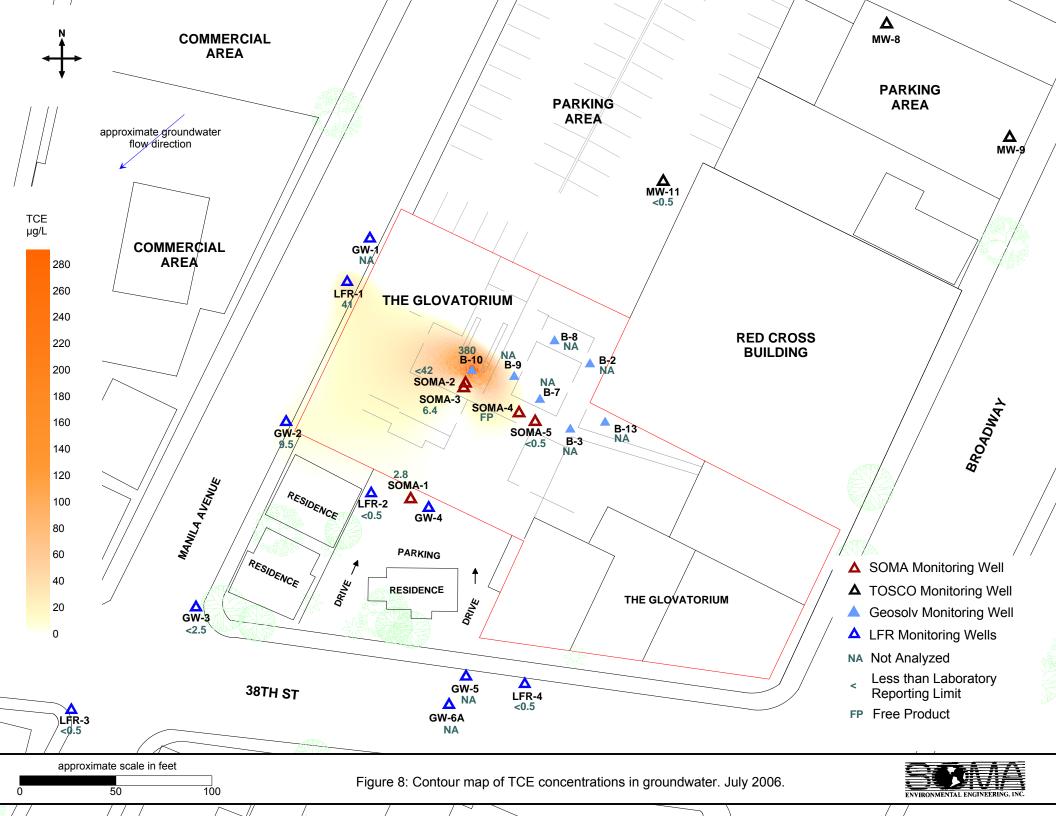


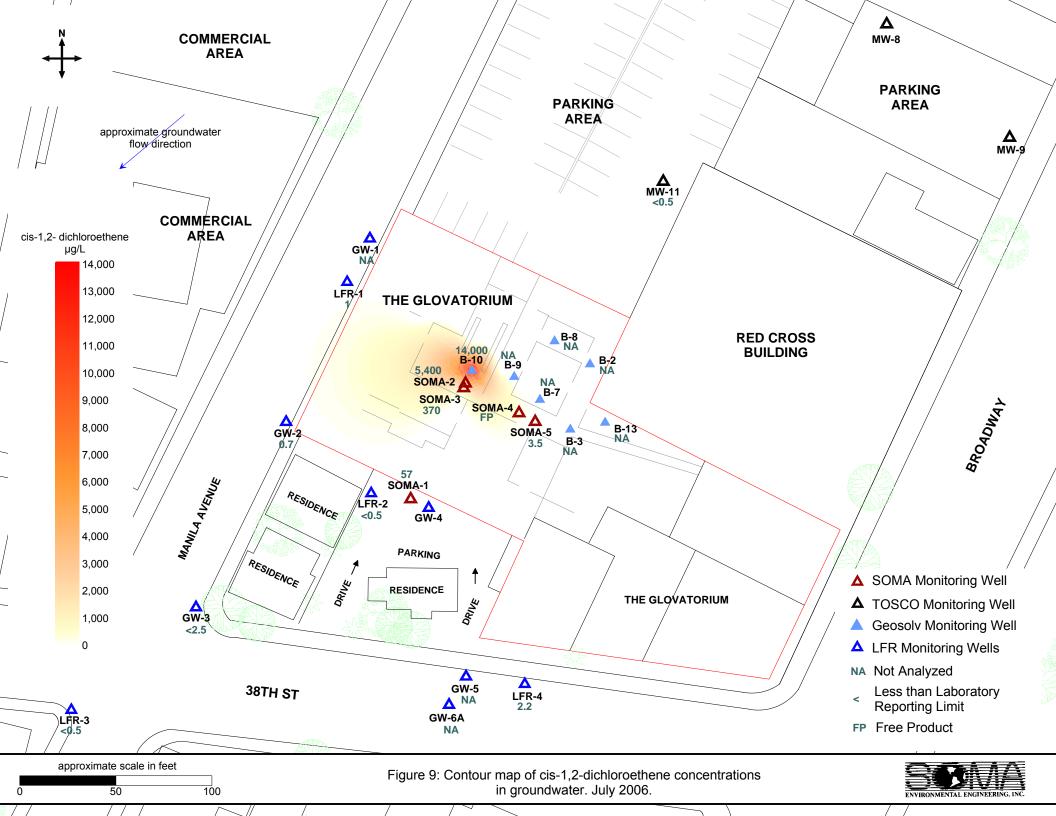


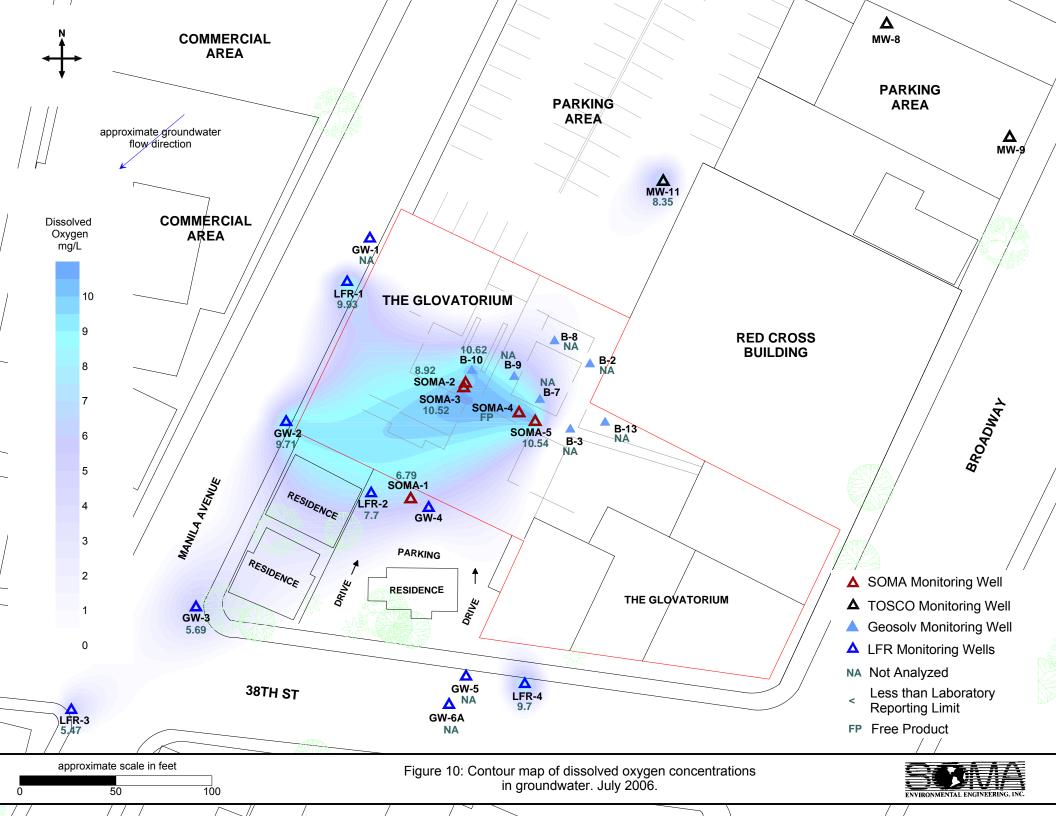


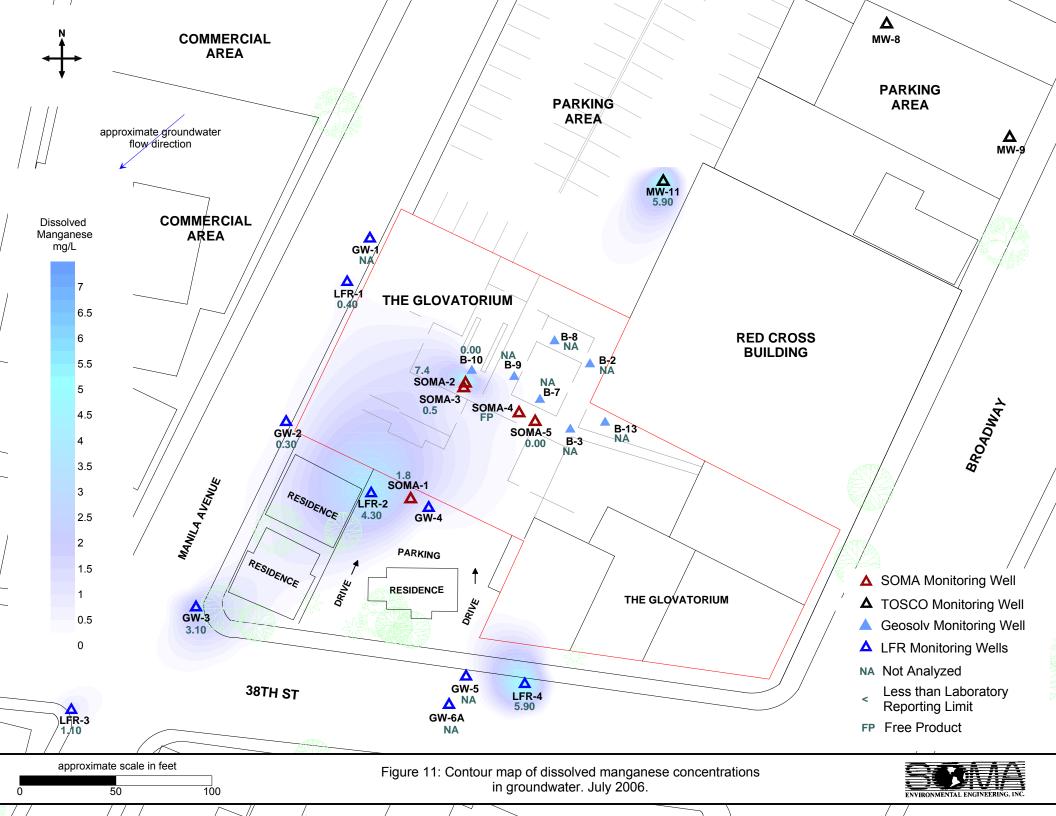


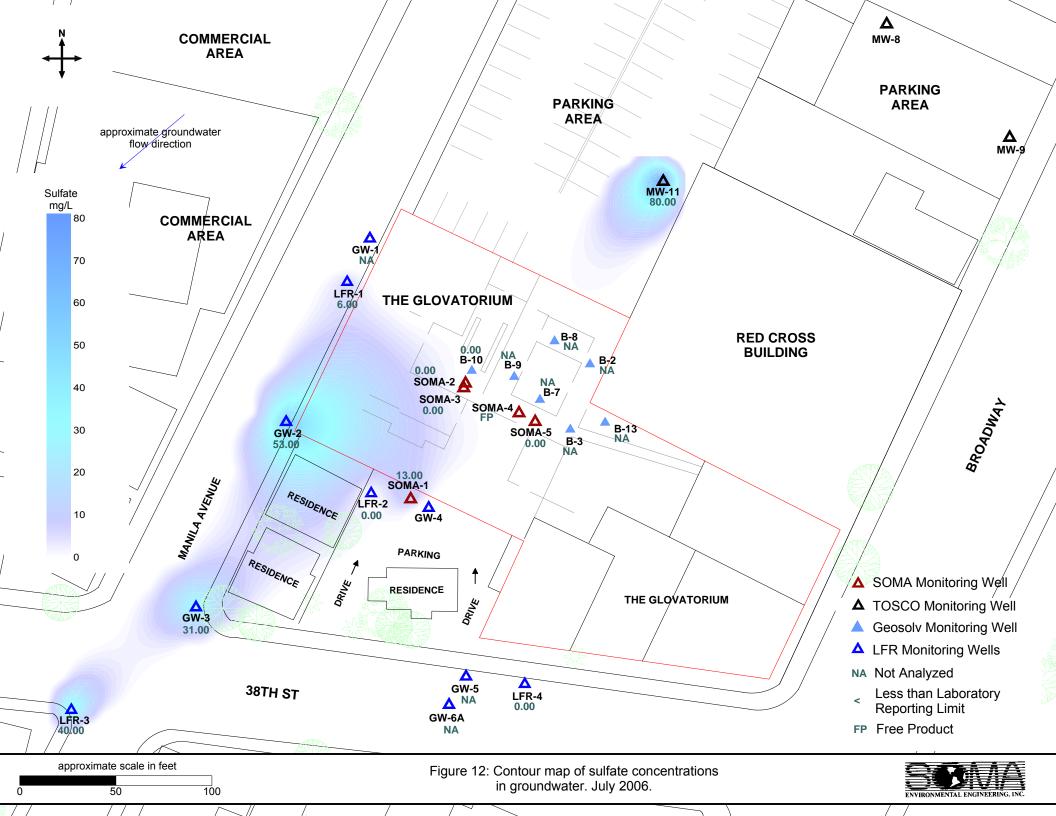


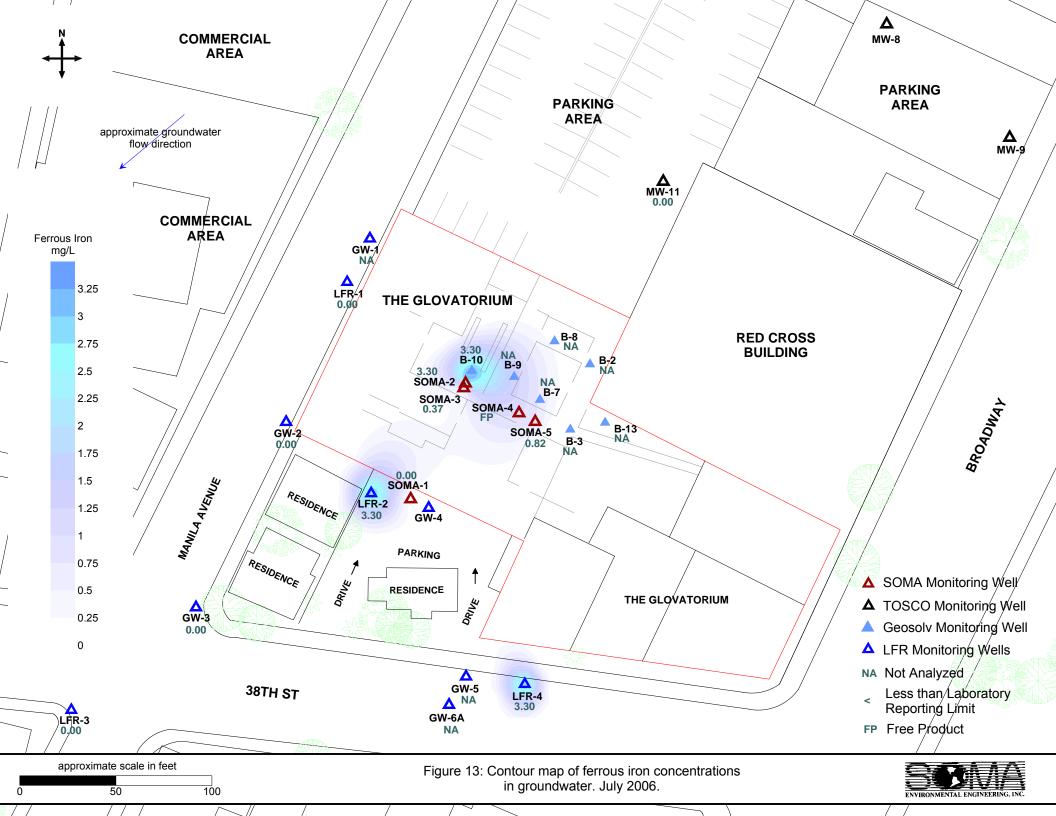


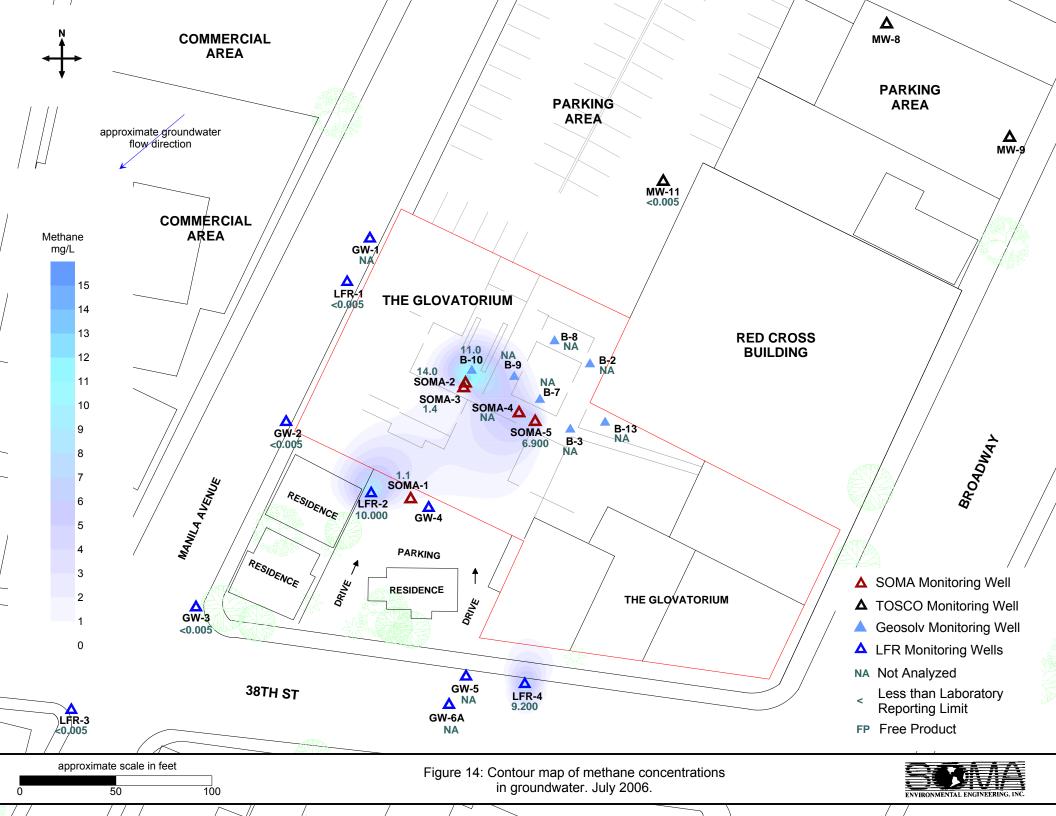


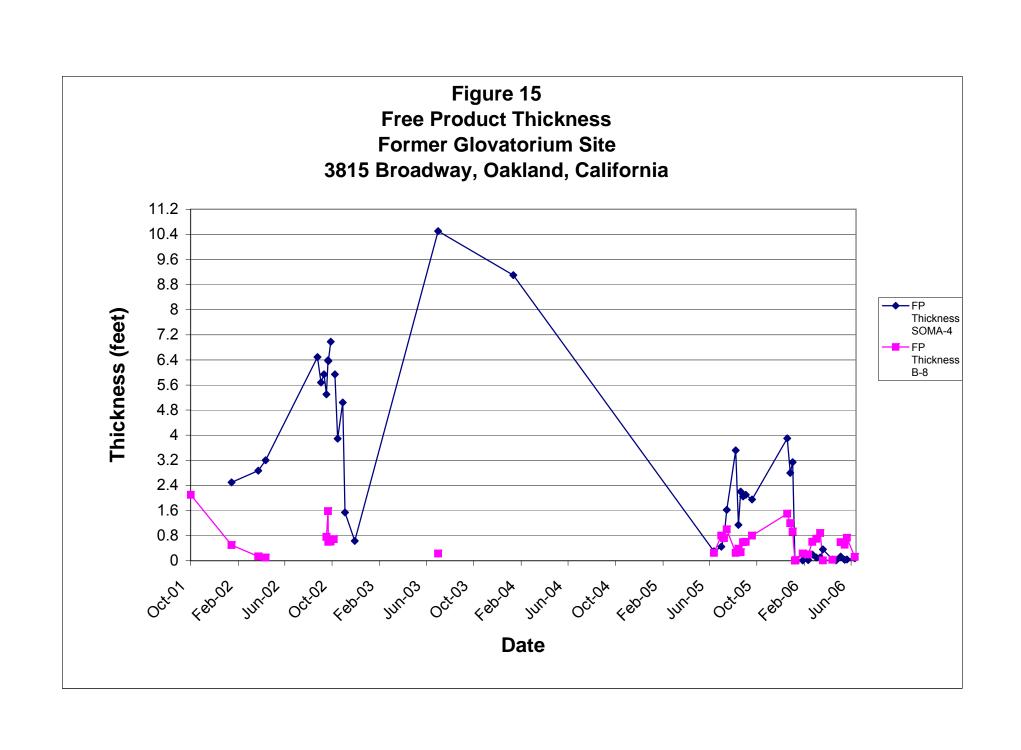












APPENDIX A



Field Activities

Field activities were conducted on July 5 and 6, 2006. During this event, 12 monitoring wells were sampled. Depths to groundwater were measured in 25 groundwater monitoring wells and temporary sampling points. Due to the presence of floating product in SOMA-4, this well was not sampled. Figure 2 shows the location of the groundwater monitoring wells and temporary sampling points. Appendix A includes SOMA's site-specific field activities during this groundwater monitoring event.

On July 5, 2006, SOMA's field crew measured the depths to groundwater in the monitoring wells and temporary groundwater sampling points from the top of the casings to the nearest 0.01 feet using an electrical sounder. The depth to groundwater and top of the casing elevation were used to calculate the Site's groundwater elevation at each sounding location.

Prior to collecting samples, each well was purged using a battery operated 2-inch diameter pump (Model ES-60 DC) or a GeoTech pump (for the smaller ¾" diameter temporary wells). Groundwater parameters such as pH, temperature, electric conductivity (EC), DO and ORP were measured in-situ using a Horiba, Model U-22 multi-parameter meter during the purging of the wells. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer.

The purging continued until the parameters for pH, temperature, EC, DO, turbidity, and ORP stabilized, or three casing volumes were purged. The groundwater samples were also tested on-site for nitrate, nitrite, sulfate, total iron, ferrous iron and dissolved manganese concentrations, once stabilization occurred, using the Hach Colorimeter (Model 890). The Hach Colorimeter is a microprocessor-controlled photometer suitable for colorimetric testing in the laboratory or the field. The required reagents for each specific test were provided in AccuVac ampules.

Nitrate was measured colorimetrically using Method 8039, the Cadmium Reduction Method. Cadmium metal in the NitraVer 5 Nitrate Reagent reduces nitrates present in the sample to nitrite; the nitrite ion reacts in an acidic medium with sulfanilic acid to form an intermediate diazonium salt, which couples with getistic acid to form an amber-colored product. The intensity of the color is proportional to the nitrate concentration in the sample.

Nitrite was measured colorimetrically using Method 8507, the Diazotization Method. Nitrite in the sample reacts with sulfanilic acid in the NitriVer 3 Nitrite Reagent to form an intermediate diazonium salt. The salt couples with chromotropic acid to produce a pink colored complex. The intensity of the color is proportional to the nitrite concentration in the sample.

Sulfate was measured colorimetrically using Method 8051, the SulfaVer 4 Method. Sulfate ions in the sample react with barium in the SulfaVer 4 Sulfate Reagent to form insoluble barium sulfate. The intensity of the subsequent color development is proportional to the sulfate concentration.

Ferrous iron was measured colorimetrically using Method 8146 (1,10-phenanthroline Method). The 1,10-phenathroline indicator in the ferrous iron reagent reacts with Fe^{+2} in the sample to form an orange color. The intensity of the orange color is proportional to the iron concentration.

Total iron was measured colorimetrically using Method 8008. The FerroVer Iron Reagent reacts with all soluble and most insoluble forms of iron in the sample to produce soluble ferrous iron. This reacts with the 1,10-phenanthroline indicator in the reagent to form an orange color in proportion to the iron concentration.

Dissolved manganese was measured colorimetrically using Method 8034, the Periodate Oxidation Method. Manganese in the sample is oxidized to the purple permanganate state by sodium periodate, after buffering the sample with citrate. The purple color that develops as a result of this reaction is directly proportional to the manganese concentration.

After purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater samples from the smaller diameter ¾" temporary wells were collected using the GeoTech pump. A ¼" poly tube was placed in the temporary well, and groundwater was extracted through the tubing using the GeoTech pump.

