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October 21, 2008

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

Subject: Fuel Leak Case#RO0458  
Site Located at 3820 Manila Avenue, Oakland, California  
Former Glovatorium Facility

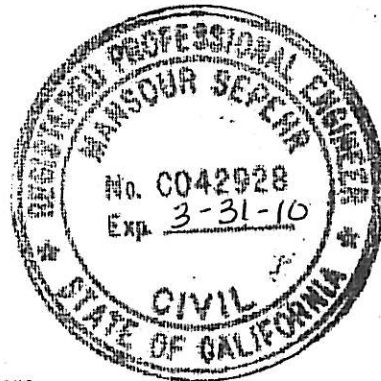
Dear Mr. Wickham:

SOMA's "Second Semi-Annual 2008 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  
Dr. Bruce Page, Bruce W. Page Consulting w/enclosure  
Mr. Peter W. McGaw, ARCHER NORRIS w/enclosure  
Ms. Betty Graham, Regional Water Quality Control Board w/o enclosure  
Mr. Stuart Depper w/enclosure

**Second Semi-Annual 2008  
Groundwater Monitoring Report  
The Former Glovatorium Facility  
3820 Manila Avenue  
Oakland, California**

**October 21, 2008**

**Project 2511**

**Prepared for:**

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




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## CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report for the Law Offices of Loeb & Loeb LLP, to comply with Alameda County Department of Environmental Health 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 Seppehr, PhD, PE  
Principal Hydrogeologist



## Perjury Statement

Stuart Depper  
Name

Responsible Party  
Title

3820 Manila Avenue                      Oakland                      94609  
Street Address                                      City                                      Zip

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



\_\_\_\_\_  
Signature

10-21-08  
Date

# TABLE OF CONTENTS

CERTIFICATION .....	i
TABLE OF CONTENTS.....	ii
LIST OF TABLES.....	iii
LIST OF FIGURES .....	iii
LIST OF APPENDICES .....	iv
1. INTRODUCTION .....	1
1.1 Site Description.....	1
1.2 Background.....	2
1.3 Site Geology and Hydrogeology .....	4
2. RESULTS .....	5
2.1 Groundwater Flow Conditions.....	5
2.2 Groundwater Quality .....	6
2.3 Bioattenuation Parameter Analysis Results .....	8
2.4 Other Parameters .....	10
3. FREE-PRODUCT REMOVAL ACTIVITIES .....	11
4. FINDINGS OF CURRENT MONITORING EVENT .....	12
4.1 Current Environmental Conditions .....	12
4.2 Recommendations .....	13
5. REFERENCES .....	13

## LIST OF TABLES

Table 1	Construction Data for Temporary Sampling Points and Monitoring Wells
Table 2	Historical Groundwater Elevation Data (feet)
Table 3	Historical Analytical Results and Field Measurements for Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples
Table 4	Historical Analytical Results for Total Petroleum Hydrocarbons, BTEX, and MtBE in Groundwater Samples
Table 5	Historical Analytical Results for Volatile Organic Compound Analyses in Groundwater Samples
Table 6	Historical In Situ and Ex Situ Analyses Results for Bioattenuation Parameters in Groundwater Samples
Table 7	Free-Product Removal Log

## LIST OF FIGURES

Figure 1	Site vicinity map
Figure 2	Map showing the approximate locations of groundwater monitoring wells
Figure 2a	Map showing the approximate locations of SOMA monitoring wells, SOMA hydropunches, and inherited monitoring locations within the former Glovatorium building
Figure 3	Groundwater elevation contour map in feet. August 21, 2008
Figure 4	Contour map of TPH-ss concentrations in groundwater August 21 and 22, 2008
Figure 5	Contour map of TPH-g concentrations in groundwater August 21 and 22, 2008
Figure 6	Contour map of MtBE concentrations in groundwater (EPA Method 8260B). August 21 and 22, 2008
Figure 7	Contour map of benzene concentrations in groundwater (EPA Method 8260B). August 21 and 22, 2008

- Figure 8 Contour map of PCE concentrations in groundwater  
August 21 and 22, 2008
- Figure 9 Contour map of TCE concentrations in groundwater  
August 21 and 22, 2008
- Figure 10 Contour map of cis-1,2-dichloroethene concentrations in  
groundwater  
August 21 and 22, 2008.
- Figure 11 Contour map of trans-1,2-dichloroethene concentrations in  
groundwater  
August 21 and 22, 2008.
- Figure 12 Contour map of dissolved oxygen concentrations in groundwater  
August 21 and 22, 2008
- Figure 13 Contour map of dissolved manganese concentrations in  
groundwater  
August 21 and 22, 2008.
- Figure 14 Contour map of sulfate concentrations in groundwater  
August 21 and 22, 2008.
- Figure 15 Contour map of ferrous iron concentrations in groundwater  
August 21 and 22, 2008.
- Figure 16 Contour map of methane concentrations in groundwater  
August 21 and 22, 2008.
- Figure 17 Free-Product Thickness

## **LIST OF APPENDICES**

- Appendix A SOMA's Groundwater Monitoring Procedures
- Appendix B Field Notes, Field Measured Physical and Chemical Parameter  
Values
- Appendix C Chain of Custody Forms and Laboratory Reports

# 1. INTRODUCTION

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

This report summarizes the results of the groundwater monitoring event conducted at the site on August 21 and 22, 2008 and includes laboratory results for the groundwater samples.

In addition to the above laboratory analyses, the natural attenuation study, initiated by Levine-Fricke Recon (LFR) in Third Quarter 2000, was continued during this monitoring event. The objective of the 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. Results of these analyses are presented in this report.

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

This work is intended to determine the nature and extent of environmental contamination and whether contamination is affecting the neighboring Thompson property. This information is pertinent to the claim Mr. Thompson brought against the Deppers, owners of the Glovatorium. Data gathered by this work may also help determine when releases occurred, significant information that is pertinent to the defense against claims brought by Ms. Johnson, a former owner of the property.

## 1.1 Site Description

The Site is located between Manila Avenue and Broadway, near the intersection of 38<sup>th</sup> Street in Oakland, California. Surface elevation ranges from approximately 78 to 84 feet above mean sea level.

A 54-inch inside-diameter storm drain culvert passes under the property, from Manila Avenue on the west to 38<sup>th</sup> 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 westerly from the on-site building and discharges into the sanitary sewer line, which runs north to south along Manila Avenue. Figure 2 shows locations of the storm drain and sanitary sewer system.

Six underground storage tanks (USTs) were formerly on the site. Two were located under the sidewalk on 38<sup>th</sup> Street and four inside the building. UST capacities 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 38<sup>th</sup> Street (see Figure 2).

Surrounding properties are primarily commercial and residential. TOSCO Marketing Company is located north and upgradient of the site, at 40<sup>th</sup> Street and Broadway, and contains a number of groundwater monitoring wells. Figure 2 shows locations of the subject site's main building, UST areas, and 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. Using the direct push method, Geosolv drilled 14 soil borings to the approximate depths of 10 to 24 feet bgs. Seven borings (B-2, B-3, B-7 through B-10 and B-13, 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 12 additional soil borings to approximate depths of 19 to 25 feet bgs. All 12 borings were converted into temporary groundwater sampling points, labeled E-15 through E-26. After collection of grab groundwater samples from the temporary "E" sampling points, these borings were abandoned and grouted. Figure 2a shows soil boring locations.

In July 1999, an investigation of potential groundwater preferential flow paths was initiated by LFR. LFR drilled 10 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, 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 the first groundwater monitoring events at the Site. In July and August 2000, LFR installed four groundwater monitoring wells, 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 groundwater monitoring event that suggested occurrence of strong anaerobic biodegradation activities and dechlorination of PCE beneath the site. On April 26 to 27, 2001, SOMA began its initial groundwater monitoring events at the Site. Results of Second Quarter 2001 monitoring indicated a strong occurrence of dechlorination 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 bioattenuation parameters.

Phase I of SOMA's workplan included installing additional groundwater monitoring wells, soil and groundwater sampling, hydraulic testing, and a sensitive receptor survey. On October 4, 11, and 12, 2001, SOMA installed monitoring wells SOMA-1 through SOMA-5. These wells are shown in Figure 2. During installation, boreholes were continuously logged and soil samples collected at 5-foot depth intervals to delineate the vertical extent of the soil and groundwater contamination.

Phase II of the workplan included defining site 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 results of investigations conducted in Phase I.

The modeling aspect of Phase II used results collected in Phase I and analytical data from quarterly monitoring events. The main objective of the groundwater flow and chemical transport modeling was to predict groundwater chemical concentrations downgradient from the site, beneath the nearest residential neighboring property, in order to assess site regulatory status and restore groundwater quality conditions to acceptable levels specified by the RBCA.

Groundwater flow, chemical transport, and bioattenuation modeling for the site was conducted by SOMA in First Quarter 2003. Modeling results confirmed the occurrence of biodegradation beneath the site and indicated that the bioattenuation processes could remove PCE in the groundwater in approximately 7 to 10 years, trichloroethylene (TCE) in approximately 3 to 9 years, and cis-1,2-dichloroethene (cis-1,2-DCE) in approximately 4 to 13 years. SOMA's March 7, 2003 report entitled "Groundwater Flow, Chemical Transport and Bioattenuation Modeling" describes the study in detail.

Based on approval from ACEHS, groundwater monitoring events have been conducted semi-annually since First Quarter 2003.

### 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 vicinity consist of Holocene alluvial deposits representative of an alluvial fan depositional environment. These deposits consist of brown, medium-dense sand that fines upward to sandy or silty clay. The pattern of stream channel deposition 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 deeper major water-bearing zone was encountered. However, as lithologic 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 are unsaturated in some locations. 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-permeability intervening clay layers between the shallow and deep layers, there is a significant vertical downward gradient between the shallow and deep wells.