The groundwater sample was transferred to 9-(40-mL VOA vials) and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. The VOA vials containing the samples were immediately placed on ice and maintained at 4°C in a cooler. A chain of custody (COC) form was written and placed with the samples in the cooler. SOMA's field crew delivered the samples to Curtis & Tompkins, Ltd. Laboratory, in Berkeley, California, upon sampling completion.

Laboratory Analysis

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, TPH-ss, Purgeable Organics, which included BTEX and MtBE constituents, Methane, Ethane, and Ethene. TPH-g and TPH-ss were prepared using EPA Method 5030B and measured using EPA Method 8015B. Purgeable Organics, which included BTEX and MtBE were prepared using EPA Method 5030B and analyzed using EPA Method 8260B. Methane, Ethane, and Ethene were analyzed using RSK-175.

APPENDIX B

Field Notes, Field Measured Physical and Chemical Parameter Values



No

Well Name:	13-10	<u>-</u> #	Project #:	2511
Casing Diameter:	3/4	_inch	Address:	3815 Broadway
Depth of Well:	17.90	feet		Oakland, California
Top of Casing Elevation:	81.50	_feet	Date:	July 5 -6, 2006
Depth to Groundwater:	8,80	feet	Sampler:	Tony Perini
Groundwater Elevation:	72.70	feet		Eric Jennings
Water Column Height:	9.10	_feet		
Purged Volume:	1600 -	_g allo ns		
	3			
Purging Method:	Bailer 🗆		Pump ■ 4	to tem
Sampling Method:	Bailer 🗉	ų.	Pump 風 a	to ten
		1		
Color:	No □		Yes B.	Describe:
Sheen:	No 🗵		Yes 🗆	Describe:

Yes

図

Describe: 44 mm

Field Measurements:

Odor:

Time	Volume (gallon s)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
10:48 Am	4500	t Furcavu	WEIL				
10;52 m	400	7.09	15.80	10.71	1410	279	-63
10:58 AM	1600	7.19	15.20	10,62	1170	279	-104
11:05 Am	SAMI	720					
			9				

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
11:05 am	lv.	٦.٦	5	0.122	0	0



Well Name:	GW-	2_	_	Proj	ect#:	2511	
Casing Diameter:	3/4		inch	Add	lress:	3815 Broadv	vay
Depth of Well:	20		feet			Oakland, Ca	lifornia
Top of Casing Elevation:	79.	14	feet		Date:	July & -6, 200	06
Depth to Groundwater:	9.40)	feet	San	npler:	Tony Perini	
Groundwater Elevation:	69.7	74	feet			Eric Jenning	S
Water Column Height:	10.6	0	feet				
Purged Volume:	200); =	gallons-				
Purging Method:	Bailer			Pump		bes Tech	
Sampling Method:	Bailer			Pump		bes Tech	
Color:	No	区		Yes		Describe:	
Sheen:	No	A		Yes		Describe:	
Odor:	No	Í		Yes	П	Describe:	

Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
8:38 Am	starfo	s pwgp.	g well				
8:42 m	400	7.03	17.60	4.86	682	281	গ্রন্থ
3:46 mm	800	6.99	17.80	9.71	657	273	36
3:51 m	SPWA	KPD					
-							

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
8:51 Am	0	0	0	D	53	<i>b</i> .3



Well Name:	is in	<u>5</u>	Proje	ct #:	2511
Casing Diameter:	3/4	inch inch	Addr	ess:	3815 Broadway
Depth of Well:	20	feet			Oakland, California
Top of Casing Elevation:	77.9	2_feet	E	Date:	July 5-6, 2006
Depth to Groundwater:	11.4	<u>}</u> feet	Samı	pler:	Tony Perini
Groundwater Elevation:	66.4	9feet			Eric Jennings
Water Column Height:	8.5	7feet			
Purged Volume:	800	gallons M			
Purging Method:	Bailer [_	Pump		beotech pump
Sampling Method:	Bailer I]	Pump		beotech pump
Color:	No I	ZÍ.	Yes		Describe:
Sheen:	No E	Z .	Yes		Describe:

Odor:

Time	Volume, (g allon s)	рН	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
7:58 AM	star	to pury	rig well	/			
8 Am	400	7.01	17.80	4.97	636	281	57
8:08 am	800	6.90	17.30	5.69	c-60	45	63
8:10	C, Ams	140					
		0					

Yes

Describe:

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
8:10 Am	0	0	0	0	31	3.1

区

No



Well Name:	mw-	-11	3	Proj	ect#:	2511
Casing Diameter:	2		inch	Add	lress:	3815 Broadway
Depth of Well:			feet			Oakland, California
Top of Casing Elevation:	84.	.13	feet		Date:	July 5-18., 2006
Depth to Groundwater:	11.6	66	feet	San	npler:	Tony Perini
Groundwater Elevation:	72.4	17	feet			Eric Jennings
Water Column Height:	7.3	4	feet			
Purged Volume:	_ 4		gallons			
Purging Method:	Bailer			Pump		
Sampling Method:	Bailer			Pump		
Color:	No	区		Yes		Describe:
Sheen:	No	囤		Yes		Describe:

No

区

Odor:

Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
12:10 PM	s taw	ks pur.	ing well				
12:11	1	6.50	19-80	3.41	1120	A	13
12:13	3	v.61	19.10	8.35	1120	28	35
12:14	ėţ	ner					
12:20 PM	Sm.	ples					

Yes

Describe:

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
12:20 PM	0	0	0	. 0	80	5.9

Notes: FER WENT OF AT of SAL



Well Name:	LFR	<u>-1</u>		Proj	ect#:	2511	
Casing Diameter:		incl	h	Ado	lress:	3815 Broadway	
Depth of Well:	19	efee	t			Oakland, California	
Top of Casing Elevation:	79.	97 fee	t		Date:	July % -6, 2006	
Depth to Groundwater:	9.1	6/_fee	t	San	npler:	Tony Perini	
Groundwater Elevation:	70.3	6fee	t			Eric Jennings	
Water Column Height:	9.	39_fee	t				
Purged Volume:	9	gall	lons				
Purging Method:	Bailer			Pump			
Sampling Method:	Bailer			Pump			
Color:	No	T		Yes		Describe:	
Sheen:	No			Yes		Describe:	
Odor	No	THE STATE OF THE S		Voc	П	Describe:	

Time	Volume (gallons)	pН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
9:20 AM	star	to purg	my well				
9:21 AM	1.0	6.63	17.20	9.86	1260	27	92
9:24 Am	4	6.57	17.50	9.79	1290	39	94
9:28 AM	9	6.59	17.10	9.93	1270	484	79
9530 AM	San	10/00					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
9:30 AM	0	0	0	0	6	0.4



Well Name:	LFR	-2	Proj	ect#:	2511
Casing Diameter:		2inch	Add	ress:	3815 Broadway
Depth of Well:		feet feet			Oakland, California
Top of Casing Elevation:	81.	99 feet		Date:	July 5-96, 2006
Depth to Groundwater:	10.	6n feet	Sam	pler:	Tony Perini
Groundwater Elevation:	71-2	9feet			Eric Jennings
Water Column Height:	8.	40 feet			
Purged Volume:	5	gallons			2
Purging Method:	Bailer		Pump		
Sampling Method:	Bailer		Pump	П	
Color:	No		Yes		Describe: cloudy
Sheen:	No	o d	Yes		Describe:
Odor:	No	区	Yes		Describe:

Time	Volume (gallons)	pН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
2:40 Am	sta.	ko su	91-29 20	11			
2:42 811	1.0	6.90	18.40	7.11	661	20	-150
2:45 PM	4	6.91	17.90	7.70	679	6	-136
2:46 Pm	5	BRIE	2				
2:50 Pm	San	eples					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
2:50 pm	3.30	3.30	0	0	0	4.3



Well Name:	LFR	!-3	Pro	ect#:	2511	
Casing Diameter:	2	inch	Add	dress:	3815 Broadway	
Depth of Well:	2:	≥feet			Oakland, California	
Top of Casing Elevation:	17.	96_feet		Date:	July 5-8, 2006	
Depth to Groundwater:	10-	36 feet	Sar	npler:	Tony Perini	
Groundwater Elevation:	67.	60 feet			Eric Jennings	
Water Column Height:	_11.	64 feet				
Purged Volume:		7 - gallons				
Purging Method:	Bailer	_	Pump			
Sampling Method:	Bailer		Pump			
Color:	No		Yes		Describe:	
Sheen:	No		Yes		Describe:	
Odor:	No		Yes		Describe:	

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
3:25Pm	star	les purg	ng nel	1			
3:27 /4	1-0	6.93	20.20	5.72	639	180	52
3:29PM	4	6.58	20.20	5.83	610	74	53
3:31/14	7	6.56	20.10	5.47	640	192	56
3:35/m	Same	eles					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
3:35 pm	0	0	0	0	40	1.1



Well Name:	LFR.	- 4(Proje	ct #:	2511	
Casing Diameter:	2	inch	Add	ress:	3815 Broadway	
Depth of Well:	1٩. ٤	ofeet			Oakland, California	
Top of Casing Elevation:	81.6	feet	I	Date:	July 5-k, 2006	
Depth to Groundwater:	12.3	zfeet	Sam	pler:	Tony Perini	
Groundwater Elevation:	69.3	?feet			Eric Jennings	
Water Column Height:	<u> </u>	feet				
Purged Volume:	<u> </u>	- gallons				
Purging Method:	Bailer		Pump			
Sampling Method:	Bailer	M	Pump			
Color:	No I	12.	Yes		Describe:	
Sheen:	No I	T	Yes		Describe:	
Odor:	No. 1	प्रत	Vas	П	Describe:	

소리가 되었다. 그 나는 그리고 가면 11. 전략 15. 전략 15. 전략 15. 그는 그는 그 그리고 있는 그 그리지 않는 그 그러워 하게 되었다면 그렇게 되었다. 전략 15. 전략 15. 전략

Field Measurements:

Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
los pu	UT DSZ	- Pream	wou				
1:06	1	4.37	1420	9.00	940	vzz	-7
1:68	ζ	4.72	19.40	9,00	810	27	-79
i:II	Ь	6.75	18.90	9.70	guz	14	-98
1:15	દ	DRY					
1120	SIMF	ud					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1:20 PM	3.30	3.30	Ø	0	0	5.9

Notes: WIN VIN DAY AT & GAL



Well Name:	Soma	٠١		Proje	ect#:	2511	
Casing Diameter:			inch	Add	ress:	3815 Broadw	<i>a</i> y
Depth of Well:	40.0	0	feet			Oakland, Cal	ifornia
Top of Casing Elevation:	81.64	_	feet		Date:	July 5-%, 200	6
Depth to Groundwater:	12.6		feet	San	pler:	Tony Perini	
Groundwater Elevation:	68.99	7	feet			Eric Jennings	5
Water Column Height:	\$7.3	5	feet				
Purged Volume:	18		gallons				
Purging Method:	Bailer I		×	Pump			
Sampling Method:	Bailer	=4		Pump			
Color:	No I	嘋、		Yes		Describe:	
Sheen:	No I	व्य		Yes		Describe:	
Odor:	No I	ঘ্		Yes		Describe:	

Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
1:39 PM	CANE	T PURCULA	n wan				
1:43	4	6.77	18.20	い.42	1120	556	49
1:59	10	i - 68	18,50	6.40	1140	166	51
1157	18	6.63	18.40	6.79	N20	86	66
2:05	SAMPI	402					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
2:05 PM	0	0.30	Q	0,011	13	1.8



well Name.		Projectiff. 2011	
Casing Diameter:	inch	Address: 3815 Broadway	
Depth of Well:	feet	Oakland, California	
Top of Casing Elevation:	81.37 feet	Date: July #-6, 2006	
Depth to Groundwater:	8.80 feet	Sampler: Tony Perini	
Groundwater Elevation:	72.59 feet	Eric Jennings	
Water Column Height:	feet		
Purged Volume:	gallons		
Purging Method:	Bailer 🗹	Pump ■	
Sampling Method:	Bailer ■	Pump □	

Yes

Yes

Yes

 \Box

回

Þ

区

No

No

No

Describe:

Describe:

Describe: ______

1 32

Field Measurements:

Color:

Sheen:

Odor:

	Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
	1:12 pm	mars	t superinh	WE II			a	
	1:13 pm	1	7.12	16.40	8,05	1170	205	-60
BALLER	1,22 pm	4	7.52	15.60	8.35	1230	282	-60
	1:30 pm	8	7.08	14.00	8.92	1170	216	-85
	1:35 pm	sans	LED					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1:35 pm	3.2	3.3	0	Ø	Ŋ	7.4



Well Name:	SOM	<u>9-3</u>		Proj	ect#:	2511	
Casing Diameter:	3/4	<u>'</u>	inch	Add	ress:	3815 Broadw	ay
Depth of Well:	3	0	feet			Oakland, Cal	ifornia
Top of Casing Elevation:	81.4	12	feet		Date:	July \$ -6, 2006	6
Depth to Groundwater:	10.	10	feet	San	npler:	Tony Perini	*
Groundwater Elevation:	71.0	2_	feet			Eric Jennings	
Water Column Height:	19.		feet				
Purged Volume:	200	න	g allo ns				
Purging Method:	Bailer			Pump			
Sampling Method:	Bailer	l-i		Pump			
Color:	No	区		Yes		Describe:	
Sheen:	No			Yes		Describe:	
Odor:	No			Yes	Q	Describe:	alinh

Time	Volume (gallons)	рН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
11: 27 AM	SUTER 1	- Preninu	WFU				
11:31 Am	800	7.23	16.20	10.51	Goll	279	-34
11:36 am	2000	72. []	16.00	10,62	1020	427	-53
11:41 am	GANIF	rep					

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
11:41 ar	0.57	0.53	0	0	D	0.5



Goma-	5	Proj	ect#:	2511
3,4	_ inch	Ado	lress:	3815 Broadway
25.60	_feet			Oakland, California
8/50	_feet		Date:	July K -6, 2006
2,80	feet	San	npler:	Tony Perini
78.70	_feet			Eric Jennings
22.80	_feet			
2000	_g allo ns			
Bailer □		Pump	- 46	1 STELM
Bailer		Pump	Ø, a	FOTT of
				16
No 🗆		Yes		Describe: LEATISM
No 🔼		Yes		Describe:
No 🕰		Yes		Describe:
	3,4 25.60 8/50 2.80 78.76 22.80 2000 Bailer □ Bailer □ No □	inch zc.60 feet 8/.50 feet 2.80 feet 78.76 feet 22.80 feet 22.80 gellons Bailer No No No No No No No No No N	inch Add Add Set San Set San Set San Set San Set San Set San Set San Set San Set San Set Set San Set Set San Set Set Set San Set Set Set Set Set Set Set Set Set Set	3/4 inch Address: 25.60 feet Date: 8/.50 feet Sampler: 78.70 feet 22.80 feet 2000 gellons Bailer Pump A

Time	Volume (g allons)	pН	Temp (°C)	D.O. (mg/L)	E.C. (μs/cm)	Turbidity (NTU)	ORP (mV)
12:36PM	5720	- FURCH	VC= WELL				
12:40	300	7.98	16.50	10.31	391	277	- 49
12:48	2000	7.81	14.30	10,54	454	362	-129
12:50	Samp	(N)					
						t p	
	7						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
12:50	0.82	3.30	0	0	0	n

APPENDIX C





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

SOMA Environmental Engineering Inc. 6620 Owens Dr. Suite A Pleasanton, CA 94588

Date: 31-JUL-06 Lab Job Number: 187895

Project ID: 2511

Location: 3815 Broadway, Oakland, CA

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:

Reviewed by:

Operations Manager

This package may be reproduced only in its entirety.

NELAP # 01107CA

Page 1 of



CASE NARRATIVE

Laboratory number:

187895

Client:

SOMA Environmental Engineering Inc.

Project:

2511

Location:

3815 Broadway, Oakland, CA

Request Date:

07/06/06

Samples Received:

07/06/06

This hardcopy data package contains sample and QC results for twelve water samples, requested for the above referenced project on 07/06/06. The samples were received on ice and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High surrogate recoveries were observed for bromofluorobenzene (FID) in B-10 (lab # 187895-001) and SOMA-2 (lab # 187895-010); the corresponding trifluorotoluene (FID) surrogate recoveries were within limits. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Dissolved Gases by GC/FID (RSK-175):

No analytical problems were encountered.

CHAIN OF CUSTODY

Page / of /

Analyses

Curtis & Tompkins, Ltd.

Analytical Laboratory Since 1878 2323 Fifth Street

> Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax

Project No: 2511

Project Name: 3815 Broadway, Oakland, CA

Turnaround Time: Standard

C&T LOGIN # _

Sampler: TONY PERINT

Report To:

Tony Perini

Company: SOMA Environmental

Telephone: 925-244-6600

925-244-6601

		I da.					020	244-0001					
				Ma	tri	X				Pre	serva	tive	•
Lab No.	Sample ID.	Sampling Date Time	Soil	Water	Waste		Co	# of entainers	HCL	H ₂ SO ₄	HNO ₃	ICE	
~ (B-10 GW-2 GW-3 MW-11	7/6/06 1/05 AM	ż	11/	T		9 -40	ml VOAs	~			1	1
-2 -3	6W-2	7/4/06 851 Am							1			1	
- 3	6W-3	7/6/06 8:10 Am		/									
۲_	mw-11	7/5/06 1220 AM		7			8	7EW 7/6/04				П	
-5	LFR-1	1/0/06 930 Am	•					, ,	\neg			П	
-6	LFR-1 LFR-2	7/1/06 250 PM			ł				\exists			П	
-71	LFR-3	7/5/db 335 PM	7	/					7			П	
-8	LFR-3 LFR-4	7/5/06 120 PM	1	/	Ī				1			П	Γ
-9	somA-1	7/5/06 205 PM	1	/					\exists			П	
-10 -11	somA-1 somA-2 somA-3 somA-5	7/6/06 13512	1	/					1				
-1[SomA-3	7/6/06 114/ AM	-	/								П	
-12	SOMA-5	7/6/06 1250/11		/			4		V			¥	
Notes:			R	L EL	L IN	OI	JISHE	ED BY:					

Fax:

		_		L	
RE	CE	YE	DВ	Y:	

JONY PERIN

7/6/06 2:20PM DATE/TIME

Exle

-6-06 3:300 M. DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

MtBE and BTEX constituents include on 8260B List

EDF output required

REZ. O intact; Onice &

Methane

TPHg (including Stoddard Solvent) 8260B

8260 (Full List)

Lisa Brooker

From:

"Tony Perini" <tperini@somaenv.com>

To:

lisa@ctberk.com>

Sent:

Wednesday, July 12, 2006 5:21 PM

Subject:

Lab Analysis

Lisa could you add to SOMA's project 2511-Oakland Glovatorium, C&T login number 187895, gasoline oxygenates and lead scavengers, as well as, ethene and ethane. Thank you.



Total Volatile Hydrocarbons Lab #: 187895 3815 Broadway, Oakland, CA Location: Prep: Analysis: Client: SOMA Environmental Engineering Inc. EPA 5030B Project#: 2511 EPA 8015B Matrix: Water Batch#: 115056 Units: ug/L Received: 07/06/06

Field ID:

B-10

Type: Lab ID:

SAMPLE 187895-001 Diln Fac:

1.000

Sampled: Analyzed: 07/06/06 07/07/06

Analyte	Result	RL
Gasoline C7-C12	2,200 H Y	50
Stoddard Solvent C7-C12	1 300	50

Surrogate	%RE(C Limits	
Trifluorotoluene (FID)	108	69-137	
Bromofluorobenzene (FID)	138 7	* 80-133	

Field ID:

GW-2

Type: Lab ID: SAMPLE 187895-002 Diln Fac:

1.000

Sampled: Analyzed:

07/06/06 07/07/06

Analyte Result RL Gasoline C7-C12 ND Stoddard Solvent C7-C12 ND 50

	TOTAL CONTRACTOR OF THE PARTY O	20000-10 00000 (
Surrogate	*REC	Limits
Trifluorotoluene (FID)	0.0	60 105
Trifluorotoluene (FID)	98	69-137
1 =		00 100
Bromofluorobenzene (FID)	102	80-133

Field ID:

Type:

Lab ID:

SAMPLE

GW-3

187895-003

Diln Fac:

Sampled: Analyzed: 1.000

07/06/06 07/07/06

	Result	RL	
Gasoline C7-C12	140 Y Z	50	
Stoddard Solvent C7-C12	91 Y Z	50	

Surrogate	%REC	Limits	
Trifluorotoluene (FID)	100	69-137	
Bromofluorobenzene (FID)	103	80-133	

*= Value outside of QC limits; see narrative H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard Z= Sample exhibits unknown single peak or peaks ND= Not Detected

RL= Reporting Limit

Page 1 of 4

2.2



Total Volatile Hydrocarbons Lab #: 187895 Location: 3815 Broadway, Oakland, CA Prep: Analysis: Client: SOMA Environmental Engineering Inc. EPA 5030B Project#: 2511 EPA 8015B Matrix: Water Batch#: 115056 Units: uq/L Received: 07/06/06

Field ID:

MW-11

Type: Lab ID:

SAMPLE 187895-004 Diln Fac:

1.000

Sampled: Analyzed: 07/05/06 07/08/06

Result RL Gasoline C7-C12 ND Stoddard Solvent C7-C12 ND 50

Surrogate %REC Limits Trifluorotoluene (FID) 96 69-137 Bromofluorobenzene (FID) 100 80-133

Field ID:

LFR-1

Type: Lab ID: SAMPLE 187895-005 Diln Fac:

1.000

Sampled: Analyzed:

07/06/06 07/07/06

Result Analyte RL Gasoline C7-C12 ND Stoddard Solvent C7-C12 ND 50

Surrogate	%RE(C Limits
Trifluorotoluene (FID)	96	69-137
Bromofluorobenzene (FID)	97	80-133

Field ID:

Type: Lab ID:

LFR-2 SAMPLE

187895-006

Diln Fac:

Sampled:

1.000

07/05/06

Analyzed:

07/07/06

Analyte	Result	RL	
Gasoline C7-C12	770 H Y	50	
Stoddard Solvent C7-C12	490	50	

Surrogate	%REC	Limits	
Trifluorotoluene (FID)	100	69-137	
Bromofluorobenzene (FID)	128	80-133	

*= Value outside of QC limits; see narrative H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit

Page 2 of 4



Total Volatile Hydrocarbons Lab #: 187895 Location: 3815 Broadway, Oakland, CA Client: SOMA Environmental Engineering Inc. Prep: Analysis: EPA 5030B Project#: 2511 EPA 8015B Matrix: Water Batch#: 115056 Units: ug/L Received: 07/06/06

Field ID:

LFR-3 SAMPLE

Type: Lab ID:

187895-007

Diln Fac:

Sampled: Analyzed: 1.000 07/05/06 07/07/06

Analyte Result RL Gasoline C7-C12 ND 50 Stoddard Solvent C7-C12 ND 50

Surrogate Limits Trifluorotoluene (FID) Bromofluorobenzene (FID) 69-137 80-133 95 101

Field ID:

LFR-4

Type: Lab ID:

SAMPLE 187895-008 Diln Fac:

Sampled: Analyzed: 1.000

07/05/06 07/07/06

Analyte Result RL Gasoline C7-C12 1,100 50 Stoddard Solvent C7-C12 650 Y 50

Surrogate %REC Limits Trifluorotoluene (FID) 115 69-137 Bromofluorobenzene (FID) 128 80-133

Field ID:

SOMA-1

Type: Lab ID:

SAMPLE 187895-009 Diln Fac:

Sampled: Analyzed: 1.000

07/05/06 07/07/06

Analyt	te Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent	C7-C12 ND	50

Trifluorotoluene (FID) 101 69-137	Surrogate	%REC	Limits	
Bromofluorobenzene (FID) 102 80-133	IIIII dolocoluciic (IID)	101	64-137	
		102		

*= Value outside of QC limits; see narrative H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit

Page 3 of 4



Total Volatile Hydrocarbons Lab #: 187895 3815 Broadway, Oakland, CA Location: Prep: Analysis: Client: SOMA Environmental Engineering Inc. EPA 5030B Project#: 2511 EPA 8015B Matrix: Water Batch#: 115056 Units: ug/L Received: 07/06/06

Field ID: Type:

Lab ID:

SOMA-2 SAMPLE

187895-010

Diln Fac:

Sampled: Analyzed: 10.00 07/06/06 07/08/06

Analyte Result RL 40,000 H Y Gasoline C7-C12 500 Stoddard Solvent C7-C12 25,000 500

Surrogate %REC Limits Trifluorotoluene (FID) 106 69-137 Bromofluorobenzene (FID) 177 80-133

Field ID:

Type: Lab ID:

SOMA-3 SAMPLE 187895-011 Diln Fac:

Sampled: Analyzed: 1.000 07/06/06 07/07/06

Analyte Result RL Gasoline C7-C12 270 H Y 50 Stoddard Solvent C7-C12 140 50

Surrogate %REC Limits Trifluorotoluene (FID) 108 69-137 Bromofluorobenzene (FID) 109 80-133

Field ID:

Type: Lab ID:

SOMA-5 SAMPLE 187895-012 Diln Fac: Sampled: Analyzed:

1.000 07/06/06 07/08/06

Analyte Result RL Gasoline C7-C12 720 Y Z Stoddard Solvent C7-C12 450 Y Z 50

Surrogate %REC Limits Trifluorotoluene (FID) 103 69-137 Bromofluorobenzene (FID) 109 80-133

Type: Lab ID:

BLANK OC346560 Diln Fac: Analyzed:

1.000 07/07/06

Analyte Result Gasoline C7-C12 ND 50 Stoddard Solvent C7-C12 ND 50

Surrogate %REC Limits Trifluorotoluene (FID) 111 69-137 Bromofluorobenzene (FID) 80-133 106

*= Value outside of QC limits; see narrative H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

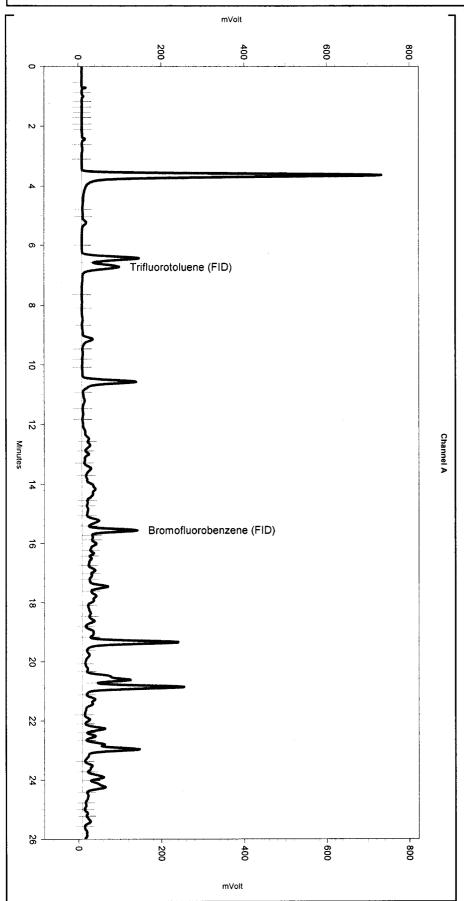
Z= Sample exhibits unknown single peak or peaks

ND= Not Detected RL= Reporting Limit

Page 4 of 4

Sample Name: 187895-001,115056,tvh+stodd
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Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\188.seq
Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
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Enabled Event Type Yes Width Yes Threshold Manual Integration Fixes Data File: \\Lims\gdrive\ezchrom\\	(Minute 0 0	0 0 0	0.2	
Yes Width Yes Threshold Manual Integration Fixes	(Minute 0 0 Projects) Stor (Minute	0 0 0 .GC07	0.2	38_006

Sample Name: 187895-003,115056,tvh+stodd

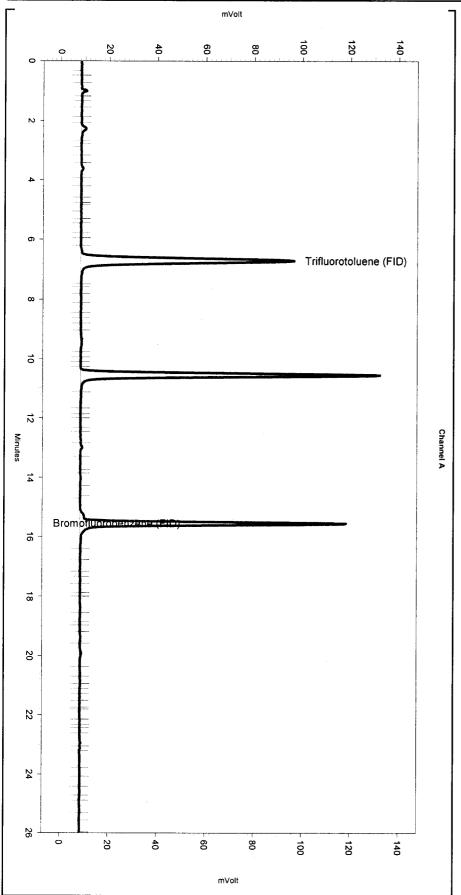
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Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\188.seq

Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

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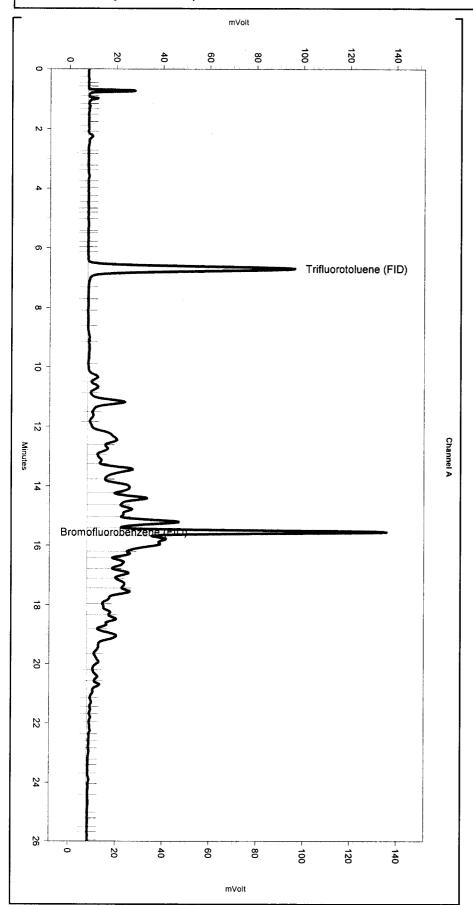
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Sample Name: 187895-006,115056,tvh+stodd
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Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

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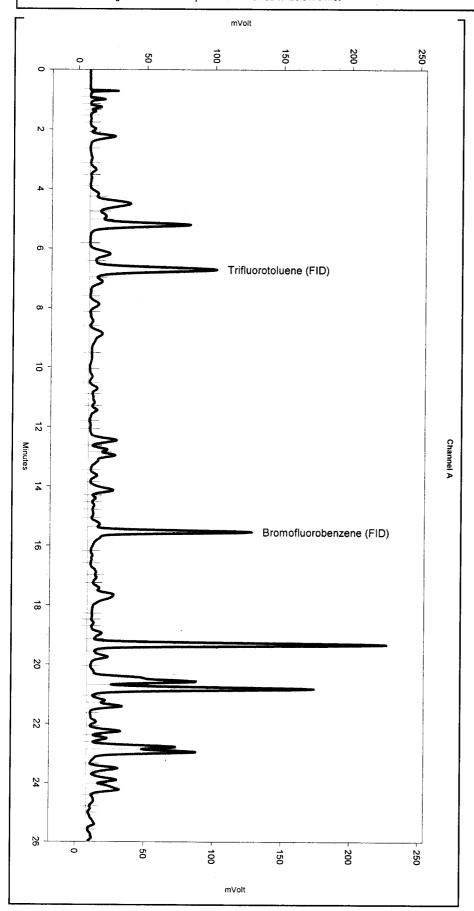
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Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\188.seq
Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

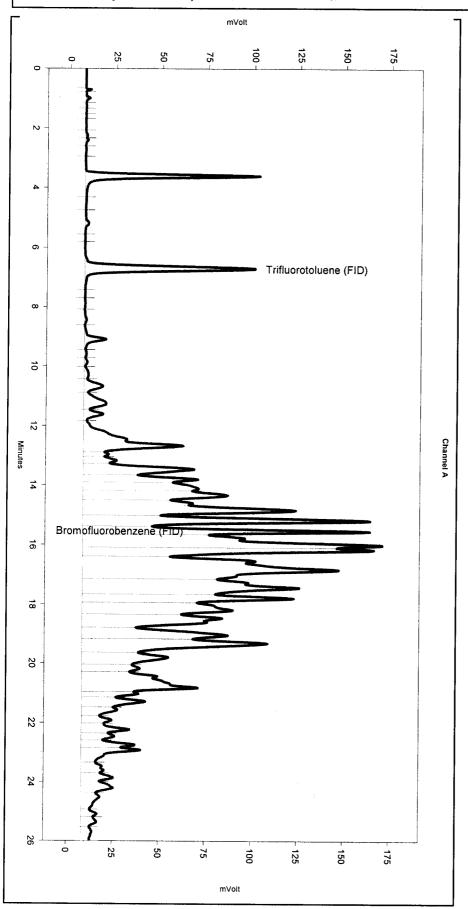
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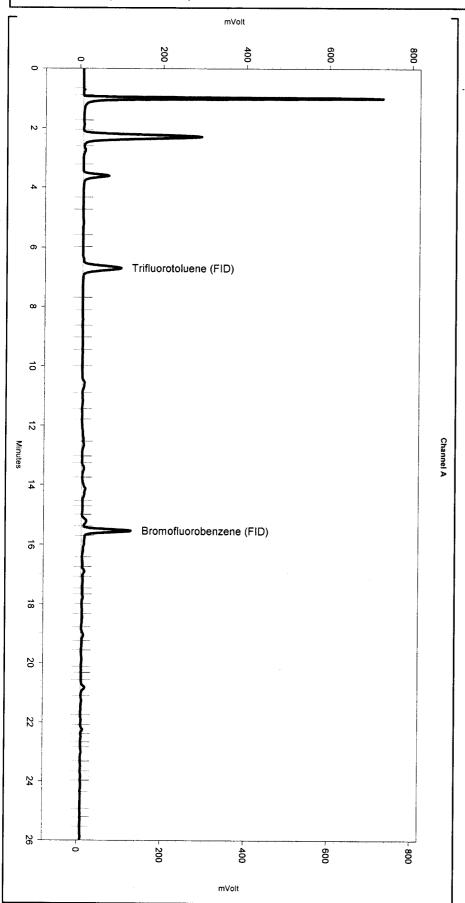
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Sample Name: 187895-011,115056,tvh+stodd
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\188_023
Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\188.seq
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Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

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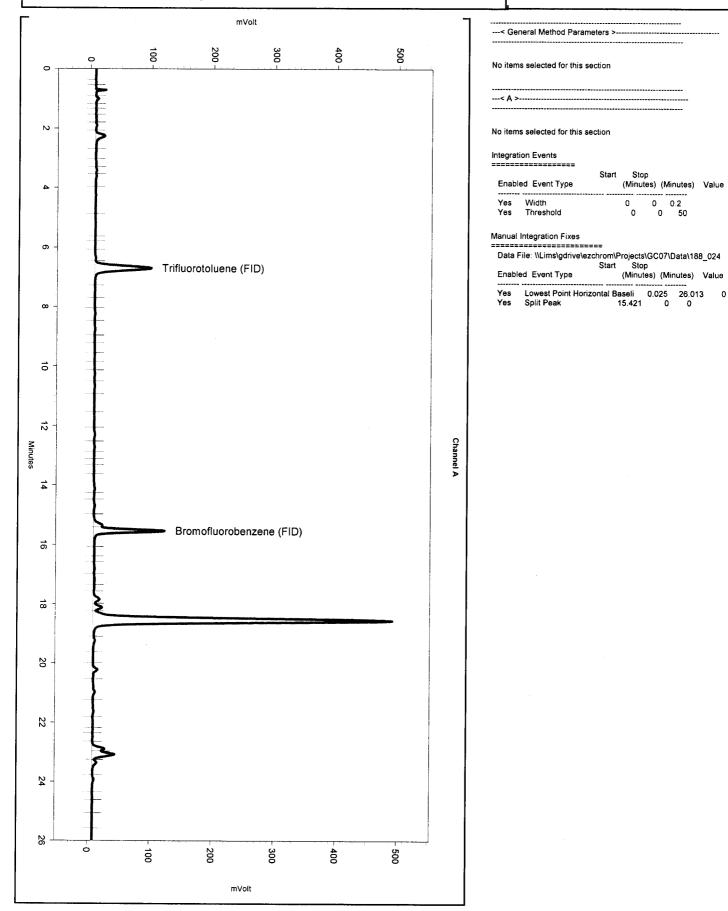


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Sample Name: 187895-012,115056,tvh+stodd Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\188_024 Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\188.seq Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2) Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

Software Version 3.1.7 Run Date: 7/8/2006 12:11:57 AM Analysis Date: 7/8/2006 11:00:31 AM