Based on quarterly monitoring activities, depths of groundwater have ranged from 4 to 14 feet bgs at gradients ranging from 0.019 ft/ft to 0.035 ft/ft. Groundwater flow has been predominantly northeast to southwest across the site. Slug test results indicate that hydraulic conductivity of the saturated sediments ranges between  $1.2 \times 10^{-4}$  and  $6.9 \times 10^{-4}$  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. RESULTS

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

### 2.1 Groundwater Flow Conditions

Table 2 presents groundwater elevations in each well, calculated using depths to water and the elevation at the top of the well casings. Elevations ranged from 56.49 feet in SOMA-5 to 76.38 feet in MW-8. Refer to Table 2 for detailed groundwater elevation trends.

In evaluating the groundwater flow direction and gradient, water level data from all “B” wells, and from 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 installed by Geosolv is available, and 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 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 in the shallow water-bearing zone.
4. Due to the presence of free product (FP) in B-10, SOMA-2, and SOMA-4, the recorded water level elevations in these wells are not representative of the shallow water-bearing zone.

Figure 3 displays a contour map of groundwater elevations. Groundwater flows from northeast to southwest at an average gradient of 0.022 ft/ft. Groundwater flow direction has remained consistent with the previous monitoring event; however, the groundwater gradient slightly decreased.

Field measurements of some physical and chemical parameters of the groundwater samples are presented in detail in Appendix B field notes, and summarized in Table 3 along with their historical values. Water temperatures ranged from 17.59°C in SOMA-2 to 23.60°C in LFR-2. The temperature variation may reflect changes in air temperature during sampling. Measurements of pH ranged from 6.10 in GW-3 to 7.19 in SOMA-2. Electrical conductivity (EC) ranged from 3411 µS/cm in SOMA-3 to 834 µS/cm in SOMA-1 and SOMA-2.

## 2.2 Groundwater Quality

Table 4 presents laboratory analysis results for the following: total petroleum hydrocarbons as Stoddard solvents (TPH-ss) and as gasoline (TPH-g); methyl tertiary-butyl ether (MtBE); and benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX).

TPH-ss was below the laboratory-reporting limit in wells GW-2, MW-11, LFR-1, and LFR-3. Detectable TPH-ss levels ranged from 55 µg/L in SOMA-1 to 760,000 µg/L in B-10. Figure 4 shows the contour map of TPH-ss concentrations in groundwater. TPH-ss concentrations in wells SOMA-2 and B-10 decreased significantly since the previous monitoring event (First Semi-Annual 2008).

Due to drought conditions in wells GW-4 and SOMA-5, SOMA's field crew was unable to obtain sufficient groundwater for sampling and analysis.

TPH-g was below the laboratory-reporting limit in wells GW-2, MW-11, and LFR-3. Detectable TPH-g concentrations ranged from 59 µg/L in LFR-1 to 1,200,000 µg/L in B-10. Groundwater samples from B-10, GW-3, LFR-1, LFR-2, LFR-4, SOMA-1, SOMA-2 and SOMA-3 exhibited a fuel pattern that did not resemble the standard gasoline pattern. Figure 5 shows the contour map of TPH-g concentrations in groundwater. TPH-g concentrations in wells LFR-1, LFR-2, and LFR-3 decreased since the previous monitoring event (First Semi-Annual 2008). In SOMA-2, TPH-g concentration decreased significantly since the March 2008 sampling.

MtBE was detected in wells SOMA-1, SOMA-3, and LFR-4 at 390 µg/L, 220 µg/L, and 2.9 µg/L, respectively and was below the laboratory-reporting limit in all other groundwater samples collected during this monitoring event. However, there is no known on-site source of MtBE. Figure 6 shows the contour map of MtBE concentrations in the groundwater.

In general, BTEX constituents were below laboratory-reporting limits throughout the site, except for LFR-2, LFR-4, and SOMA-2. Ethylbenzene and total xylenes were below laboratory-reporting limits in LFR-2. Toluene, ethylbenzene and total xylenes were below laboratory-reporting limits in LFR-4. Highest BTEX concentrations were detected in SOMA-2 at 16 µg/L, 120 µg/L, 14 µg/L, and 94 µg/L, respectively. Figure 7 shows the contour map of benzene concentrations in the groundwater.

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

Table 5 shows historical concentrations of VOCs in the groundwater. PCE was below the laboratory-reporting limit in groundwater samples from wells MW-11, LFR-2, and LFR-4. Detectable PCE concentrations ranged from 1.3 µg/L in LFR-3 to 1,100 µg/L in B-10. Figure 8 shows the contour map of PCE concentrations in the groundwater. Since the previous monitoring event (First Semi-Annual 2008), PCE concentrations have decreased significantly in wells B-10 and SOMA-2.

TCE was below the laboratory-reporting limit in groundwater samples from wells MW-11, LFR-2, LFR-3, and LFR-4. Detectable TCE concentrations ranged from 1.3 µg/L in GW-3 to 970 µg/L in B-10. Figure 9 shows the contour map of TCE concentrations in the groundwater. Since the previous monitoring event (First Semi-Annual 2008), TCE concentrations have decreased significantly in wells B-10 and SOMA-2.

Cis-1,2-dichloroethene (cis-1,2-DCE) was below the laboratory-reporting limit in groundwater samples from wells GW-2, GW-3, MW-11, LFR-3, and LFR-4. Detectable cis-1,2-DCE concentrations ranged from 14 µg/L in well LFR-1 to 17,000 µg/L in well B-10. Figure 10 shows the contour map of cis-1,2-DCE concentrations in groundwater. Since the previous monitoring event (First Semi-Annual 2008), cis-1,2-DCE concentrations have decreased significantly in wells B-10 and SOMA-2.

Trans-1,2-dichloroethene (trans-1,2-DCE) was below the laboratory-reporting limit in wells GW-2, GW-3, MW-11, LFR-3, LFR-4, and SOMA-1. Detectable trans-1,2-DCE concentrations ranged from 3.9 µg/L in LFR-1 to 160 µg/L in SOMA-2. Figure 11 shows the contour map of trans-1,2-DCE concentrations in groundwater.

Vinyl chloride (VC) was below the laboratory-reporting limit throughout the site, except for samples from LFR-2 at 89.0 µg/L. 1,2-dichloropropane (1,2-DCP) was below the laboratory-reporting limit throughout the site, except for samples from wells LFR-2 and SOMA-1 at 0.9 µg/L and 3.1 µg/L, respectively. Due to generally low or non-detectable levels of these constituents throughout the site, no iso-concentration figures were drawn for VC and 1,2-DCP.

Table 5 shows detailed PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, and 1,2-DCP groundwater concentration trends.

Appendix C includes chain of custody forms and laboratory analytical reports for this groundwater monitoring event.

### 2.3 Bioattenuation Parameter Analysis Results

Although results of the current groundwater monitoring event revealed elevated levels of chlorinated solvents, results of the bioattenuation study indicated that subsurface conditions are still favorable for occurrence of intrinsic bioremediation processes in soil and groundwater. 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 µg/L in 2000 to 84 µg/L during this monitoring event. SOMA's field crew measured the bioattenuation parameters in situ. Dissolved methane was measured in the laboratory. Field measurements were taken in situ, within each 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 in the subsurface utilize the energy released from the transfer of electrons to drive 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 distribution of these electron acceptors can provide evidence of where, and to what extent, chlorinated and aliphatic hydrocarbon biodegradation is occurring. Byproducts of biodegradation processes are nitrite, ferrous iron, alkalinity, sulfide, methane, and carbon dioxide. Groundwater samples were tested to evaluate the extent of bioattenuation processes beneath the site. Table 6 summarizes these bioattenuation parameters.

**Dissolved Oxygen:** DO is the most favored electron acceptor used by microbes for biodegrading organic compounds. A DO concentration lower than 0.5 mg/L indicates anaerobic conditions. DO levels ranged from 0.10 mg/L in well MW-11 to 0.30 mg/L in SOMA-3. The contour map of DO concentrations in the groundwater is illustrated in Figure 12.

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 SOMA-3, results might not be representative of overall subsurface conditions.

**Nitrate:** After DO has been depleted, nitrate may be used as an electron acceptor for anaerobic biodegradation. Nitrate concentrations lower than 1.0 mg/L may indicate that reductive dechlorination is occurring. Nitrate was detected only in well B-10 at 12.10 mg/L, and below the minimum equipment tolerance level in remaining tested wells.

**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 groundwater indicate reductive dechlorination. Soluble manganese was detected in all groundwater samples except those from GW-2 and SOMA-3. Detectable manganese concentrations ranged from 0.1 mg/L in SOMA-1 to 21.4 mg/L in LFR-2. The contour map of dissolved manganese concentrations in the groundwater is illustrated in Figure 13.

**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 lower than 20 mg/L indicate reductive dechlorination (EPA 1998). Sulfate was detected in B-10, GW-2, and MW-11. Detectable sulfate levels ranged from 4 mg/L in well GW-3 to 35 mg/L in well MW-11. The contour map of sulfate concentrations in the groundwater is illustrated in Figure 14.

**Ferrous Iron:** Increased ferrous iron concentrations often accompany 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. Detectable ferrous iron concentrations ranged from 3.20 mg/L in LFR-4 to the equipment maximum allowable tolerance level of 3.30 mg/L in B-10, LFR-2, and SOMA-2. Ferrous concentrations were not detected in remaining tested wells. The contour map of ferrous iron concentrations in the groundwater is illustrated in Figure 15.

**Methane:** The presence of methane in groundwater indicates 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, and LFR-3. Detectable methane concentrations ranged from 0.0059 mg/L in LFR-1 to 7.5 mg/L in SOMA-2. Higher concentrations of methane indicate conditions conducive to anaerobic biodegradation. The contour map of methane concentrations in groundwater is illustrated in Figure 16.