Sample Amount: 5



Sample Name: ccv/lcs,qc345461,115056,s3708,5/5000

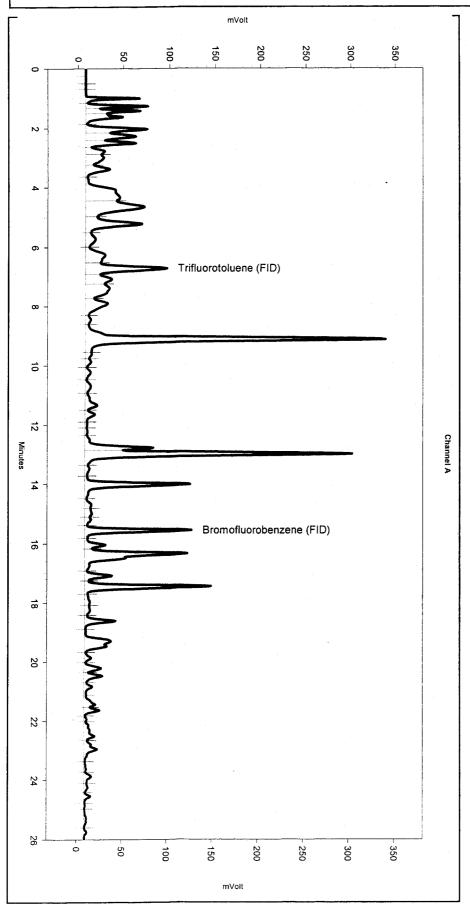
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Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

Gasoline

Software Version 3.1.7 Run Date: 7/7/2006 9:55:55 AM Analysis Date: 7/7/2006 12:14:24 PM Sample Amount: 5



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Sample Name: ccv,stodd,115056,s3641,5/5000

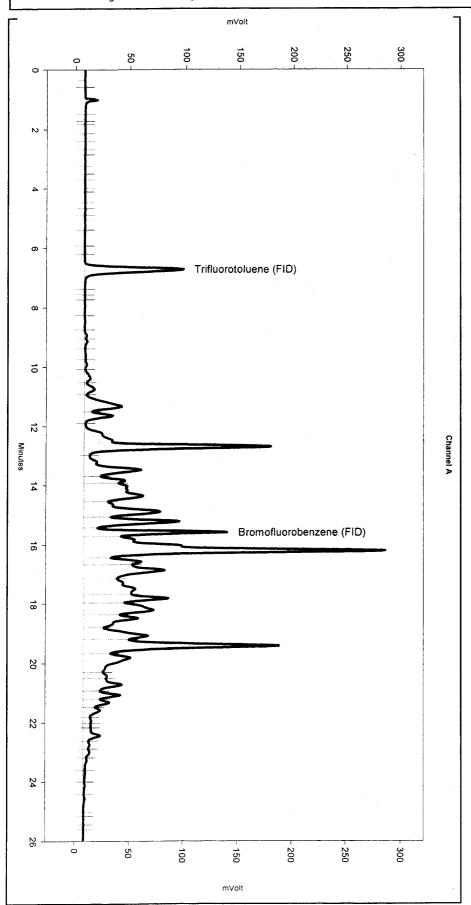
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Instrument: GC07 Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)

Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe173.met

Studdard

Software Version 3.1.7 Run Date: 7/7/2006 10:32:36 AM Analysis Date: 7/7/2006 12:14:28 PM Sample Amount: 5



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Data F	ile: \\Lims\gdrive\ez		Projects Sto		\Data\18	8_003
Enable	ed Event Type	Oldin	-	•	linutes)	Value
Yes	Lowest Point Horiz	 zontal B	aseli	0.037	25.96	63 (



		Total Volatil	e Hydrocarbons	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8015B
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC346561		Batch#:	115056
Matrix:	Water		Analyzed:	07/07/06
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,001	100	80-120

····		
Bromofluorobenzene (FID)	107	80-133
Trifluorotoluene (FID)	111	69-137
Surrogate	%REC	Limits



		Total Volatil	e Hydrocarbons	
Lab #: 18	37895		Location:	3815 Broadway, Oakland, CA
Client: SC	MA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#: 25	511		Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ		Batch#:	115056
MSS Lab ID:	187916-001		Sampled:	07/06/06
Matrix:	Water		Received:	07/07/06
Units:	ug/L		Analyzed:	07/07/06
Diln Fac:	1.000			

Type:

MS

Lab ID: QC346624

Analyte	MSS Result	Spiked	Result	%RI	C Limits
Gasoline C7-C12	28.63	2,000	1,782	88	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	69-137
Bromofluorobenzene (FID)	105	80-133

Type:

MSD

Lab ID:

QC346625

Analy	te Spiked	Result	%REC	' Limits	RPD Lim
Gasoline C7-C12	2,000	1,773	87	80-120	0 20

Surrogate	%RE(Limits
Trifluorotoluene (FID)	108	69-137
Bromofluorobenzene (FID)	102	80-133



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	3	Analysis:	EPA 8260B
Field ID:	B-10		Batch#:	115189
Lab ID:	187895-001		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L	•	Analyzed:	07/12/06
Diln Fac:	200.0		-	.,,,

Apalyte		esu t	
tert-Butyl Alcohol (TBA)	ND	2,000	
Freon 12	ND	200)
Chloromethane	ND	200)
Vinyl Chloride	ND	100)
Isopropyl Ether (DIPE)	ND	100)
Ethyl tert-Butyl Ether (ETBE)	ND	100	
Bromomethane	ND	200	
Methyl tert-Amyl Ether (TAME)	ND	100	
Chloroethane	ND	200	
Trichlorofluoromethane	ND	200	
Acetone	ND	2,000	
Freon 113	ND	100	
1,1-Dichloroethene	ND	100	
Methylene Chloride	ND		
Carbon Disulfide	ND	2,000	
MTBE		100	
trans-1,2-Dichloroethene	ND	100	
Vinyl Acetate	ND	100	
· I · · · · · · · · · · · · · · · · · ·	ND	2,000	
1,1-Dichloroethane	ND	100	
2-Butanone	ND	2,000	
cis-1,2-Dichloroethene		,000 100	
2,2-Dichloropropane	ND	100	
Chloroform	ND	. 100	
Bromochloromethane	ND	100)
1,1,1-Trichloroethane	ND	100	
1,1-Dichloropropene	ND	100)
Carbon Tetrachloride	ND	100	
1,2-Dichloroethane	ND	100	
Benzene	ND	100)
Trichloroethene		380 100)
1,2-Dichloropropane	ND	100	
Bromodichloromethane	ND	100	
Dibromomethane	ND	100	
4-Methyl-2-Pentanone	ND	2,000	
cis-1,3-Dichloropropene	ND	100	
Toluene	ND	100	
trans-1,3-Dichloropropene	ND	100	•
1,1,2-Trichloroethane	ND	100	
2-Hexanone	ND	2,000	
1,3-Dichloropropane	ND	100	
Tetrachloroethene	-112	370	
Dibromochloromethane	ND	100	
1,2-Dibromoethane	ND	100	
Chlorobenzene	ND	100	
1,1,1,2-Tetrachloroethane	ND		
Ethylbenzene	ND	100	
m,p-Xylenes	ND	100	
o-Xylene		100	
Styrene	ND	100	· · · · · · · · · · · · · · · · · · ·
Bromoform	ND	100	
	ND	200	
Isopropylbenzene	ND	100	
1,1,2,2-Tetrachloroethane	ND	100	
1,2,3-Trichloropropane	ND	100	
Propylbenzene	ND	100	

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Field ID:	B-10		Batch#:	115189
Lab ID:	187895-001		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/12/06
Diln Fac:	200.0		<u> </u>	

Analyte	Reside	RL
Bromobenzene	ND	100
1,3,5-Trimethylbenzene	ND	100
2-Chlorotoluene	ND	100
4-Chlorotoluene	ND	100
tert-Butylbenzene	ND	100
1,2,4-Trimethylbenzene	ND	100
sec-Butylbenzene	ND	100
para-Isopropyl Toluene	ND	100
1,3-Dichlorobenzene	ND	100
1,4-Dichlorobenzene	ND	100
n-Butylbenzene	ND	100
1,2-Dichlorobenzene	ND	100
1,2-Dibromo-3-Chloropropane	ND	400
1,2,4-Trichlorobenzene	ND	100
Hexachlorobutadiene	ND	100
Naphthalene	ND	400
1,2,3-Trichlorobenzene	ND	100

Surrogate	%REC	Limits	
Dibromofluoromethane	113	80-120	
1,2-Dichloroethane-d4	112	80-130	
Toluene-d8	106	80-120	
Bromofluorobenzene	106	80-122	



		Volatile	Organics			
Lab #:	187895		Location:	3815 Broadway,	Oakland,	CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	•	
Project#:	2511	-	Analysis:	EPA 8260B		
Field ID:	GW-2		Batch#:	115100		
Lab ID:	187895-002		Sampled:	07/06/06		i
Matrix:	Water		Received:	07/06/06		
Units:	ug/L		Analyzed:	07/10/06		
Diln Fac:	1.000					

Analyte	P.	sult	RL
tert-Butyl Alcohol (TBA)	ND		10
Freon 12			
Chloromethane	ND		1.0
	ND		1.0
Vinyl Chloride	ND		0.5
Isopropyl Ether (DIPE)	ND		0.5
Ethyl tert-Butyl Ether (ETBE)	ND		0.5
Bromomethane	ND		1.0
Methyl tert-Amyl Ether (TAME)	ND		0.5
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
Acetone	ND		10
Freon 113	ND		0.5
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		10
Carbon Disulfide	ND		0.5
MTBE	ND		0.5
trans-1,2-Dichloroethene	ND		
Vinyl Acetate			0.5
1,1-Dichloroethane	ND		10
2-Butanone	ND		0.5
	ND	^ 7	10
cis-1,2-Dichloroethene	3.75	0.7	0.5
2,2-Dichloropropane	ND		0.5
Chloroform	ND		0.5
Bromochloromethane	ND		0.5
1,1,1-Trichloroethane	ND		0.5
1,1-Dichloropropene	ND		0.5
Carbon Tetrachloride	ND		0.5
1,2-Dichloroethane	ND		0.5
Benzene	ND		0.5
Trichloroethene		9.5	0.5
1,2-Dichloropropane	ND		0.5
Bromodichloromethane	ND		0.5
Dibromomethane	ND		0.5
4-Methyl-2-Pentanone	ND		10
cis-1,3-Dichloropropene	ND		0.5
Toluene	ND		0.5
trans-1,3-Dichloropropene	ND		0.5
1,1,2-Trichloroethane	ND		0.5
2-Hexanone	ND		10
1,3-Dichloropropane	ND		0.5
Tetrachloroethene	תוז	75	0.5
Dibromochloromethane	ND	13	
1,2-Dibromoethane			0.5
Chlorobenzene	ND		0.5
1,1,1,2-Tetrachloroethane	ND		0.5
Ethylbenzene	ND		0.5
m,p-Xylenes	ND		0.5
	ND		0.5
o-Xylene	ND		0.5
Styrene	ND		0.5
Bromoform	ND		1.0
Isopropylbenzene	ND		0.5
1,1,2,2-Tetrachloroethane	ND		0.5
1,2,3-Trichloropropane	ND		0.5
Propylbenzene	ND		0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics		
Lab #:	187895		Location:	3815 Broadway, Oal	cland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	
Project#:	2511	3	Analysis:	EPA 8260B	
Field ID:	GW-2		Batch#:	115100	
Lab ID:	187895-002		Sampled:	07/06/06	
Matrix:	Water		Received:	07/06/06	
Units:	ug/L		Analyzed:	07/10/06	
Diln Fac:	1.000				· · · · · · · · · · · · · · · · · · ·

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	110	80-130
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental E	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Field ID:	GW-3		Units:	ug/L
Lab ID:	187895-003		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06

Analyte	Result	RL	Diln	Fac Batch# Analyzed
tert-Butyl Alcohol (TBA)	ND	50	5.000	115189 07/12/06
Freon 12	ND	5.0	5.000	115189 07/12/06
Chloromethane	ND	5.0	5.000	115189 07/12/06
Vinyl Chloride	ND	2.5	5.000	115189 07/12/06
Isopropyl Ether (DIPE)	ND	2.5	5.000	115189 07/12/06
Ethyl tert-Butyl Ether (ETBE)	ND	2.5	5.000	115189 07/12/06
Bromomethane	ND	5.0	5.000	115189 07/12/06
Methyl tert-Amyl Ether (TAME)	ND	2.5	5.000	115189 07/12/06
Chloroethane	ND	5.0	5.000	115189 07/12/06
Trichlorofluoromethane	ND	5.0	5.000	115189 07/12/06
Acetone	ND	50	5.000	115189 07/12/06
Freon 113	ND	2.5	5.000	115189 07/12/06
1,1-Dichloroethene	ND	2.5	5.000	115189 07/12/06
Methylene Chloride	ND	50	5.000	115189 07/12/06
Carbon Disulfide	ND	2.5	5.000	115189 07/12/06
MTBE	ND	2.5	5.000	115189 07/12/06
trans-1,2-Dichloroethene	ND	2.5	5.000	115189 07/12/06
Vinyl Acetate	ND	50	5.000	115189 07/12/06
1,1-Dichloroethane	ND	2.5	5.000	115189 07/12/06
2-Butanone	ND	50	5.000	115189 07/12/06
cis-1,2-Dichloroethene	ND	2.5	5.000	115189 07/12/06
2,2-Dichloropropane	ND	2.5	5.000	115189 07/12/06
Chloroform	ND	2.5	5.000	115189 07/12/06
Bromochloromethane	ND	2.5	5.000	115189 07/12/06
1,1,1-Trichloroethane	ND	2.5	5.000	115189 07/12/06
1,1-Dichloropropene	ND	2.5	5.000	115189 07/12/06
Carbon Tetrachloride	ND	2.5	5.000	115189 07/12/06
1,2-Dichloroethane	ND	2.5	5.000	115189 07/12/06
Benzene	ND	2.5	5.000	115189 07/12/06
Trichloroethene	ND	2.5	5.000	115189 07/12/06
1,2-Dichloropropane	ND	2.5	5.000	115189 07/12/06
Bromodichloromethane	ND	2.5	5.000	115189 07/12/06
Dibromomethane	ND	2.5	5.000	115189 07/12/06
4-Methyl-2-Pentanone	ND	50	5.000	115189 07/12/06
cis-1,3-Dichloropropene	ND	2.5	5.000	115189 07/12/06
Toluene	ND	2.5	5.000	115189 07/12/06
trans-1,3-Dichloropropene	ND	2.5	5.000	115189 07/12/06
1,1,2-Trichloroethane	ND	2.5	5.000	115189 07/12/06
2-Hexanone	ND	50	5.000	115189 07/12/06

ND= Not Detected RL= Reporting Limit



	Volatile	Organics	
Lab #:	187895	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-3	Units:	ug/L
Lab ID:	187895-003	Sampled:	07/06/06
Matrix:	Water	Received:	07/06/06

Analyte	Result	RL	Diln Fa	sc Batch# Analyzed
1,3-Dichloropropane	ND	2.5	5.000	115189 07/12/06
Tetrachloroethene	400	3.6	7.143	115140 07/11/06
Dibromochloromethane	ND	2.5	5.000	115189 07/12/06
1,2-Dibromoethane	ND	2.5	5.000	115189 07/12/06
Chlorobenzene	ND	2.5	5.000	115189 07/12/06
1,1,1,2-Tetrachloroethane	ND	2.5	5.000	115189 07/12/06
Ethylbenzene	ND	2.5	5.000	115189 07/12/06
m,p-Xylenes	ND	2.5	5.000	115189 07/12/06
o-Xylene	ND	2.5	5.000	115189 07/12/06
Styrene	ND	2.5	5.000	115189 07/12/06
Bromoform	ND	5.0	5.000	115189 07/12/06
Isopropylbenzene	ND	2.5	5.000	115189 07/12/06
1,1,2,2-Tetrachloroethane	ND	2.5	5.000	115189 07/12/06
1,2,3-Trichloropropane	ND	2.5	5.000	115189 07/12/06
Propylbenzene	ND	2.5	5.000	115189 07/12/06
Bromobenzene	ND	2.5	5.000	115189 07/12/06
1,3,5-Trimethylbenzene	ND	2.5	5.000	115189 07/12/06
2-Chlorotoluene	ND	2.5	5.000	115189 07/12/06
4-Chlorotoluene	ND	2.5	5.000	115189 07/12/06
tert-Butylbenzene	ND	2.5	5.000	115189 07/12/06
1,2,4-Trimethylbenzene	ND	2.5	5.000	115189 07/12/06
sec-Butylbenzene	ND	2.5	5.000	115189 07/12/06
para-Isopropyl Toluene	ND	2.5	5.000	115189 07/12/06
1,3-Dichlorobenzene	ND	2.5	5.000	115189 07/12/06
1,4-Dichlorobenzene	ND	2.5	5.000	115189 07/12/06
n-Butylbenzene	ND	2.5	5.000	115189 07/12/06
1,2-Dichlorobenzene	ND	2.5	5.000	115189 07/12/06
1,2-Dibromo-3-Chloropropane	ND	10	5.000	115189 07/12/06
1,2,4-Trichlorobenzene	ND	2.5	5.000	115189 07/12/06
Hexachlorobutadiene	ND	2.5	5.000	115189 07/12/06
Naphthalene	ND	10	5.000	115189 07/12/06
1,2,3-Trichlorobenzene	ND	2.5	5.000	115189 07/12/06