**Oxygen Reduction Potential (ORP):** The ORP of groundwater is a measure of electron activity and 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 -66.1 mV in LFR-2 to +202.7 mV in SOMA-1.

Negative ORP values, detected in wells B-10, LFR-2, LFR-4 and SOMA-2, 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 removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface. Refer to Table 6 for detailed bioattenuation parameter trends.

## 2.4 Other Parameters

(See 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 data collected during previous groundwater monitoring events in connection with the bioattenuation process, no alkalinity data was collected during the current or 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 data collected during previous groundwater monitoring events in connection with the bioattenuation process, no chloride data was collected during this or previous groundwater monitoring events.

**Carbon Dioxide:** Carbon dioxide is a product of several biodegradation processes. Due to the inconclusive data collected during previous groundwater monitoring events in connection with the bioattenuation process, no carbon dioxide data was collected during 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-3, MW-11, LFR-1, LFR-3, and SOMA-1. Detectable total iron concentrations ranged from 0.27 mg/L in SOMA-3 to the equipment maximum allowable tolerance level of 3.30 mg/L in B-10, LFR-2, LFR-4 and SOMA-2.

**Nitrite:** Nitrate may reduce to nitrite during the process of anaerobic biodegradation. Nitrite was below the equipment minimal tolerance level throughout the site except at wells B-10, GW-2, and LFR-2, where it was at 0.196 mg/L, 0.032 mg/L and 0.092 mg/L, respectively.

**Sulfide:** When sulfate is used as an electron acceptor for anaerobic biodegradation it is reduced to sulfide. Due to the inconclusive data collected during 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 affects 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. FREE-PRODUCT REMOVAL ACTIVITIES**

Prior to installation of a skimmer pump in SOMA-4 on January 28, 2004, over 9 feet of FP was 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 FP.

In August 2004, SOMA converted borings B-3 and B-8 into wells for removal of FP from these locations. The FAP system was installed in B-8, in addition to the February 2004 installation in SOMA-4, to remove FP. As of March 2008, approximately 1,895 gallons of FP and contaminated groundwater have been removed from these two wells, and transported off-site by NRC. SOMA has been frequently checking levels of, and removing, FP. Table 7 shows field observations for wells SOMA-4, B-8, B-10 and SOMA-2.

Figure 17 illustrates the historical FP thickness measured in wells SOMA-4 and B-8. Since installation of the FAP system in February 2004, FP has significantly decreased in SOMA-4. The thickness of FP in SOMA-4 has significantly decreased since June 2003. Results of current observations indicate that FP from B-8 has been removed to the extent practicable by the current product removal system. Currently, the FAP system is inoperative pending completion of the multi-phase extraction (MPE) pilot testing that is being conducted using wells B-8, B-10, SOMA-4, and SOMA-2.

During the First Semi-Annual 2008 monitoring event, FP was unexpectedly observed in wells B-10 and SOMA-2 at 2.76 feet and 0.71 feet, respectively. During the current event, FP was observed in well B-10 at 0.17 feet and in wells SOMA-2 and SOMA-4 at 0.60 feet each.

## 4. FINDINGS OF CURRENT MONITORING EVENT

### 4.1 Current Environmental Conditions

Based on data obtained during the Second Semi-Annual 2008 groundwater monitoring event, current environmental conditions at the site are as follows:

1. All analyzed constituents in the farthest downgradient well LFR-3 were below laboratory-reporting limits except for PCE (detected at 1.3 µg/L). Furthermore, all analyzed constituents in the farthest upgradient well, MW-11, were below laboratory-reporting limits.
2. Data collected to date regarding distribution of PCE and other VOCs in groundwater demonstrate that PCE has degraded into some of its breakdown products in certain groundwater monitoring wells.
3. Results of this sampling event showed a significant decrease in PCE and TCE levels in wells B-10 and SOMA-2, where FP was discovered for the first time during the previous groundwater monitoring event (First Semi-Annual 2008).
4. TCE, a breakdown product of PCE, has been detected more frequently in groundwater monitoring wells during the current event. 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 VC, ethane and ethene and, finally, to carbon dioxide, water, and chloride. This sequence of degradation would be anticipated where biological reductive dehalogenation of PCE is occurring. Some of these breakdown products and relative concentrations were more frequently present in various wells during this event.
5. The presence of TCE in wells GW-2, LFR-1, SOMA-1, SOMA-2 and SOMA-3 during the current sampling event demonstrates that PCE degradation is occurring. The presence of cis-1,2-DCE in wells LFR-1, LFR-2, SOMA-1, SOMA-2, and SOMA-3 indicates the occurrence of dechlorination of PCE in the subsurface.
6. Results of DO, nitrate, manganese, sulfate, ferrous iron, methane, and ORP measurements demonstrate that conditions in the apparent source area are conducive to reductive dechlorination processes.
7. In general, the apparent source area still appears to be in the region of wells B-10, SOMA-2, SOMA-3 and SOMA-4.
8. Based on existing data, it appears that significant amounts of PCE, TCE and petroleum contaminants are still present in the subsurface, primarily within the smear zone. Passive removal of FP and dehalogenation of chlorinated solvents through bioremediation processes in soil and groundwater have not been sufficient for timely reduction of contaminant

concentrations to obtain site closure status, when a significant contaminant source and FP exist in the smear zone.

## **4.2 Recommendations**

SOMA is currently conducting a 45-day multiphase extraction (MPE) pilot test at the site to evaluate the effectiveness of MPE in removing chemicals from the subsurface. Based on available data, significant amounts of free product, VOCs and TPH-ss have been removed from the subsurface. SOMA is in the process of preparing an interim performance report on the MPE pilot test.

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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)
<b>Temporary Sampling Points Installed by Geosolv, LLC</b>						
B-2	19-Aug-97	82.20	82.09	21	5 to 21	77.2 to 61.2
B-3 <sup>1</sup>	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
<b>Temporary Sampling Points Installed by LFR</b>						
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 <sup>2</sup>	15-Jul-99	81.91	81.65	13.5	7.5 to 13.5	74.4 to 68.4
GW-6A <sup>2</sup>	16-Jul-99	81.93	81.61	15	5 to 15	76.9 to 66.9
GW-7 <sup>2</sup>	15-Jul-99	81.30	NS	20	10 to 20	71.3 to 61.3
GW-8 <sup>2</sup>	16-Jul-99	80.28	80.10	20	10 to 20	70.3 to 60.3
<b>Temporary Sampling Points Installed by TOSCO</b>						
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
<b>Groundwater Monitoring Wells Installed by LFR</b>						
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
<b>Groundwater Monitoring Wells Installed by SOMA</b>						
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:

- <sup>1</sup> Top of casing surveyed on south side on January 21, 2000, because the casing was broken.
- <sup>2</sup> 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.

NS = Not surveyed.



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

Date	B-2	B-3	B-7	B-8	B-9	B-10	B-13
<b>21-Aug-08</b>	<b>71.98</b>	<b>72.65</b>	<b>DRY</b>	<b>68.80</b>	<b>66.64</b>	<b>70.47</b>	<b>DRY</b>
19-Feb-08	78.05	74.51	DRY	68.27	68.33	69.75	64.58
23-Aug-07	70.45	71.54	DRY	64.66	63.89	67.76	75.59
28-Feb-07	78.13	76.18	Dry	70.80	70.14	74.18	75.77
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 <sup>(FP)</sup>	77.16 <sup>(FP 0.5)</sup>	70.79	75.03 <sup>(FP 0.5)</sup>	70.43	74.14	77.53 <sup>(FP 0.7)</sup>
18-Oct-01	73.26 <sup>(0.25 FP)</sup>	73.24 <sup>(1 FP)</sup>	67.89	69.51 <sup>(2.1 FP)</sup>	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 <sup>(FP)</sup>	69.01	73.32	69.42	73.35	DRY
10-Aug-00							
9-Aug-00	73.9 <sup>(FP)</sup>	74.55 <sup>(FP)</sup>	68.61	72.8 <sup>(FP)</sup>	68.82	72.65	75.23
27-Apr-00	75.41 <sup>(FP)</sup>	75.86 <sup>(FP)</sup>	69.85 <sup>(FP)</sup>	74.14 <sup>(FP)</sup>	69.96	73.70	75.87
25-Jan-00							
24-Jan-00	75.93 <sup>(FP)</sup>	75.83	69.66 <sup>(FP)</sup>	72.84	70.25 <sup>(FP)</sup>	74.15 <sup>(FP)</sup>	
21-Jan-00							76.32
20-Jan-00							
19-Jan-00	73.97 <sup>(FP)</sup>	73.22 <sup>(2)</sup>	68.6 <sup>(FP)</sup>	71.81 <sup>(FP)</sup>	68.91 <sup>(FP)</sup>	73.02 <sup>(FP)</sup>	74.18
27-Aug-99							
18-Feb-98	78.16 <sup>(1)</sup>	78.04 <sup>(1)</sup>	71.57 <sup>(1)</sup>	76.64 <sup>(1)</sup>	71.44 <sup>(1)</sup>	75.13 <sup>(1)</sup>	78.51 <sup>(1)</sup>
26-Oct-97	72.66 <sup>(1)</sup>	73.64 <sup>(1)</sup>	68.09 <sup>(1)</sup>	71.11 <sup>(1)</sup>	68.39 <sup>(1)</sup>	72.26 <sup>(1)</sup>	73.02 <sup>(1)</sup>

**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
21-Aug-08	DRY	66.59	67.88	DRY	68.88	67.70	NM	76.38	75.94	68.43
19-Feb-08	DRY	60.89	67.15	74.81	69.10	67.94	NM	76.70	76.00	69.82
22-Aug-07	DRY	DRY	66.71	DRY	68.54	67.89	NM	75.98	75.15	70.70
28-Feb-07	72.31	69.95	68.39	74.90	69.73	68.13	NM	79.05	78.64	71.30
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 Giovatorium Site  
3815 Broadway, Oakland, California