Surrogate	%REC	Limits	Diln	Fac Batch# Analyzed
Dibromofluoromethane	112	80-120	5.000	115189 07/12/06
1,2-Dichloroethane-d4	115	80-130	5.000	115189 07/12/06
Toluene-d8	107	80-120	5.000	115189 07/12/06
Bromofluorobenzene	108	80-122	5.000	115189 07/12/06

ND= Not Detected RL= Reporting Limit

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		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Field ID:	MW-11		Batch#:	115100
Lab ID:	187895-004		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1.000		•	•

Analyte	Re	sult	RL	
tert-Butyl Alcohol (TBA)	ND		10	
Freon 12	ND		1.0	
Chloromethane	ND		1.0	
Vinyl Chloride	ND		0.5	
Isopropyl Ether (DIPE)	ND		0.5	
Ethyl tert-Butyl Ether (ETBE)	ND		0.5	
Bromomethane	ND		1.0	
Methyl tert-Amyl Ether (TAME)	ND		0.5	
Chloroethane	ND		1.0	
Trichlorofluoromethane	ND		1.0	
Acetone	ND		10	
Freon 113	ND		0.5	
1,1-Dichloroethene	ND		0.5	
Methylene Chloride	ND		10	
Carbon Disulfide	ND		0.5	
MTBE	עאו	1.0		
	NTT)	1.0	0.5	
trans-1,2-Dichloroethene	ND		0.5	
Vinyl Acetate	ND		10	
1,1-Dichloroethane	ND		0.5	
2-Butanone	ND		10	
cis-1,2-Dichloroethene	ND		0.5	
2,2-Dichloropropane	ND		0.5	
Chloroform	ND		0.5	
Bromochloromethane	ND		0.5	
1,1,1-Trichloroethane	ND		0.5	
1,1-Dichloropropene	ND		0.5	
Carbon Tetrachloride	ND		0.5	
1,2-Dichloroethane	ND		0.5	
Benzene	ND		0.5	
Trichloroethene	ND		0.5	
1,2-Dichloropropane	ND		0.5	
Bromodichloromethane	ND		0.5	
Dibromomethane	ND		0.5	
4-Methyl-2-Pentanone	ND		10	
cis-1,3-Dichloropropene	ND		0.5	
Toluene	ND		0.5	
trans-1,3-Dichloropropene	ND		0.5	
1,1,2-Trichloroethane	ND		0.5	
2-Hexanone	ND		10	
1,3-Dichloropropane	ND		0.5	
Tetrachloroethene	ND		0.5	
Dibromochloromethane	ND		0.5	
1,2-Dibromoethane	ND		0.5	
Chlorobenzene	ND		0.5	
1,1,1,2-Tetrachloroethane	ND		0.5	
Ethylbenzene	ND		0.5	
m,p-Xylenes	ND		0.5	
o-Xylene	ND		0.5	
Styrene	ND		0.5	
Bromoform	ND		1.0	
Isopropylbenzene	ND		0.5	
1,1,2,2-Tetrachloroethane	ND		0.5	
1,2,3-Trichloropropane	ND		0.5	
Propylbenzene	ND			
TTODATDELIZELE	עוע		0.5	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	3	Analysis:	EPA 8260B
Field ID:	MW-11		Batch#:	115100
Lab ID:	187895-004		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	uq/L		Analyzed:	07/10/06
Diln Fac:	1.000			

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	. 0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits	
Dibromofluoromethane	111	80-120	
1,2-Dichloroethane-d4	111	80-130	
Toluene-d8	106	80-120	
Bromofluorobenzene	106	80-122	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Field ID:	LFR-1		Batch#:	115100
Lab ID:	187895-005		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1.000		* -	

Analyte		esult	RL
tert-Butyl Alcohol (TBA)	ND		10
Freon 12	ND		1.0
Chloromethane	ND		1.0
Vinyl Chloride	ND		0.5
Isopropyl Ether (DIPE)	ND		0.5
Ethyl tert-Butyl Ether (ETBE)	ND		0.5
Bromomethane	ND		1.0
Methyl tert-Amyl Ether (TAME)	ND		0.5
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
Acetone	ND		10
Freon 113	ND		0.5
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		10
Carbon Disulfide	ND		
MTBE			0.5
	ND		0.5
trans-1,2-Dichloroethene	ND		0.5
Vinyl Acetate	ND		10
1,1-Dichloroethane	ND		0.5
2-Butanone	ND		10
cis-1,2-Dichloroethene		1.0	0.5
2,2-Dichloropropane	ND		0.5
Chloroform	ND		0.5
Bromochloromethane	ND		0.5
1,1,1-Trichloroethane	ND		0.5
1,1-Dichloropropene	ND		0.5
Carbon Tetrachloride	ND		0.5
1,2-Dichloroethane	ND		0.5
Benzene	ND		0.5
Trichloroethene		7.8	0.5
1,2-Dichloropropane	ND		0.5
Bromodichloromethane	ND		0.5
Dibromomethane	ND		0.5
4-Methyl-2-Pentanone	ND		10
cis-1,3-Dichloropropene	ND		0.5
Toluene	ND		0.5
trans-1,3-Dichloropropene	ND		0.5
1,1,2-Trichloroethane	ND		0.5
2-Hexanone	ND		10
1,3-Dichloropropane	ND		0.5
Tetrachloroethene		41	0.5
Dibromochloromethane	ND		0.5
1,2-Dibromoethane	ND		0.5
Chlorobenzene	ND		0.5
1,1,1,2-Tetrachloroethane	ND		0.5
Ethylbenzene	ND		0.5
m,p-Xylenes	ND		0.5
o-Xylene	ND		0.5
Styrene	ND		0.5
Bromoform	ND		1.0
Isopropylbenzene	ND		0.5
1,1,2,2-Tetrachloroethane	ND		
1,2,3-Trichloropropane	ND		0.5
Propylbenzene	ND ND		0.5
1 LODY IDCITAGILE	אט		0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
	2511		Analysis:	EPA 8260B
Field ID:	LFR-1		Batch#:	115100
Lab ID:	187895-005		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1,000			., -0, 00

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

	%REC	Limits	
Dibromofluoromethane	112	80-120	
1,2-Dichloroethane-d4	114	80-130	l
Toluene-d8	105	80-120	
Bromofluorobenzene	106	80-122	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	-	Analysis:	EPA 8260B
Field ID:	LFR-2		Batch#:	115100
Lab ID:	187895-006		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1.000		-	

Analyte		sult RL
tert-Butyl Alcohol (TBA)	ND	10
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Bromomethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	
1,1-Dichloroethane		10
2-Butanone	ND	0.5
	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
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ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics		
Lab #:	187895		Location:	3815 Broadway, Oakland	, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	
Project#:	2511	3 3	Analysis:	EPA 8260B	
Field ID:	LFR-2		Batch#:	115100	
Lab ID:	187895-006		Sampled:	07/05/06	
Matrix:	Water		Received:	07/06/06	
Units:	uq/L		Analyzed:	07/10/06	
Diln Fac:	1.000		*		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	112	80-130
Toluene-d8	105	80-120
Bromofluorobenzene	107	80-122



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
	2511	3	Analysis:	EPA 8260B
Field ID:	LFR-3		Batch#:	115100
Lab ID:	187895-007		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1.000		4 ·	

Analyte	Re	sult RL	
tert-Butyl Alcohol (TBA)	ND	10	
Freon 12	ND		1.0
Chloromethane	ND	-	.0
Vinyl Chloride	ND	-	0.5
 			
Isopropyl Ether (DIPE)	ND		0.5
Ethyl tert-Butyl Ether (ETBE)	ND		0.5
Bromomethane	ND		L.0
Methyl tert-Amyl Ether (TAME)	ND	().5
Chloroethane	ND	-	L.0
Trichlorofluoromethane	ND		L.0
Acetone	ND	10)
Freon 113	ND).5
1,1-Dichloroethene	ND).5
Methylene Chloride	ND	10	
Carbon Disulfide	ND).5
MTBE			
1	ND		0.5
trans-1,2-Dichloroethene	ND		0.5
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ИD		0.5
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND		0.5
2,2-Dichloropropane	ND	().5
Chloroform	ND).5
Bromochloromethane	ND).5
1,1,1-Trichloroethane	ND).5
1,1-Dichloropropene	ND).5
			=
Carbon Tetrachloride	ND		0.5
1,2-Dichloroethane	ND		0.5
Benzene	ND		0.5
Trichloroethene	ND		0.5
1,2-Dichloropropane	ND	().5
Bromodichloromethane	ND	().5
Dibromomethane	ND	().5
4-Methyl-2-Pentanone	ND	10)
cis-1,3-Dichloropropene	ND).5
Toluene	ND).5
trans-1,3-Dichloropropene	ND		0.5
1,1,2-Trichloroethane	ND).5
2-Hexanone			
	ND	10	
1,3-Dichloropropane	ND		0.5
Tetrachloroethene			0.5
Dibromochloromethane	ND).5
1,2-Dibromoethane	ND		0.5
Chlorobenzene	ND	().5
1,1,1,2-Tetrachloroethane	ND	().5
Ethylbenzene	ND	().5
m,p-Xylenes	ND		0.5
o-Xylene	ND		0.5
Styrene	ND		0.5
Bromoform	ND		0
Isopropylbenzene	ND		0.5
1,1,2,2-Tetrachloroethane	ND		2.5
1,2,3-Trichloropropane	ND		0.5
Propylbenzene	ND	(0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics		
Lab #:	187895		Location:	3815 Broadway, Oa	kland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	•
Project#:	2511	3	Analysis:	EPA 8260B	
Field ID:	LFR-3		Batch#:	115100	
Lab ID:	187895-007		Sampled:	07/05/06	
Matrix:	Water		Received:	07/06/06	
Units:	ug/L		Analyzed:	07/10/06	
Diln Fac:	1.000				

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	113	80-130
Toluene-d8	104	80-120
Bromofluorobenzene	105	80-122



		Volatile	Organics	
Lab #:	187895	•	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	3 3	Analysis:	EPA 8260B
Field ID:	LFR-4		Batch#:	115100
Lab ID:	187895-008		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/10/06
Diln Fac:	1.000		•	•

Analyte		esult	RL
tert-Butyl Alcohol (TBA)	ND		10
Freon 12	ND		1.0
Chloromethane	ND		1.0
Vinyl Chloride		0.7	0.5
Isopropyl Ether (DIPE)	ND		0.5
Ethyl tert-Butyl Ether (ETBE)	ND		0.5
Bromomethane	ND		1.0
Methyl tert-Amyl Ether (TAME)	ND		0.5
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
Acetone	ND		10
Freon 113	ND		0.5
1,1-Dichloroethene	ND		0.5
Methylene Chloride	ND		10
Carbon Disulfide	ND		0.5
MTBE		8.1	0.5
trans-1,2-Dichloroethene	ND		0.5
Vinyl Acetate	ND		10
1,1-Dichloroethane	ND		0.5
2-Butanone	ND		10
cis-1,2-Dichloroethene		2.2	0.5
2,2-Dichloropropane	ND		0.5
Chloroform	ND		0.5
Bromochloromethane	ND		0.5
1,1,1-Trichloroethane	ND		0.5
1,1-Dichloropropene	ND		0.5
Carbon Tetrachloride	ND		0.5
1,2-Dichloroethane	ND		0.5
Benzene	112	59	0.5
Trichloroethene	ND	33	0.5
1,2-Dichloropropane	ND		0.5
Bromodichloromethane	ND		0.5
Dibromomethane	ND		0.5
4-Methyl-2-Pentanone	ND		10
cis-1,3-Dichloropropene	ND		0.5
Toluene	ND		0.5
trans-1,3-Dichloropropene	ND		0.5
1,1,2-Trichloroethane	ND		0.5
2-Hexanone	ND		10
1,3-Dichloropropane	ND		0.5
Tetrachloroethene	ND		0.5
Dibromochloromethane	ND		0.5
1,2-Dibromoethane	ND		0.5
Chlorobenzene	ND		0.5
1,1,1,2-Tetrachloroethane	ND		0.5
Ethylbenzene	110	8.1	0.5
m,p-Xylenes		5.0	0.5
o-Xylene		1.0	0.5
Styrene	ND		0.5
Bromoform	ND		1.0
Isopropylbenzene	110	1.4	0.5
1,1,2,2-Tetrachloroethane	ND	- • - -	0.5
1,2,3-Trichloropropane	ND		0.5
Propylbenzene	1410	0.6	0.5
		0.0	٧.٥

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics			
Lab #:	187895		Location:	3815 Broadway,	Oakland,	CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	·	
Project#:	2511	5 5	Analysis:	EPA 8260B		
Field ID:	LFR-4		Batch#:	115100		
Lab ID:	187895-008		Sampled:	07/05/06		
Matrix:	Water		Received:	07/06/06		
Units:	ug/L		Analyzed:	07/10/06		
Diln Fac:	1.000		-	· · ·		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	0.9	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	2.5	0.5
1,2,4-Trimethylbenzene	2.0	0.5
sec-Butylbenzene	1.6	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	0.7	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits	
Dibromofluoromethane	111	80-120	
1,2-Dichloroethane-d4	110	80-130	
Toluene-d8	105	80-120	
Bromofluorobenzene	108	80-122	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:		3	Analysis:	EPA 8260B
Field ID:	SOMA-1		Batch#:	115189
Lab ID:	187895-009		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/12/06
Diln Fac:	4.000			

Analyte	P	esult	RL
tert-Butyl Alcohol (TBA)	ND	Torres y	40
Freon 12	ND		4.0
Chloromethane	ND		4.0
Vinyl Chloride	ND		
Isopropyl Ether (DIPE)	MD	6.1	2.0
	NTD	0.1	2.0
Ethyl tert-Butyl Ether (ETBE)	ND		2.0
Bromomethane	ND		4.0
Methyl tert-Amyl Ether (TAME)	ND		2.0
Chloroethane	ND		4.0
Trichlorofluoromethane	ND		4.0
Acetone	ND		40
Freon 113	ND		2.0
1,1-Dichloroethene	ND		2.0
Methylene Chloride	ND		40
Carbon Disulfide	ND		2.0
MTBE		310	2.0
trans-1,2-Dichloroethene	ND		2.0
Vinyl Acetate	ND		40
1,1-Dichloroethane	ND		2.0
2-Butanone	ND		40
cis-1,2-Dichloroethene	עואו	57	
	NT	5 /	2.0
2,2-Dichloropropane	ND		2.0
Chloroform	ND		2.0
Bromochloromethane	ND		2.0
1,1,1-Trichloroethane	ND		2.0
1,1-Dichloropropene	ND		2.0
Carbon Tetrachloride	ND		2.0
1,2-Dichloroethane	ND		2.0
Benzene	ND		2.0
Trichloroethene		2.8	2.0
1,2-Dichloropropane		3.7	2.0
Bromodichloromethane	ND		2.0
Dibromomethane	ND		2.0
4-Methyl-2-Pentanone	ND		40
cis-1,3-Dichloropropene	ND		2.0
Toluene	ND		2.0
trans-1,3-Dichloropropene	ND		
1,1,2-Trichloroethane			2.0
	ND		2.0
2-Hexanone	ND		40
1,3-Dichloropropane	ND		2.0
Tetrachloroethene		37	2.0
Dibromochloromethane	ND		2.0
1,2-Dibromoethane	ND		2.0
Chlorobenzene	ND		2.0
1,1,1,2-Tetrachloroethane	ND		2.0
Ethylbenzene	ND		2.0
m,p-Xylenes	ND		2.0
o-Xylene	ND		2.0
Styrene	ND		2.0
Bromoform	ND		4.0
Isopropylbenzene	ND		2.0
1,1,2,2-Tetrachloroethane	ND		2.0
1,2,3-Trichloropropane	ND		
Propylbenzene			2.0
TIONATHERITE	ND		2.0