Date	LFR-1	LFR-2	LFR-3	LFR-4	SOMA-1	SOMA-2	SOMA-3	SOMA-4	SOMA-5
<b>21-Aug-08</b>	<b>69.81</b>	<b>69.57</b>	<b>65.20</b>	<b>66.02</b>	<b>65.63</b>	<b>70.63</b>	<b>67.24</b>	<b>67.27</b>	<b>56.49</b>
19-Feb-08	69.94	70.90	61.64	62.35	61.04	71.39	64.87	64.51	56.51
23-Aug-07	69.64	69.18	60.03	62.52	59.51	69.72	63.23	63.05	DRY
28-Feb-07	70.98	73.41	67.90	69.99	69.10	73.73	70.96	71.63	61.57
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 <sup>(FP 2.5)</sup>	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:**

- 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.
- NM: not measured
- FP= Floating product or sheen was observed.
- \* Monitoring well GW-1 was dry

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	Temp (°C)	Electrical Conductivity (µS/cm)
<b>Temporary Sampling Points Installed by Geosolv, LLC</b>												
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					
B-7 field	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
B-7 field	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					
B-10	31-Oct-00				8.35	0.00	0.00			6.21	16.62	1051
B-10	31-Jan-01	480	81	72	6.10	<0.1	<2.0					
B-10	31-Jan-01				1.44	0.07				6.81	14.66	1117
B-10	11-Jun-01				1.31					6.65	16.70	1090
B-10	26-Jul-01				6.50	0.00				6.38	16.09	1160
B-10	10-Aug-01	520	74	145	6.00	<0.05	<0.04	<0.0005	0.00	6.86	16.80	1130
B-10	6-Jul-05	NM	NM	NM	3.30	0.348	NM	<0.005	<0.005	6.70	16.55	1420
B-10	9-Jan-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.68	16.48	1410
B-10	6-Jul-06	NM	NM	NM	3.30	0.122	NM	<0.005	<0.005	7.19	15.80	1170
B-10	1-Mar-07	NM	NM	NM	3.20	0.000	NM	<0.005	<0.005	7.12	10.79	776
B-10	23-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
B-10	20-Feb-08	NM	NM	NM	3.30	0.244	NM	NM	NM	NM	NM	NM
B-10	21-Aug-08	NM	NM	NM	3.30	0.196	NM	NM	NM	6.83	20.43	380
<b>Temporary Sampling Points Installed by LFR</b>												
GW-2	01-Nov-00									6.31	18.97	1218
GW-2 field	30-Jan-01			63								
GW-2 field	31-Jan-01									6.82	13.75	846
GW-2 field	26-Apr-01				0.02					6.80	19.50	874
GW-2 field	26-Jul-01				0.03	0.02				6.74	20.30	803
GW-2 field	19-Oct-01	NM	NM	NM	NM	NM	NM	NM	NM	6.84	21.30	786

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	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
	28-Feb-07	NM	NM	NM	0.37	0.024	NM	<0.005	<0.005	6.27	16.70	544
	22-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Feb-08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
22-Aug-08	NM	NM	NM	NM	0.30	0.032	NM	NM	NM	6.55	22.66	422
GW-3	11-Aug-00	340	25	54		0.05	-1.00	<0.0005	<0.0005	7.05	21.43	860
GW-3 field	11-Aug-00											
GW-3 field	1-Nov-00									6.52	18.83	967
GW-3 field	1-Feb-01			54								
	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
1-Mar-07	NM	NM	NM	0.14	0.010	NM	<0.005	<0.005	6.59	16.15	518	
23-Aug-07	NM	NM	NM	0.07	0.210	NM	<0.005	<0.005	6.58	19.71	412	
20-Feb-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.62	18.66	275	
22-Aug-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.10	21.52	463	

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	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
	28-Feb-07	NM	NM	NM	3.30	0.000	NM	<0.01	<0.01	6.70	12.63	369
	22-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Feb-08	NM	NM	NM	1.18	0.000	NM	NM	NM	6.54	13.42	248	
21-Aug-08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
<b>Monitoring Wells Owned by TOSCO</b>												
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				0.01	0.00	-1.00			5.83	20.13	1
MW-11 field	31-Jan-01	330	130	150	<0.05	<0.1	<2.0					
	31-Jan-01									6.35	13.67	1
	26-Apr-01				0.01					5.67	18.00	1210
	26-Jul-01				0.00	0.02				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	NM	NM	NM	0.00	0.02	NM	NM	NM	6.27	18.37	1180
	23-Oct-02	NM	NM	NM	0.00	0.04	NM	NM	NM	6.62	20.81	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	0.00	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	0.13	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
28-Feb-07	NM	NM	NM	0.74	0.000	NM	<0.005	<0.005	6.71	16.34	1100	
22-Aug-07	NM	NM	NM	0.01	0.000	NM	<0.005	<0.005	5.46	19.97	865	
19-Feb-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.51	19.36	1081	
22-Aug-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.61	22.07	676	

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	Temp (°C)	Electrical Conductivity (µS/cm)
<b>Monitoring Wells Installed by LFR</b>												
LFR-1	11-Aug-00	250	110	51				<0.0005	<0.0005	6.97	19.73	936
LFR-1 field	09-Aug-00					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			6.38	17.94	697
LFR-1-spl	30-Oct-00	220	100	40	<0.05	<0.1	<2					
LFR-1 field	29-Jan-01	150	76	28	<0.05	<0.1	<2					
LFR-1 Dup	29-Jan-01				0.00	0.04				6.82	15.00	870
	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
	1-Mar-07	NM	NM	NM	0.45	0.000	NM	<0.005	<0.005	6.15	14.51	787
	23-Aug-07	NM	NM	NM	0.22	0.011	NM	<0.005	<0.005	5.45	19.42	642
	19-Feb-08	NM	NM	NM	0.08	0.000	NM	NM	NM	6.50	17.29	690
	22-Aug-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.50	21.13	432
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
LFR-2 field	30-Jan-01	480	21	130	4.60	<0.1	<2					
	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

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	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
	28-Feb-07	NM	NM	NM	3.30	0.000	NM	<0.025	<0.025	6.41	16.54	782
	22-Aug-07	NM	NM	NM	3.30	0.000	NM	<0.025	<0.025	6.05	17.60	814
20-Feb-08	NM	NM	NM	1.77	0.000	NM	NM	NM	6.58	17.52	616	
	<b>21-Aug-08</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>3.30</b>	<b>0.092</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>6.68</b>	<b>23.60</b>	<b>610</b>
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					
LFR-3 field	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
LFR-3 field	30-Jan-01	250	31	71	<0.05	<0.1	<2					
	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
	1-Mar-07	NM	NM	NM	1.03	0.005	NM	<0.005	<0.005	6.17	17.44	514
	22-Aug-07	NM	NM	NM	0.84	0.000	NM	<0.005	<0.005	5.45	20.36	547
20-Feb-08	NM	NM	NM	0.20	0.000	NM	NM	NM	6.38	19.55	607	
	<b>22-Aug-08</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>0.00</b>	<b>0.000</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>6.63</b>	<b>21.09</b>	<b>406</b>



**Table 3**  
**Historical Analytical Results and Field Measurements for**  
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**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)	pH	Temp (°C)	Electrical Conductivity (µS/cm)
LFR-4	11-Aug-00	630	71	161	0.22	0.02	0.00	<0.0005	<0.0005	6.90	20.11	1240
	10-Aug-00											
LFR-4 FB	11-Aug-00	490	28	130	1.00	<0.1	<2	0.00	<0.0005	6.21	18.11	830
LFR-4 field	31-Oct-00											
LFR-4 field	31-Oct-00	460	25	120	0.67	0.02	0.00	<0.1	<2	6.55	15.28	916
LFR-4 field	01-Feb-01											
LFR-4 field	01-Feb-01	460	25	120	1.43	0.02	<0.1	<2	<0.0005	6.26	19.23	866
LFR-4 field	27-Apr-01											
LFR-4 field	26-Jul-01	460	25	120	1.44	0.02	<0.1	<2	<0.0005	6.26	19.23	866
LFR-4 field	26-Jul-01											
LFR-4 field	16,17-Apr-02	NM	NM	NM	5.10	0.03	NM	NM	NM	6.19	18.04	925
LFR-4 field	17,18-Jul-02	NM	NM	NM	>3.3	0.01	NM	NM	NM	5.92	17.28	878
LFR-4 field	23-Oct-02	NM	NM	NM	3.30	0.00	NM	NM	NM	6.69	19.90	602
LFR-4 field	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.38	19.10	994
LFR-4 field	29-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.94	19.00	994
LFR-4 field	29-Jan-04	NM	NM	NM	0.71	0.00	NM	NM	NM	6.53	19.50	689
LFR-4 field	5-Jul-05	NM	NM	NM	3.30	0.00	NM	<0.005	<0.005	6.49	19.20	772
LFR-4 field	5-Jan-06	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
LFR-4 field	5-Jul-06	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.75	18.90	912
LFR-4 field	1-Mar-07	NM	NM	NM	3.30	0.000	NM	<0.01	<0.01	6.46	15.75	972
LFR-4 field	22-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
LFR-4 field	19-Feb-08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
LFR-4 field	21-Aug-08	NM	NM	NM	3.30	0.00	NM	NM	NM	6.13	21.38	353
<b>Monitoring Wells Installed by SOMA</b>												
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
SOMA-1	16,17-Apr-02	NM	NM	NM	0.17	0.03	NM	NM	NM	6.01	17.98	1280
SOMA-1	17,18-Jul-02	NM	NM	NM	0.11	0.01	NM	NM	NM	6.52	16.21	1270
SOMA-1	23-Oct-02	NM	NM	NM	0.24	0.01	NM	NM	NM	6.60	17.77	1270
SOMA-1	19-Feb-03	NM	NM	NM	0.00	0.01	NM	NM	NM	6.33	17.40	1350
SOMA-1	30-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	6.90	17.80	1300
SOMA-1	29-Jan-04	NM	NM	NM	2.10	0.00	NM	NM	NM	6.51	17.60	959
SOMA-1	3-Aug-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.42	17.89	956
SOMA-1	1-Feb-05	NM	NM	NM	0.00	0.00	NM	NM	NM	6.26	17.70	985
SOMA-1	5-Jul-05	NM	NM	NM	0.19	0.00	NM	<0.005	<0.005	6.36	19.36	1220
SOMA-1	5-Jan-06	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.54	18.02	926
SOMA-1	5-Jul-06	NM	NM	NM	0.30	0.011	NM	<0.005	<0.005	6.68	18.40	1150
SOMA-1	28-Feb-07	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	6.10	17.17	1140
SOMA-1	22-Aug-07	NM	NM	NM	0.00	0.000	NM	<0.005	<0.005	5.73	17.75	939
SOMA-1	20-Feb-08	NM	NM	NM	0.00	0.006	NM	NM	NM	6.53	17.93	791
SOMA-1	21-Aug-08	NM	NM	NM	0.00	0.000	NM	NM	NM	6.21	19.33	834