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatil	e Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	3 3	Analysis:	EPA 8260B
Field ID:	SOMA-1		Batch#:	115189
Lab ID:	187895-009		Sampled:	07/05/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/12/06
Diln Fac:	4.000		<u> </u>	

Analyte	Result	RL
Bromobenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
4-Chlorotoluene	ND	2.0
tert-Butylbenzene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
sec-Butylbenzene	ND	2.0
para-Isopropyl Toluene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
n-Butylbenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,2-Dibromo-3-Chloropropane	ND	8.0
1,2,4-Trichlorobenzene	ND	2.0
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	8.0
1,2,3-Trichlorobenzene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-120
1,2-Dichloroethane-d4	113	80-130
Toluene-d8	106	80-120
Bromofluorobenzene	107	80-122



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
	2511	5 5	Analysis:	EPA 8260B
Field ID:	SOMA-2		Batch#:	115189
Lab ID:	187895-010		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/12/06
Diln Fac:	83.33		1	

Analyte	Resul	t RL
tert-Butyl Alcohol (TBA)	ND	830
Freon 12	ND ND	83
Chloromethane	ND	83
Vinyl Chloride	ND	42
Isopropyl Ether (DIPE)	ND	42
Ethyl tert-Butyl Ether (ETBE)	ND	42
Bromomethane	ND	83
Methyl tert-Amyl Ether (TAME)	ND	42
Chloroethane	ND	83
Trichlorofluoromethane	ND	83
Acetone	ND	830
Freon 113	ND	42
1,1-Dichloroethene	ND	42
Methylene Chloride	ND	830
Carbon Disulfide	ND ND	
MTBE		42
	ND	42
trans-1,2-Dichloroethene	46	42
Vinyl Acetate	ND	830
1,1-Dichloroethane	ND	42
2-Butanone	ND	830
cis-1,2-Dichloroethene	5,400	42
2,2-Dichloropropane	ND	42
Chloroform	ND	42
Bromochloromethane	ND	42
1,1,1-Trichloroethane	ND	42
1,1-Dichloropropene	ND	42
Carbon Tetrachloride	ND	$\frac{1}{42}$
1,2-Dichloroethane	ND	42
Benzene	ND	42
Trichloroethene	ND	42
1,2-Dichloropropane	ND	42
Bromodichloromethane	ND	42
Dibromomethane	ND	42
4-Methyl-2-Pentanone	ND	830
cis-1,3-Dichloropropene	ND	42
Toluene	61	42
trans-1,3-Dichloropropene	ND	42
1,1,2-Trichloroethane	ND	42
2-Hexanone	ND	830
1,3-Dichloropropane	ND	42
Tetrachloroethene	ND	42
Dibromochloromethane	ND	42
1,2-Dibromoethane	ND	42
Chlorobenzene	ND	42
1,1,1,2-Tetrachloroethane	ND	42
Ethylbenzene	ND	42
m,p-Xylenes	ND	$\frac{1}{42}$
o-Xylene	ND	42
Styrene	ND	42
Bromoform	ND	83
Isopropylbenzene	ND	42
1,1,2,2-Tetrachloroethane	ND	42
1,2,3-Trichloropropane	ND	42
Propylbenzene	ND	42
[7117	***

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics			
Lab #:	187895		Location:	3815 Broadway,	Oakland,	CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	·	
Project#:	2511		Analysis:	EPA 8260B		
Field ID:	SOMA-2		Batch#:	115189		
Lab ID:	187895-010		Sampled:	07/06/06		
Matrix:	Water		Received:	07/06/06		
Units:	ug/L		Analyzed:	07/12/06		
Diln Fac:	83.33		-			

Analyte	Result	RL
Bromobenzene	ND	42
1,3,5-Trimethylbenzene	ND	42
2-Chlorotoluene	ND	42
4-Chlorotoluene	ND	42
tert-Butylbenzene	ND	42
1,2,4-Trimethylbenzene	82	42
sec-Butylbenzene	ND	42
para-Isopropyl Toluene	ND	42
1,3-Dichlorobenzene	ND	42
1,4-Dichlorobenzene	ND	42
n-Butylbenzene	ND	42
1,2-Dichlorobenzene	ND	42
1,2-Dibromo-3-Chloropropane	ND	170
1,2,4-Trichlorobenzene	ND	42
Hexachlorobutadiene	ND	42
Naphthalene	ND	170
1,2,3-Trichlorobenzene	ND	42

Surrogate	%REC	Limits	
Dibromofluoromethane	113	80-120	
1,2-Dichloroethane-d4	113	80-130	
Toluene-d8	106	80-120	
Bromofluorobenzene	108	80-122	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	3 3	Analysis:	EPA 8260B
Field ID:	SOMA-3		Batch#:	115189
Lab ID:	187895-011		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06
Units:	ug/L		Analyzed:	07/12/06
Diln Fac:	10.00			· ·

Analyte		Result RL	
tert-Butyl Alcohol (TBA)	ND	100	<u></u>
Freon 12	ND	100	
Chloromethane		10	
	ND		
Vinyl Chloride	ND	5.0	
Isopropyl Ether (DIPE)	ND	5.0	
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	
Bromomethane	ND	10	
Methyl tert-Amyl Ether (TAME)	ND	5.0	
Chloroethane	ND	10	
Trichlorofluoromethane	ND	10	
Acetone	ND	100	
Freon 113	ND	5.0	
1,1-Dichloroethene	ND	5.0	
Methylene Chloride	ND	100	
Carbon Disulfide	ND	5.0	
MTBE		500 5.0	
trans-1,2-Dichloroethene	ND	5.0	
Vinyl Acetate	ND	100	
1,1-Dichloroethane	ND	5.0	
2-Butanone	ND	100	
cis-1,2-Dichloroethene	ענאז	370 5.0	
2,2-Dichloropropane	ND	5.0	
Chloroform			
	ND	5.0	
Bromochloromethane	ND	5.0	
1,1,1-Trichloroethane	ND	5.0	
1,1-Dichloropropene	ND	5.0	
Carbon Tetrachloride	ND	5.0	
1,2-Dichloroethane	ND	5.0	
Benzene	ND	5.0	
Trichloroethene		6.4 5.0	
1,2-Dichloropropane	ND	5.0	
Bromodichloromethane	ND	5.0	
Dibromomethane	ND	5.0	
4-Methyl-2-Pentanone	ND	100	
cis-1,3-Dichloropropene	ND	5.0	
Toluene	ND	5.0	
trans-1,3-Dichloropropene	ND	5.0	
1,1,2-Trichloroethane	ND	5.0	
2-Hexanone	ND	100	
1,3-Dichloropropane	ND	5.0	
Tetrachloroethene		15 5.0	
Dibromochloromethane	ND	5.0	
1,2-Dibromoethane	ND	5.0	
Chlorobenzene	ND	5.0	
1,1,1,2-Tetrachloroethane	ND	5.0	
Ethylbenzene	ND	5.0	
m,p-Xylenes	ND	5.0	
o-Xylene	ND	5.0	
Styrene	ND	5.0	
Bromoform			
<u> </u>	ND	10	
Isopropylbenzene	ND	5.0	
1,1,2,2-Tetrachloroethane	ND	5.0	
1,2,3-Trichloropropane	ND	5.0	
Propylbenzene	ND	5.0	

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics			
Lab #:	187895		Location:	3815 Broadway,	Oakland,	CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B	•	
	2511	5 5	Analysis:	EPA 8260B		
Field ID:	SOMA-3		Batch#:	115189		
Lab ID:	187895-011		Sampled:	07/06/06		
Matrix:	Water		Received:	07/06/06		
Units:	ug/L		Analyzed:	07/12/06		
Diln Fac:	10.00		*	· ·		

Analyte	Result	RL
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	20 '
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	20
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits	
Dibromofluoromethane	114	80-120	
1,2-Dichloroethane-d4	115	80-130	
Toluene-d8	106	80-120	1
Bromofluorobenzene	105	80-122	



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Field ID:	SOMA-5		Units:	ug/L
Lab ID:	187895-012		Sampled:	07/06/06
Matrix:	Water		Received:	07/06/06

Analyte	Result	RL	Diln Pac	Batch# Analyzed
tert-Butyl Alcohol (TBA)	ND	10	1.000	115140 07/11/06
Freon 12	ND	1.0	1.000	115140 07/11/06
Chloromethane	ND	1.0	1.000	115140 07/11/06
Vinyl Chloride	ND	0.5	1.000	115140 07/11/06
Isopropyl Ether (DIPE)	ND	0.5	1.000	115140 07/11/06
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	115140 07/11/06
Bromomethane	ND	1.0	1.000	115140 07/11/06
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000	115140 07/11/06
Chloroethane	ND	1.0	1.000	115140 07/11/06
Trichlorofluoromethane	ND	1.0	1.000	115140 07/11/06
Acetone	110	20	2.000	115189 07/12/06
Freon 113	ND	0.5	1.000	115140 07/11/06
1,1-Dichloroethene	ND	0.5	1.000	115140 07/11/06
Methylene Chloride	ND	10	1.000	115140 07/11/06
Carbon Disulfide	ND	0.5	1.000	115140 07/11/06
MTBE	ND	0.5	1.000	115140 07/11/06
trans-1,2-Dichloroethene	ND	0.5	1.000	115140 07/11/06
Vinyl Acetate	ND	10	1.000	115140 07/11/06
1,1-Dichloroethane	ND	0.5	1.000	115140 07/11/06
2-Butanone	15	10	1.000	115140 07/11/06
cis-1,2-Dichloroethene	3.5	0.5	1.000	115140 07/11/06
2,2-Dichloropropane	ND	0.5	1.000	115140 07/11/06
Chloroform	ND	0.5	1.000	115140 07/11/06
Bromochloromethane	ND	0.5	1.000	115140 07/11/06
1,1,1-Trichloroethane	ND	0.5	1.000	115140 07/11/06
1,1-Dichloropropene	ND	0.5	1.000	115140 07/11/06
Carbon Tetrachloride	ND	0.5	1.000	115140 07/11/06
1,2-Dichloroethane	ND	0.5	1.000	115140 07/11/06
Benzene	ND	0.5	1.000	115140 07/11/06
Trichloroethene	ND	0.5	1.000	115140 07/11/06
1,2-Dichloropropane	ND	0.5	1.000	115140 07/11/06
Bromodichloromethane	ND	0.5	1.000	115140 07/11/06
Dibromomethane	ND	0.5	1.000	115140 07/11/06
4-Methyl-2-Pentanone	ND	10	1.000	115140 07/11/06
cis-1,3-Dichloropropene	ND	0.5	1.000	115140 07/11/06
Toluene	ND	0.5	1.000	115140 07/11/06
trans-1,3-Dichloropropene	ND	0.5	1.000	115140 07/11/06
1,1,2-Trichloroethane	ND	0.5	1.000	115140 07/11/06
2-Hexanone	ND	10	1.000	115140 07/11/06

ND= Not Detected

RL= Reporting Limit



	Volatile	Organics	
Lab #:	187895	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-5	Units:	ug/L
Lab ID:	187895-012	Sampled:	07/06/06
Matrix:	Water	Received:	07/06/06

Analyte	Res	ult	RL	Diln Fac	Batch#	Analyzed
1,3-Dichloropropane	ND		0.5	1.000	115140	07/11/06
Tetrachloroethene	ND		0.5	1.000	115140	07/11/06
Dibromochloromethane	ND		0.5	1.000	115140	07/11/06
1,2-Dibromoethane	ND		0.5	1.000	115140	07/11/06
Chlorobenzene	ND		0.5	1.000	115140	07/11/06
1,1,1,2-Tetrachloroethane	ND		0.5	1.000	115140	07/11/06
Ethylbenzene	ND		0.5	1.000	115140	07/11/06
m,p-Xylenes	ND		0.5	1.000	115140	07/11/06
o-Xylene	ND		0.5	1.000	115140	07/11/06
Styrene	ND		0.5	1.000	115140	07/11/06
Bromoform	ND		1.0	1.000	115140	07/11/06
Isopropylbenzene	ND		0.5	1.000	115140	07/11/06
1,1,2,2-Tetrachloroethane	ND		0.5	1.000	115140	07/11/06
1,2,3-Trichloropropane	ND		0.5	1.000	115140	07/11/06
Propylbenzene	ND		0.5	1.000	115140	07/11/06
Bromobenzene	ND		0.5	1.000	115140	07/11/06
1,3,5-Trimethylbenzene	ND		0.5	1.000	115140	07/11/06
2-Chlorotoluene	ND		0.5	1.000	115140	07/11/06
4-Chlorotoluene	ND		0.5	1.000	115140	07/11/06
tert-Butylbenzene	ND		0.5	1.000	115140	07/11/06
1,2,4-Trimethylbenzene	ND		0.5	1.000	115140	07/11/06
sec-Butylbenzene	ND		0.5	1.000	115140	07/11/06
para-Isopropyl Toluene		12	0.5	1.000	115140	07/11/06
1,3-Dichlorobenzene	ND		0.5	1.000	115140	07/11/06
1,4-Dichlorobenzene	ND		0.5	1.000	115140	07/11/06
n-Butylbenzene	ND		0.5	1.000	115140	07/11/06
1,2-Dichlorobenzene	ND		0.5	1.000	115140	07/11/06
1,2-Dibromo-3-Chloropropane	ND		2.0	1.000	115140	07/11/06
1,2,4-Trichlorobenzene	ND		0.5	1.000	115140	07/11/06
Hexachlorobutadiene	ND		0.5	1.000	115140	07/11/06
Naphthalene	ND		2.0	1.000	115140	07/11/06
1,2,3-Trichlorobenzene	ND		0.5	1.000	115140	07/11/06

Surrogate	%REC	Limits	Diln	Fac Batch# Analyzed
Dibromofluoromethane	116	80-120	1.000	115140 07/11/06
1,2-Dichloroethane-d4	114	80-130	1.000	115140 07/11/06
Toluene-d8	106	80-120	1.000	115140 07/11/06
Bromofluorobenzene	112	80-122	1.000	115140 07/11/06

ND= Not Detected

RL= Reporting Limit

Page 2 of 2



-		Volatile	Organics	
Lab #: Client: Project#:	187895 SOMA Environmental 2511	Engineering Inc.	Location: Prep: Analysis:	3815 Broadway, Oakland, CA EPA 5030B EPA 8260B
Type: Lab ID: Matrix: Units:	BLANK QC346737 Water ug/L		Diln Fac: Batch#: Analyzed:	1.000 115100 07/10/06

Agla: y/-e	Result	32.
tert-Butyl Alcohol (TBA)	ND	10
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Bromomethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
·		
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane		
Tetrachloroethene	ND ND	0.5
Dibromochloromethane	ND ND	0.5
1,2-Dibromoethane		0.5
Chlorobenzene	ND	0.5
	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