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	Temp (°C)	Electrical Conductivity (µS/cm)
<b>SOMA-2</b>	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
	1-Mar-07	NM	NM	NM	3.30	0.000	NM	<0.025	<0.025	7.24	10.16	1288
	23-Aug-07	NM	NM	NM	3.30	0.000	NM	<0.005	<0.005	6.20	15.98	764
20-Feb-08	NM	NM	NM	3.30	0.000	NM	NM	NM	6.85	13.37	1434	
<b>21-Aug-08</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>3.30</b>	<b>0.000</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>7.19</b>	<b>17.59</b>	<b>834</b>	
<b>SOMA-3</b>	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
	1-Mar-07	NM	NM	NM	0.69	0.000	NM	<0.005	<0.005	6.78	14.34	528
	23-Aug-07	NM	NM	NM	1.20	0.000	NM	<0.005	<0.005	6.45	17.13	495
20-Feb-08	NM	NM	NM	3.21	0.158	NM	NM	NM	6.98	14.19	31	
<b>21-Aug-05</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>0.27</b>	<b>0.000</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>6.62</b>	<b>19.87</b>	<b>341</b>	
<b>SOMA-4</b>	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

**Table 3**  
**Historical Analytical Results and Field Measurements for**  
**Dissolved Ions and Gas, pH, Temperature, and Electrical Conductivity in Groundwater Samples**  
**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)	pH	Temp (°C)	Electrical Conductivity (µS/cm)
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
	1-Mar-07	NM	NM	NM	NM	NM	NM	<0.025	<0.025	NM	NM	NM
	23-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	20-Feb-08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	21-Aug-08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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**  
**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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
<b>Temporary Sampling Points Installed by Geosolv, LLC</b>								
B-2	24-Jan-00	20 <sup>J</sup>	31 <sup>YJ</sup>	<0.05	<0.013	<0.013	0.11 <sup>C</sup>	0.22 <sup>C</sup>
B-3	24-Jan-00	4.9 <sup>J</sup>	8.8 <sup>YJ</sup>	<0.01	0.0048	<0.0025	<0.0025	0.0714
B-7	24-Jan-00	19	30 <sup>J</sup>	<0.05	<0.013	0.062	<0.013	0.207
	11-Aug-00	3.7 <sup>J</sup>	6.8 <sup>YHJ</sup>	0.02	0.0077 <sup>J</sup>	0.047 <sup>J</sup>	0.007 <sup>J</sup>	0.065 <sup>CJ</sup>
	31-Oct-00	62 <sup>J</sup>	98 <sup>YHJ</sup>	0.01 <sup>J</sup>	0.0091 <sup>J</sup>	0.061 <sup>J</sup>	<0.0005	0.237 <sup>J</sup>
	27-Jul-01	2.5	5.2 <sup>HY</sup>	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 <sup>H</sup>	0.0069	0.0110	0.071	0.077 <sup>C</sup>	0.2080
B-8	24-Jan-00	11 <sup>J</sup>	19 <sup>YJ</sup>	<0.01	<0.0025	<0.0025	<0.0025	0.17 <sup>C</sup>
B-9	24-Jan-00	1 <sup>YJ</sup>	1.8 <sup>YHJ</sup>	<0.002	<0.0005	<0.0005	0.01 <sup>C</sup>	0.0089 <sup>C</sup>
B-10	24-Jan-00	2.4 <sup>Y</sup>	4.2	0.0140 <sup>C</sup>	0.0072	0.027	0.025 <sup>C</sup>	0.032
	10-Aug-00	2.8 <sup>Y</sup>	6.1 <sup>Y</sup>	0.1600	0.0073	0.012	<0.005	0.0241
	31-Oct-00	2.2 <sup>YZ</sup>	3.5 <sup>Z</sup>	<0.002	0.0038	0.011	<0.0005	0.0182
	27-Jul-01	1.7	3.6 <sup>H</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	31-Jan-01	2.4 <sup>Z</sup>	3.6 <sup>HYZ</sup>	<0.002	0.0031	0.010	0.00076 <sup>C</sup>	0.0197
	26-Apr-01	2.4 <sup>Z</sup>	4.7 <sup>Z</sup>	0.0025	0.0041	0.013	ND	0.0290
	6-Jul-05	3.4 <sup>H</sup>	4.5 <sup>HY</sup>	<0.1	<0.1	<0.1	<0.1	<0.1
	9-Jan-06	11 <sup>Y</sup>	15	<0.1	<0.1	<0.1	<0.1	<0.1
	6-Jul-06	1.3	2.2 <sup>HY</sup>	<0.1	<0.1	<0.1	<0.1	<0.1
	1-Mar-07	0.5 <sup>L</sup>	0.810 <sup>HY</sup>	<0.1	<0.1	<0.1	<0.1	<0.1
	23-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	860	1,100 <sup>Y</sup>	<0.25	<0.25	<0.25	<0.25	<0.25
	25-Mar-08	2,000	43 <sup>Yb</sup>	<0.36	<0.36	0.75	0.42	2.12
<b>21-Aug-08</b>	<b>760</b>	<b>1,200<sup>Y</sup></b>	<b>&lt;0.083</b>	<b>&lt;0.083</b>	<b>&lt;0.083</b>	<b>&lt;0.083</b>	<b>&lt;0.083</b>	
B-13	24-Jan-00	1.7 <sup>J</sup>	3 <sup>YJ</sup>	<0.01	<0.0025	<0.0025	<0.0025	0.0200
<b>Temporary Sampling Points Installed by LFR</b>								
<b>GW-2</b>	19-Jul-99	<0.05	<0.05	0.0025	<0.0005	0.00071	<0.0005	0.00074
	20-Jan-00	0.15	0.25 <sup>Y</sup>	0.0044	<0.0005	<0.0005	0.00097 <sup>C</sup>	0.0013
	28-Apr-00	<0.05	0.095 <sup>YZ</sup>	<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 <sup>YZ</sup>	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**  
**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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
GW-2 cont.	31-Jan-02	<0.05	<0.05	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>
	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 <sup>YZ</sup>	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	2-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA	NA
20-Feb-08	NA	NA	NA	NA	NA	NA	NA	
<b>22-Aug-08</b>	<b>&lt;0.05</b>	<b>&lt;0.05</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>
GW-3	19-Jul-99	0.070 <sup>Z</sup>	0.100 <sup>Z</sup>	<0.0020	<0.0005	<0.0005	<0.0005	0.00064
	20-Jan-00	0.15	0.260 <sup>Y</sup>	<0.0020	<0.0005	<0.0005	<0.0005	0.00130 <sup>C</sup>
	27-Apr-00	0.20 <sup>YZ</sup>	0.380 <sup>YZ</sup>	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	27-Apr-00	0.30 <sup>Z</sup>	0.570 <sup>YZ</sup>	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	11-Aug-00	<0.05	0.077 <sup>YZ</sup>	<0.0020	<0.0005	<0.0005	<0.0005	0.00051
	2-Nov-00	<0.05	0.050 <sup>YZ</sup>	0.0026	<0.0005	<0.0005	<0.0005	<0.00050
	1-Feb-01	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	27-Apr-01	<0.05	0.062 <sup>YZ</sup>	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 <sup>YZ</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.00500 <sup>b</sup>
	16,17-Apr-02	<0.05	0.055 <sup>YZ</sup>	<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 <sup>YZ</sup>	0.140 <sup>YZ</sup>	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071
	19-Feb-03	0.068 <sup>YZ</sup>	0.100 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jul-03	0.120 <sup>YZ</sup>	0.180 <sup>YZ</sup>	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.051 <sup>YZ</sup>	0.086 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	0.170 <sup>YZ</sup>	0.150 <sup>YZ</sup>	<0.017	<0.017	<0.017	<0.017	<0.017
	2-Feb-05	0.190 <sup>Z</sup>	0.250 <sup>HYZ</sup>	<0.031	<0.031	<0.031	<0.031	<0.031
	6-Jul-05	0.084 <sup>YZ</sup>	0.11 <sup>YZ</sup>	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jan-06	0.063 <sup>YZ</sup>	0.088 <sup>YZ</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.091 <sup>YZ</sup>	.140 <sup>YZ</sup>	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	1-Mar-07	0.088 <sup>YZ</sup>	0.140 <sup>YZ</sup>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017
23-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
20-Feb-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>22-Aug-08</b>	<b>0.079<sup>Y</sup></b>	<b>0.120<sup>YZ</sup></b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	

**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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
<b>GW-4</b>  Split	21-Jul-99	6.80 <sup>J</sup>	10 <sup>YHJ</sup>	0.0022	<0.0005	<0.0005	<0.0005	0.0029 <sup>J</sup>
	20-Jan-00	0.97 <sup>J</sup>	1.60 <sup>YJ</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	20-Jan-00	0.85 <sup>J</sup>	1.50 <sup>YJ</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.31	0.60 <sup>Y</sup>	<0.0020	<0.0005	<0.0005	<0.0005	0.0027
	30-Jan-01	0.39	0.58 <sup>HY</sup>	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.42	0.86 <sup>HY</sup>	<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 <sup>HY</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	0.40	0.67 <sup>HY</sup>	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.97	1.7 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	0.55	0.700 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.58	0.880 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	0.39	0.580 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	0.31	0.520 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	0.71	0.640 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	0.28	0.370 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	0.12	0.16 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
5-Jan-06	0.54	0.75 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
28-Feb-07	0.56	0.90 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-07	NA	NA	NA	NA	NA	NA	NA	
20-Feb-08	0.50	0.63 <sup>Y</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>21-Aug-08</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>GW-5</b>	27-Aug-99	<0.05	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001
	20-Jan-00	<0.05	0.057 <sup>Y</sup>	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.05 <sup>Y</sup>	0.096 <sup>Y</sup>	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
<b>GW-6A</b>  Split	27-Aug-99	<0.05	0.054 <sup>Y</sup>	0.0089	<0.0005	<0.0005	<0.0005	<0.0005
	27-Aug-99	<0.05	0.057 <sup>Y</sup>	0.0087	<0.0005	<0.0005	<0.0005	<0.0005
	25-Jan-00	<0.05	<0.05	0.0022	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	<0.05	0.087 <sup>Y</sup>	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
<b>GW-7</b>  Split  Split	15-Jul-99	NA	NA	<0.0025	0.05 <sup>J</sup>	<0.0005	0.000727	0.00313 <sup>J</sup>
	15-Jul-99	NA	NA	NA	NA	NA	NA	NA
	15-Jul-99	NA	NA	NA	0.0567 <sup>J</sup>	<0.002	<0.002	<0.002
	15-Jul-99	NA	NA	NA	0.0755 <sup>J</sup>	<0.002	<0.002	<0.002
<b>GW-8</b>  Split	19-Jul-99	<0.05	<0.05	0.0078	<0.0005	0.00064	<0.0005	0.00151
	20-Jan-00	0.19	0.33 <sup>Y</sup>	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	20-Jan-00	0.20	0.37 <sup>Y</sup>	<0.002	0.00058	<0.0005	<0.0005	<0.0005
	28-Apr-00	0.064 <sup>YZ</sup>	0.12 <sup>YZ</sup>	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**  
**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)
<b>Monitoring Wells Owned by TOSCO</b>								
<b>MW-11</b>	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 <sup>HY</sup>	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 <sup>Y</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>
	16,17-Apr-02	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	<0.05	<0.05	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.05	<0.05	0.001	<0.0005	<0.0005	<0.0005	<0.0005
28-Feb-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
19-Feb-08	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-08	<b>&lt;0.05</b>	<b>&lt;0.05</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>
<b>Monitoring Wells Installed by LFR</b>								
<b>LFR-1</b>	9-Aug-00	0.53	1.2	0.0095	<0.0005	<0.0005	<0.0005	<0.0005
	30-Oct-00	0.24 <sup>YZ</sup>	0.37 <sup>YZ</sup>	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	30-Oct-00	0.24 <sup>YZ</sup>	0.37 <sup>YZ</sup>	0.0043	<0.0005	<0.0005	<0.0005	<0.0005
	29-Jan-01	0.21 <sup>YZ</sup>	0.31 <sup>YZ</sup>	0.0033	<0.0005	<0.0005	<0.0005	<0.0005
	26-Apr-01	0.092	0.18 <sup>YZ</sup>	0.0044	<0.0005	0.002	<0.0005	<0.0005
	27-Jul-01	0.086	0.18 <sup>YZ</sup>	<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 <sup>YZ</sup>	0.27 <sup>YZ</sup>	<0.013 <sup>b</sup>	<0.013 <sup>b</sup>	<0.013 <sup>b</sup>	<0.013 <sup>b</sup>	<0.013 <sup>b</sup>
	16,17-Apr-02	0.10 <sup>YZ</sup>	0.17 <sup>YZ</sup>	< 0.013	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.084 <sup>YZ</sup>	0.14 <sup>YZ</sup>	<0.013	<0.013	<0.013	<0.013	<0.013
	22,23-Oct-02	<0.05	0.078 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	0.076 <sup>YZ</sup>	0.110 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.05	0.068 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	0.060 <sup>YZ</sup>	0.100 <sup>YZ</sup>	<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 <sup>YZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	<0.05	0.053 <sup>YZ</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	0.070 <sup>YZ</sup>	0.120 <sup>YZ</sup>	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	19-Feb-08	0.062 <sup>Y</sup>	0.077 <sup>Y</sup>	<0.001	<0.001	<0.001	<0.001	0.0033
	22-Aug-08	<b>&lt;0.05</b>	<b>0.059<sup>YZ</sup></b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>

**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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
<b>LFR-2</b>	11-Aug-00	0.59	1.10 <sup>YH</sup>	0.0022	0.0018	<0.0005	<0.0005	0.0013 <sup>C</sup>
	2-Nov-00	0.38	0.70 <sup>YH</sup>	0.003	0.0035	0.0011	0.0042	0.01184 <sup>C</sup>
	30-Jan-01	0.36	0.54 <sup>HY</sup>	0.0034	0.00057	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.33	0.66 <sup>HY</sup>	<0.002	<0.0005	0.0013	<0.0005	<0.0005
	27-Apr-01	0.36	0.72 <sup>HY</sup>	<0.002	0.00059	0.0019	<0.0005	0.013
	27-Jul-01	0.33	0.76 <sup>HY</sup>	<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 <sup>HY</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>
	16,17-Apr-02	1.10	1.90 <sup>HY</sup>	<0.002	<0.0005	<0.0005	<0.0005	0.019 <sup>C</sup>
	17,18-Jul-02	0.97	1.7 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	3.10	5.000 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	1.50	2.300 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	4.10	6.000 <sup>HY</sup>	<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 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	1-Feb-05	1.10	1.5 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	5-Jul-05	0.95	1.3 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	4.00	5.6 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.49	0.770 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	1.20	1.9 <sup>HY</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
22-Aug-07	3.70	6.4 <sup>HY</sup>	<0.0005	0.0022	<0.0005	<0.0005	<0.0005	
20-Feb-08	73	92 <sup>Y</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>21-Aug-08</b>	<b>15</b>	<b>23<sup>Y</sup></b>	<b>&lt;0.0083</b>	<b>0.0059</b>	<b>0.0017</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	
<b>LFR-3 Split</b>	10-Aug-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	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 <sup>Y</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>	<0.005 <sup>b</sup>
	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	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Dec-05	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1-Mar-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-07	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
20-Feb-08	<0.05	0.053 <sup>Y</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>22-Aug-08</b>	<b>&lt;0.05</b>	<b>&lt;0.05</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	