	1.09010	Volatile	Organics	
Lab #: Client: Project#:	187895 SOMA Environmental Eng. 2511	ineering Inc.	Location: Prep: Analysis:	3815 Broadway, Oakland, CA EPA 5030B EPA 8260B
Type: Lab ID: Matrix: Units:	BLANK QC346737 Water ug/L		Diln Fac: Batch#: Analyzed:	1.000 115100 07/10/06

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	112	80-130
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-122



		Volatile	Organics	
Lab #: Client: Project#:	187895 SOMA Environmental 2511	Engineering Inc.	Location: Prep: Analysis:	3815 Broadway, Oakland, CA EPA 5030B EPA 8260B
Type: Lab ID: Matrix: Units:	BLANK QC346921 Water ug/L		Diln Fac: Batch#: Analyzed:	1.000 115140 07/11/06

Analyte	Res	ult RL
tert-Butyl Alcohol (TBA)	ND	10
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Bromomethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform		
Bromochloromethane	ND	0.5
	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	
1,2-Dibromoethane		0.5
1 2	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics	
Lab #: Client:	187895	The sine and the Total	Location:	3815 Broadway, Oakland, CA
Cirent:	SOMA Environmental	Engineering inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Type:	BLANK		Diln Fac:	1.000
Type: Lab ID:	OC346921		Batch#:	115140
Matrix:	Water		Analyzed:	07/11/06
Units:	ug/L			

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ИD	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	: Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	111	80-130
Toluene-d8	104	80-120
Bromofluorobenzene	102	80-122



-	TREBUT C	Volatile	Organics			
Lab #: Client: Project#:	187895 SOMA Environmental 1 2511	Engineering Inc.	Location: Prep: Analysis:	3815 Broadway, EPA 5030B EPA 8260B	Oakland,	CA
Type: Lab ID: Matrix: Units:	BLANK QC347092 Water ug/L		Diln Fac: Batch#: Analyzed:	1.000 115189 07/12/06		

Analyte	Result	RI
tert-Butyl Alcohol (TBA)	ND	10
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND ND	
1		0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Bromomethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	0.5
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND ND	0.5
	ND ND	
2,2-Dichloropropane Chloroform	ND ND	0.5 0.5
Bromochloromethane		· - · · · · · · · · · · · · · ·
	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND ND	0.5
o-Xylene	ND ND	0.5
Styrene	ND ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND ND	0.5
1,1,2,2-Tetrachloroethane	ND ND	0.5
1,2,3-Trichloropropane	ND ND	0.5
Propylbenzene	ND	0.5
TTOPYTDEIIZEIIE	IAID	U.D

ND= Not Detected RL= Reporting Limit Page 1 of 2



		Volatile	Organics	
Lab #:	187895		Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	2511		Analysis:	EPA 8260B
Type: Lab ID:	BLANK		Diln Fac:	1.000
Lab ID:	OC347092		Batch#:	115189
Matrix:	Water		Analyzed:	07/12/06
Units:	ug/L			

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits	
Dibromofluoromethane	109	80-120	
1,2-Dichloroethane-d4	113	80-130	
Toluene-d8	108	80-120	
Bromofluorobenzene	103	80-122	



	Volatile	• Organics	
Lab #:	187895	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC346736	Batch#:	115100
Matrix:	Water	Analyzed:	07/10/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	' Limits
tert-Butyl Alcohol (TBA)	125.0	110.7	89	64-141
Isopropyl Ether (DIPE)	25.00	25.38	102	68-123
Ethyl tert-Butyl Ether (ETBE)	25.00	24.48	98	77-129
Methyl tert-Amyl Ether (TAME)	25.00	24.06	96	77-120
1,1-Dichloroethene	25.00	28.43	114	77-128
Benzene	25.00	25.95	104	80-120
Trichloroethene	25.00	24.69	99	80-120
Toluene	25.00	23.72	95	80-120
Chlorobenzene	25.00	24.87	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	104	80-130
Toluene-d8	104	80-120
Bromofluorobenzene	99	80-122



		Volatile	Organics	
Project#:	187895 SOMA Environmental 2511	Engineering Inc.	Location: Prep: Analysis:	3815 Broadway, Oakland, CA EPA 5030B EPA 8260B
Matrix: Units: Diln Fac:	Water ug/L 1.000		Batch#: Analyzed:	115140 07/11/06

Type:

BS

Lab ID:

QC346919

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	187.5	186.0	99	64-141
Isopropyl Ether (DIPE)	37.50	40.90	109	68-123
Ethyl tert-Butyl Ether (ETBE)	37.50	39.14	104	77-129
Methyl tert-Amyl Ether (TAME)	37.50	36.20	97	77-120
1,1-Dichloroethene	37.50	44.01	117	77-128
Benzene	37.50	38.40	102	80-120
Trichloroethene	37.50	37.41	100	80-120
Toluene	37.50	36.12	96	80-120
Chlorobenzene	37.50	36.42	97	80-120

Surrogate	%REC	Limits	**********
Dibromofluoromethane	113	80-120	
1,2-Dichloroethane-d4	106	80-130	- 1
Toluene-d8	106	80-120	
Bromofluorobenzene	100	80-122	i

Type:

BSD

Lab ID:

QC346920

Analyte	Spiked	Result	%REC	Limits	RPD	Lin
tert-Butyl Alcohol (TBA)	187.5	189.3	101	64-141	2	22
Isopropyl Ether (DIPE)	37.50	41.34	110	68-123	1	20
Ethyl tert-Butyl Ether (ETBE)	37.50	39.49	105	77-129	ī	20
Methyl tert-Amyl Ether (TAME)	37.50	38.62	103	77-120	6	20
1,1-Dichloroethene	37.50	43.63	116	77-128	ĭ	20
Benzene	37.50	40.22	107	80-120	5	20
Trichloroethene	37.50	39.24	105	80-120	5	20
Toluene	37.50	36.51	97	80-120	1	20
Chlorobenzene	37.50	37.92	101	80-120	$\bar{4}$	20

Dibromofluoromethane 112 80-120 1,2-Dichloroethane-d4 106 80-130 Toluene-d8 107 80-120 Bromofluorobenzene 99 80-132	Surrogate	%REC	Limits	
Toluene-d8 107 80-120	Dibromofluoromethane	112	80-120	
20, 00 220	1,2-Dichloroethane-d4	106	80-130	
Bromofluorobenzene 99 80-122	Toluene-d8	107	80-120	l
220.0012d010D000EC0C	Bromofluorobenzene	99	80-122	



	Organics	
Lab #: 187895 Client: SOMA Environmental Engineering Inc. Project#: 2511	Location: Prep: Analysis:	3815 Broadway, Oakland, CA EPA 5030B EPA 8260B
Matrix: Water Units: ug/L Diln Fac: 1.000	Batch#: Analyzed:	115189 07/12/06

Type:

BS

Lab ID: QC347090

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	250.0	251.8	101	64-141
Isopropyl Ether (DIPE)	50.00	50.44	101	68-123
Ethyl tert-Butyl Ether (ETBE)	50.00	48.99	98	77-129
Methyl tert-Amyl Ether (TAME)	50.00	46.67	93	77-120
1,1-Dichloroethene	50.00	55.85	112	77-128
Benzene	50.00	48.12	96	80-120
Trichloroethene	50.00	47.39	95	80-120
Toluene	50.00	45.12	90	80-120
Chlorobenzene	50.00	47.89	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	104	80-130
Toluene-d8	106	80-120
Bromofluorobenzene	101	80-122

Type:

BSD

Lab ID: QC347091

Analyte	Spiked	Result	%REC	Limits	RPD	100
tert-Butyl Alcohol (TBA)	250.0	276.9	111	64-141	10	22
Isopropyl Ether (DIPE)	50.00	54.19	108	68-123	7	20
Ethyl tert-Butyl Ether (ETBE)	50.00	51.91	104	77-129	6	20
Methyl tert-Amyl Ether (TAME)	50.00	52.82	106	77-120	12	20
1,1-Dichloroethene	50.00	60.97	122	77-128	9	20
Benzene	50.00	52.84	106	80-120	9	20
Trichloroethene	50.00	51.72	103	80-120	9	20
Toluene	50.00	48.51	97	80-120	7	20
Chlorobenzene	50.00	51.20	102	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	104	80-130
Toluene-d8	104	80-120
Bromofluorobenzene	99	80-122



		Vola	tile	Organics		
Lab #: 1878				Location:	3815 Broadway,	Oakland, CA
Client: SOMA	. Environmental	Engineering	Inc.	Prep:	EPA 5030B	•
Project#: 2511				Analysis:	EPA 8260B	
Field ID:	ZZZZZZZZZ			Batch#:	115100	
MSS Lab ID:	187796-009			Sampled:	06/29/06	
Matrix:	Water			Received:	06/30/06	
Units:	ug/L			Analyzed:	07/10/06	i
Diln Fac:	1.000					

Type:

MS

Lab ID: QC346738

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.319	125.0	138.8	111	68-148
Isopropyl Ether (DIPE)	<0.02976	25.00	27.57	110	74-125
Ethyl tert-Butyl Ether (ETBE)	<0.03253	25.00	26.90	108	80-131
Methyl tert-Amyl Ether (TAME)	<0.04809	25.00	25.64	103	78-120
1,1-Dichloroethene	<0.1010	25.00	28.34	113	77-129
Benzene	<0.1164	25.00	26.66	107	80-122
Trichloroethene	<0.1059	25.00	25.66	103	77-123
Toluene	<0.06248	25.00	24.19	97	80-120
Chlorobenzene	<0.1633	25.00	25.15	101	80-120

Surrogate	%REC	Limits	
Dibromofluoromethane	109	80-120	
1,2-Dichloroethane-d4	108	80-130	
Toluene-d8	106	80-120	
Bromofluorobenzene	103	80-122	

Type:

MSD

Lab ID: QC346739

Analyte	Spiked	Result	%REC		RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	138.6	111	68-148	0	23
Isopropyl Ether (DIPE)	25.00	27.58	110	74-125	Ō	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.44	106	80-131	2	20
Methyl tert-Amyl Ether (TAME)	25.00	25.57	102	78-120	0	20
1,1-Dichloroethene	25.00	27.60	110	77-129	3	20
Benzene	25.00	26.20	105	80-122	2	20
Trichloroethene	25.00	24.44	98	77-123	5	20
Toluene	25.00	23.69	95	80-120	2	20
Chlorobenzene	25.00	24.47	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	109	80-130
Toluene-d8	106	80-120
Bromofluorobenzene	101	80-122



Dissolved Gasses Lab #: Client: 187895 Location: 3815 Broadway, Oakland, CA SOMA Environmental Engineering Inc. Prep: METHOD Project#: 2511 RSK-175 07/06/06 Analysis: Matrix: Water Received: Units: mg/L 115111 Analyzed: 07/10/06 Batch#:

Field ID: Type:

B-10 SAMPLE Lab ID: Sampled:

187895-001 07/06/06

Analyte	Result	RL	Diln Fac
Methane	11	0.025	5.000
Ethene	ND	0.0050	1.000
Ethane	ND	0.0050	1.000

Field ID: Type:

GW-2

SAMPLE

Diln Fac: Sampled:

1.000 07/06/06

Lab ID: 187895-002

Analyte	Result	RL
Methane	ND	0.0050
Ethene	ND	0.0050
Ethane	ND	0.0050

Field ID:

Type: Lab ID:

GW-3 SAMPLE

187895-003

Diln Fac: Sampled:

1.000 07/06/06

Analyte	Result	RL
Methane	ND	0.0050
Ethene	ND	0.0050
Ethane	ND	0.0050

Field ID: Type: Lab ID:

MW-11

SAMPLE 187895-004 Diln Fac: Sampled:

1.000 07/05/06

Analyte Result Methane ND 0.0050 Ethene ND 0.0050 Ethane ND 0.0050

Field ID: Type: Lab ID:

LFR-1

SAMPLE 187895-005 Diln Fac: Sampled:

1.000 07/06/06

Analyte	Result	RL
Methane	ND	0.0050
Ethene	ND	0.0050
Ethane	ND	0.0050

ND= Not Detected RL= Reporting Limit Page 1 of 3

5.0



Dissolved Gasses Lab #: 187895 3815 Broadway, Oakland, CA METHOD Location: Client: Prep: Analysis: SOMA Environmental Engineering Inc. RSK-175 07/06/06 Project#: 2511 Matrix: Water Received: mg/L 115111 Units: Analyzed: 07/10/06 Batch#:

Field ID: Type:

LFR-2 SAMPLE Lab ID: Sampled: 187895-006 07/05/06

Analyte	Result	RL	Diln Fac
Methane	10	0 005	5.000
Ethene	ND	0.0050	1.000
Ethane	ND	0.0050	1.000

Field ID:

LFR-3 SAMPLE Diln Fac:

1.000 07/05/06

Type: Lab ID:

187895-007

Sampled:

Analyte	Result	RL	
Methane	ND	0.0050	
Ethene	ND	0.0050	
Ethane	ND	0.0050	

Field ID: Type:

LFR-4 SAMPLE Lab ID: Sampled: 187895-008 07/05/06

Anals	te Result	RL Diln Fac
Methane	9.2	0.025 5.000
Ethene Ethane	ND	0.0050 1.000
Ethane	ND	0.0050 1.000

Field ID:

SOMA-1 Type:

SAMPLE

Diln Fac: Sampled:

1.000 07/05/06

Lab ID: 187895-009

Analyte	Result	RL
Methane	1.1	0.0050
Ethene	ND	0.0050
Ethane	ND	0.0050

Field ID: Type:

SOMA-2 SAMPLE Lab ID: Sampled:

187895-010 07/06/06

Analyte	e Result	RL Diln Fac
Methane	14	0.050 10.00
Ethene	ND	0.0050 1.000
Ethane	ND	0.0050 1.000

ND= Not Detected RL= Reporting Limit

Page 2 of 3



Dissolved Gasses						
Lab #:	187895	Location:	3815 Broadway, Oakland, CA			
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD			
Project#:	2511	Analysis:	RSK-175			
Matrix:	Water	Received:	07/06/06			
Units:	mg/L	Analyzed:	07/10/06			
Batch#:	115111	-	. ,			

Field ID:

SOMA-3 SAMPLE Type: Lab ID:

Diln Fac: Sampled:

1.000 07/06/06

187895-011

Analyte	Result	RL	
Methane	1.4	0.0050	
Ethene	ND	0.0050	
Ethane	ND	0.0050	

Field ID: Type:

SOMA-5 SAMPLE Lab ID: Sampled:

187895-012 07/06/06

Anal	yte Result	RL Diln Fac
Methane	6.9	0.025 5.000
Ethene	ND	0.0050 1.000
Ethane	ND	0.0050 1.000

Type: Lab ID:

BLANK QC346787 Diln Fac:

1.000

Analyte		RL
Methane	ND	0.0050
Ethene	ND	0.0050
Ethane	ND	0.0050

ND= Not Detected RL= Reporting Limit Page 3 of 3



Dissolved Gasses						
Lab #:	187895	Location:	3815 Broadway, Oakland, CA			
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD			
Project#:	2511	Analysis:	RSK-175			
Matrix:	Water	Batch#:	115111			
Units:	mg/L	Analyzed:	07/10/06			
Diln Fac:	1.000					

Type:

BS

Lab ID:

QC346788

Analyt	Spiked	Result	%RE	C Limits
Methane	0.03272	0.03497	107	80-120
Ethene	0.05725	0.05914	103	80-120
Ethane	0.06135	0.06323	103	80-120

Type:

BSD

Lab ID:

QC346789

Analyte	Spiked R	esult	%REC		RPI) Lim
Methane	0.03272	0.03580	109	80-120	2	20
Ethene	0.05725	0.06010	105	80-120	2	20
Ethane	0.06135	0.06460	105	80-120	2	20