**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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
<b>LFR-4</b>	11-Aug-00	0.22 <sup>Y</sup>	0.41 <sup>Y</sup>	0.0051	0.01100	<0.0005	<0.0005	0.00162 <sup>C</sup>
	31-Oct-00	0.17 <sup>Y</sup>	0.27	0.0065	0.00084	<0.0005	<0.0005	<0.0005
	1-Feb-01	0.16 <sup>Y</sup>	0.22	0.0097	0.00330	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.22 <sup>Y</sup>	0.44	0.0058	0.02700	0.0036	<0.0005	<0.0005
	27-Jul-01	0.091 <sup>Y</sup>	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 <sup>Y</sup>	0.67	<0.005	0.05300	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.21 <sup>Y</sup>	0.36 <sup>Y</sup>	0.0075	0.007	<0.005	<0.005	<0.005
	22,23-Oct-02	0.110 <sup>Y</sup>	0.17	0.0080	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.490 <sup>Y</sup>	0.740	<0.005	0.055	<0.005	<0.005	<0.005
	30-Jul-03	0.400 <sup>Y</sup>	0.59	<0.005	0.010	<0.005	<0.005	<0.005
	29-Jan-04	0.42 <sup>Y</sup>	0.700 <sup>Y</sup>	<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 <sup>Y</sup>	0.68	0.0049	0.024	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.650 <sup>Y</sup>	1.10	0.0081	0.059	<0.0005	0.0081	0.006
	1-Mar-07	0.370 <sup>Y</sup>	0.590 <sup>H</sup>	0.006	0.0063	<0.0005	<0.0005	<0.0005
22-Aug-07	NA	NA	NA	NA	NA	NA	NA	
20-Feb-08	NA	NA	NA	NA	NA	NA	NA	
<b>21-Aug-08</b>	<b>0.990<sup>Y</sup></b>	<b>1.50<sup>Y</sup></b>	<b>0.0029</b>	<b>0.0009</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	
<b>Monitoring Wells Installed by SOMA</b>								
<b>SOMA-1</b>	19-Oct-01	0.22	0.44	0.034	<0.0050	<0.0050	<0.0050	<0.0100
	31-Jan-02	0.058	0.100 <sup>HY</sup>	0.110 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	<0.05	0.052 <sup>Y</sup>	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
	28-Feb-07	0.050 <sup>YZ</sup>	0.081 <sup>YZ</sup>	0.330	0.0025	<0.002	<0.002	<0.002
22-Aug-07	<0.05	0.066 <sup>YZ</sup>	0.450	<0.002	<0.002	<0.002	<0.002	
20-Feb-08	<0.05	0.076 <sup>Y</sup>	0.340	<0.002	<0.002	<0.002	0.0084	
<b>21-Aug-08</b>	<b>0.055<sup>Y</sup></b>	<b>0.084<sup>YZ</sup></b>	<b>0.390</b>	<b>&lt;0.0025</b>	<b>&lt;0.0025</b>	<b>&lt;0.0025</b>	<b>&lt;0.0025</b>	
<b>SOMA-2</b>	19-Oct-01	1.4	2.8	<0.250	<0.2500	<0.250	<0.250	<0.500
	31-Jan-02	1.3	2.4 <sup>HY</sup>	<0.071 <sup>b</sup>	<0.0710 <sup>b</sup>	<0.071 <sup>b</sup>	<0.071 <sup>b</sup>	<0.071 <sup>b</sup>
	16,17-Apr-02	1.3 <sup>L</sup>	2.2 <sup>H</sup>	<0.130	0.0067	0.046	0.012	0.044
	17,18-Jul-02	2.6	4.4 <sup>HY</sup>	<0.063	<0.063	<0.063	<0.063	<0.063
	22,23-Oct-02	0.37	0.600 <sup>HY</sup>	0.300	<0.0071	<0.0071	<0.0071	<0.0071
	19-Feb-03	0.30	0.460 <sup>HY</sup>	0.210	<0.017	<0.017	<0.017	<0.017
29-Jul-03	0.27	0.400 <sup>HY</sup>	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)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
<b>SOMA-2 cont.</b>	28-Jan-04	0.23	0.38 <sup>HY</sup>	0.270	<0.017	<0.017	<0.017	<0.017
	4-Aug-04	0.31	0.28 <sup>HY</sup>	0.280	<0.031	<0.031	<0.031	<0.031
	2-Feb-05	39	53 <sup>HY</sup>	<0.31	<0.31	<0.31	<0.31	<0.31
	6-Jul-05	5.10	6.8 <sup>HY</sup>	<0.025	<0.025	0.053	<0.025	0.031
	9-Jan-06	67	93 <sup>HY</sup>	<0.042	<0.042	0.054	<0.042	<0.042
	6-Jul-06	25	40 <sup>HY</sup>	<0.042	<0.042	0.061	<0.042	<0.042
	1-Mar-07	18	29 <sup>HY</sup>	<0.042	<0.042	0.055	<0.042	<0.042
	23-Aug-07	75	130 <sup>HY</sup>	<0.042	<0.042	0.081	<0.042	<0.042
	20-Feb-08	3.2	4.0 <sup>Y</sup>	<0.1	<0.1	<0.1	<0.1	<0.1
	25-Mar-08	360.0	270 <sup>Yb</sup>	<0.13	<0.13	0.180	<0.13	0.170
	<b>21-Aug-08</b>	<b>3.8</b>	<b>5.7<sup>Y</sup></b>	<b>&lt;0.0063</b>	<b>0.016</b>	<b>0.120</b>	<b>0.014</b>	<b>0.094</b>
<b>SOMA-3</b>	19-Oct-01	0.42	0.83	0.65	<0.02500	<0.02500	<0.0250	<0.0500
	31-Jan-02	0.23	0.41 <sup>HY</sup>	0.31 <sup>b</sup>	<0.01300 <sup>b</sup>	<0.01300 <sup>b</sup>	<0.0130 <sup>b</sup>	<0.0130 <sup>b</sup>
	16,17-Apr-02	0.61	1.00 <sup>HY</sup>	0.42	0.00078	0.00068	<0.0005	<0.0005
	17,18-Jul-02	0.41	0.69 <sup>HY</sup>	0.38	<0.017	<0.017	<0.017	<0.017
	22,23-Oct-02	3.00	4.700 <sup>HY</sup>	<0.17	<0.170	<0.170	<0.170	<0.170
	19-Feb-03	2.50	3.800 <sup>HY</sup>	<0.13	<0.130	<0.130	<0.130	<0.130
	29-Jul-03	2.10	3.100 <sup>HY</sup>	<0.13	<0.130	<0.130	<0.130	<0.130
	29-Jan-04	4.10	6.8 <sup>HY</sup>	<0.31	<0.310	<0.310	<0.310	<0.310
	4-Aug-04	4.00	3.6 <sup>HY</sup>	<0.50	<0.500	<0.500	<0.500	<0.500
	2-Feb-05	0.27	0.36 <sup>HY</sup>	0.25	<0.063	<0.063	<0.063	<0.063
	6-Jul-05	0.32	0.43 <sup>HY</sup>	0.32	0.0017	<0.0005	<0.0005	0.0016
	6-Jan-06	0.22	0.30 <sup>HY</sup>	0.39	0.0014	<0.0005	<0.0005	0.0012
	6-Jul-06	0.14	0.27 <sup>HY</sup>	0.500	<0.005	<0.005	<0.005	<0.005
	1-Mar-07	0.19	0.31 <sup>HY</sup>	0.490	<0.005	<0.005	<0.005	<0.005
	23-Aug-07	0.97	1.700 <sup>HY</sup>	0.320	<0.005	<0.005	<0.005	<0.005
20-Feb-08	0.38	0.48 <sup>Y</sup>	<0.031	<0.031	<0.031	<0.031	<0.031	
	<b>21-Aug-08</b>	<b>0.40</b>	<b>0.60<sup>Y</sup></b>	<b>0.220</b>	<b>&lt;0.013</b>	<b>&lt;0.013</b>	<b>&lt;0.013</b>	<b>&lt;0.013</b>
<b>SOMA-4</b>	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	
<b>SOMA-5</b>	4-Aug-04	4.1	3.7 <sup>HY</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	2-Feb-05	0.11 <sup>Z</sup>	0.15 <sup>HYZ</sup>	<0.005	<0.005	<0.005	<0.005	<0.005
	6-Jul-05	2.3 <sup>H</sup>	3.1 <sup>HY</sup>	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	9-Jan-06	0.89	1.2 <sup>HY</sup>	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jul-06	0.450 <sup>YZ</sup>	0.720 <sup>YZ</sup>	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	1-Mar-07	NA	3.9 <sup>YZ</sup>	0.0052	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	NA	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA	NA
	<b>21-Aug-08</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

**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)
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Notes:

- <sup>b</sup> Analysis was carried out past the hold date, no analytical problems were encountered. See narrative for Q1 2008
- <sup>c</sup> Presence of this compound confirmed by second column, however, the confirmation concentration different from reported results by more than a factor of two.
- <sup>H</sup> Heavier hydrocarbons than the standard are present in the sample.
- <sup>J</sup> Result is estimated.
- <sup>L</sup> Lighter hydrocarbons contributed to the quantitation
- NA = Not analyzed, LFR-4 was not analyzed during the Second Quarter 2002 due to the well being inaccessible.  
Not Analyzed. Well LFR-4 inaccessible during the Third Quarter 2004 Monitoring Event.
- <sup>Y</sup> Sample exhibits fuel pattern which does not resemble standard.
- <sup>Z</sup> 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.

**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 (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)
<b>Temporary Sampling Points Installed by Geosolv, LLC</b>							
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
	1-Mar-07	<0.1	<0.1	14.00	0.110	<0.1	<0.1
	23-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	20.0	9.1	16.0	<0.25	<0.25	<0.25
	25-Mar-08	520.0	70.0	28.0	<0.36	<0.36	<0.36
<b>21-Aug-08</b>	<b>1.1</b>	<b>0.97</b>	<b>17.0</b>	<b>0.096</b>	<b>&lt;0.083</b>	<b>&lt;0.083</b>	
B-13	24-Jan-00	0.020	0.029	0.13	0.005	< 0.0005	< 0.0005
<b>Temporary Sampling Points Installed by LFR</b>							
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 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>
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
28-Feb-07		0.082	0.0096	0.0006	<0.0005	<0.0005	<0.0005
22-Aug-07		NA	NA	NA	NA	NA	NA
20-Feb-08	NA	NA	NA	NA	NA	NA	
<b>22-Aug-08</b>	<b>0.015</b>	<b>0.003</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	

**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 (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-3  Split	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
	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 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	0.160	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	0.086	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	0.200	<0.0071	<0.0071	<0.0071	<0.014	<0.0071
	19-Feb-03	0.240	<0.005	0.006	<0.005	<0.010	<0.005
	29-Jul-03	0.430	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.170	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	0.440	<0.017	<0.017	<0.017	<0.033	<0.017
	2-Feb-05	0.360	<0.031	<0.031	<0.031	<0.063	<0.031
	6-Jul-05	0.320	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	6-Jan-06	0.200	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.400	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
	1-Mar-07	0.400	0.002	<0.0017	<0.0017	<0.0017	<0.0017
23-Aug-07	0.150	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
20-Feb-08	0.082	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>22-Aug-08</b>	<b>0.240</b>	<b>0.0013</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	
GW-4  Split	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
	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 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	0.0081	<0.005	0.010	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	6-Jul-05	0.0006	<0.0005	0.0013	<0.0005	<0.0005	0.0011
	5-Jan-06	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	0.0015
	28-Feb-07	0.0006	<0.0005	0.0016	<0.0005	<0.0005	0.0014
22-Aug-07	NA	NA	NA	NA	NA	NA	
20-Feb-08	<0.0005	<0.0005	0.0010	<0.0005	<0.0005	0.0011	
<b>21-Aug-08</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	

**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 (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-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 Split	27-Aug-99	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	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
GW-7 Split	27-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	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
GW-8 Split	15-Jul-99	< 0.0020	< 0.0020	0.004	< 0.0020	< 0.0020	< 0.0020
	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
<b>Monitoring wells owned by TOSCO</b>							
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 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
28-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
19-Feb-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-08	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	

**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 (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)
<b>Monitoring wells installed by LFR</b>							
<b>LFR-1</b>  Split	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
	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 <sup>b</sup>	0.035 <sup>b</sup>	<0.0130 <sup>b</sup>	<0.0130 <sup>b</sup>	<0.0250 <sup>b</sup>	<0.0130 <sup>b</sup>
	16,17-Apr-02	0.38	0.040	<0.0130	<0.0130	<0.0250	<0.0130
	17,18-Jul-02	0.36	0.041	<0.013	<0.013	<0.025	<0.013
	22,23-Oct-02	0.18	0.024	0.007	<0.005	<0.010	<0.005
	18-Feb-03	0.28	0.032	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	0.15	0.027	0.007	<0.005	<0.010	<0.005
	29-Jan-04	0.15	0.023	0.0077	<0.0063	<0.013	<0.0063
	4-Aug-04	0.058	0.016	0.0052	<0.005	<0.010	<0.005
	2-Feb-05	0.089	0.0079	0.0072	<0.005	<0.010	<0.005
	6-Jul-05	0.096	0.0260	0.0049	<0.0005	<0.0005	<0.0005
	6-Jan-06	0.062	0.0076	0.0010	<0.0005	<0.0005	<0.0005
	6-Jul-06	0.0078	0.0410	0.001	<0.0005	<0.0005	<0.0005
1-Mar-07	0.098	0.0099	0.0017	<0.0005	<0.0005	<0.0005	
23-Aug-07	0.170	0.073	0.036	0.0066	0.0005	<0.0005	
19-Feb-08	0.130	0.051	0.021	0.0048	<0.001	<0.001	
<b>22-Aug-08</b>	<b>0.084</b>	<b>0.047</b>	<b>0.014</b>	<b>0.0039</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	
<b>LFR-2</b>  split	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
	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 <sup>b</sup>	<0.0050 <sup>b</sup>	0.0069 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.012	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	0.066	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	0.011	<0.005	<0.010	<0.005
	4-Aug-04	<0.005	<0.005	0.012	<0.005	<0.010	<0.005
	1-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	<0.0005	<0.0005	0.0012	<0.0005	<0.0005	<0.0005
	5-Jan-06	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	28-Feb-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
22-Aug-07	<0.0005	<0.0005	0.078	<0.0005	0.0098	<0.0005	
20-Feb-08	<0.0005	<0.0005	0.014	<0.0005	0.0040	<0.0005	
<b>21-Aug-08</b>	<b>&lt;0.0083</b>	<b>&lt;0.0005</b>	<b>1.40</b>	<b>0.0083</b>	<b>0.0890</b>	<b>0.0009</b>	

**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 (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)
<b>LFR-3</b> Split	10-Aug-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
	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 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	<0.0050 <sup>b</sup>
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	2-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	5-Jul-05	0.011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	9-Dec-05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	6-Jan-06	0.0031	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	5-Jul-06	0.023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1-Mar-07	0.020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
22-Aug-07	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
20-Feb-08	0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
<b>22-Aug-08</b>	<b>0.0013</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>
<b>LFR-4</b>	11-Aug-00	< 0.0005	< 0.0005	0.001	< 0.0005	< 0.0005	< 0.0005
	31-Oct-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	30-Jan-01	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005
	27-Apr-01	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.001	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	4-Aug-04	NA	NA	NA	NA	NA	NA
	5-Jul-05	0.0011	<0.0005	0.0026	<0.0005	<0.0005	<0.0005
	5-Jul-06	<0.0005	<0.0005	0.0022	<0.0005	0.0007	<0.0005
	1-Mar-07	<0.0005	<0.0005	0.0033	<0.0005	0.0006	<0.0005
	22-Aug-07	NA	NA	NA	NA	NA	NA
20-Feb-08	NA	NA	NA	NA	NA	NA	
<b>21-Aug-08</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	<b>&lt;0.0005</b>	



**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 (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)
<b>Monitoring wells installed by SOMA</b>							
<b>SOMA-1</b>	19-Oct-01	<0.0050	<0.0050	0.014	<0.0050	<0.0100	<0.0050
	31-Jan-02	0.0056 <sup>b</sup>	<0.0050 <sup>b</sup>	0.0070 <sup>b</sup>	<0.0050 <sup>b</sup>	<0.0100 <sup>b</sup>	0.0057 <sup>b</sup>
	16,17-Apr-02	0.006	<0.0050	0.007	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.016	<0.005	<0.01	<0.005
	22,23-Oct-02	0.008	<0.005	0.041	<0.005	<0.010	0.007
	19-Feb-03	0.009	<0.0071	0.016	<0.0071	<0.014	<0.0071
	30-Jul-03	0.016	<0.005	0.042	<0.005	<0.010	0.006
	29-Jan-04	0.019	<0.005	0.044	<0.005	<0.010	0.0059
	3-Aug-04	0.019	<0.013	0.038	<0.013	<0.025	<0.013
	1-Feb-05	0.022	<0.017	0.028	<0.017	<0.033	<0.017
	5-Jul-05	0.041	0.0026	0.051	<0.0017	<0.0017	0.0046
	5-Jan-06	0.019	0.0013	0.028	<0.0005	<0.0005	0.0026
	5-Jul-06	0.037	0.0028	0.057	<0.002	<0.002	0.0037
	28-Feb-07	0.079	0.0062	0.170	<0.002	<0.002	0.0067
	22-Aug-07	0.062	0.0060	0.170	0.0022	<0.002	0.0035
	20-Feb-08	0.075	0.0058	0.180	0.0022	<0.002	0.0025
<b>21-Aug-08</b>	<b>0.110</b>	<b>0.0085</b>	<b>0.250</b>	<b>&lt;0.0025</b>	<b>&lt;0.0025</b>	<b>0.0031</b>	
<b>SOMA-2</b>	19-Oct-01	1.400	0.350	5.000	<0.250	<0.500	<0.250
	31-Jan-02	<0.071 <sup>b</sup>	<0.071 <sup>b</sup>	1.8 <sup>b</sup>	<0.071 <sup>b</sup>	<0.140 <sup>b</sup>	<0.071 <sup>b</sup>
	16,17-Apr-02	<0.130	<0.130	2.900	<0.130	<0.250	<0.130
	17,18-Jul-02	<0.063	<0.063	1.600	<0.063	<0.13	<0.063
	22,23-Oct-02	0.017	0.008	0.350	<0.0071	<0.014	<0.0071
	19-Feb-03	<0.017	<0.017	0.790	<0.017	<0.033	<0.017
	29-Jul-03	0.032	<0.020	0.580	<0.040	<0.040	<0.020
	28-Jan-04	0.036	<0.017	0.430	<0.017	<0.033	<0.017
	4-Aug-04	<0.031	<0.031	0.430	<0.031	<0.063	<0.031
	2-Feb-05	<0.310	<0.310	6.100	<0.310	<0.630	<0.310
	6-Jul-05	0.078	0.047	5.200	0.044	<0.025	<0.025
	9-Jan-06	<0.042	<0.042	7.30	0.049	<0.042	<0.042
	6-Jul-06	<0.042	<0.042	5.400	0.046	<0.042	<0.042
	1-Mar-07	<0.042	<0.042	5.100	<0.042	<0.042	<0.042
	23-Aug-07	<0.042	0.110	5.400	0.042	<0.042	<0.042
	20-Feb-08	0.200	0.360	16.00	0.100	<0.100	<0.100
25-Mar-08	6.400	2.500	20.00	0.130	<0.130	<0.130	
<b>21-Aug-08</b>	<b>0.620</b>	<b>0.870</b>	<b>15.00</b>	<b>0.160</b>	<b>&lt;0.0063</b>	<b>&lt;0.0063</b>	
<b>SOMA-3</b>	19-Oct-01	0.042	0.057	0.440	<0.025	<0.050	<0.025
	31-Jan-02	0.018 <sup>b</sup>	0.023 <sup>b</sup>	0.38 <sup>b</sup>	<0.013 <sup>b</sup>	<0.025 <sup>b</sup>	<0.013 <sup>b</sup>
	16,17-Apr-02	0.025	0.018	0.36	<0.017	<0.033	<0.017
	17,18-Jul-02	0.027	<0.017	0.44	<0.017	<0.033	<0.017
	22,23-Oct-02	<0.170	<0.170	5.90	<0.170	<0.330	<0.170
	19-Feb-03	<0.130	<0.130	4.10	<0.130	<0.250	<0.130
	29-Jul-03	0.150	0.220	4.70	<0.130	<0.250	<0.130
	29-Jan-04	<0.310	<0.310	7.70	<0.310	<0.630	<0.310
	4-Aug-04	<0.500	<0.500	6.90	<0.500	<1.0	<0.500
	2-Feb-05	<0.063	<0.063	1.10	<0.063	<0.130	<0.063
	6-Jul-05	0.031	0.014	0.89	0.0067	0.0011	0.0032
	6-Jan-06	0.025	0.0094	0.77	0.005	0.001	0.0026
	6-Jul-06	0.015	0.0064	0.370	<0.005	<0.005	<0.005
	1-Mar-07	0.015	<0.005	0.270	<0.005	<0.005	<0.005
	23-Aug-07	0.280	0.060	2.900	0.010	<0.005	<0.005
	20-Feb-08	0.041	0.062	5.300	0.068	<0.031	<0.031
<b>21-Aug-08</b>	<b>0.160</b>	<b>0.030</b>	<b>2.100</b>	<b>0.019</b>	<b>&lt;0.013</b>	<b>&lt;0.013</b>	

**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 (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)
<b>SOMA-4</b>	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
<b>SOMA-5</b>	4-Aug-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	2-Feb-05	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	6-Jul-05	<0.0025	<0.0025	0.0057	<0.0025	<0.0025	<0.0025
	9-Jan-06	<0.0025	0.0067	0.430	0.027	<0.0025	<0.0025
	6-Jul-06	<0.0005	<0.0005	0.0035	<0.0005	<0.0005	<0.0005
	1-Mar-07	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	23-Aug-07	NA	NA	NA	NA	NA	NA
	20-Feb-08	NA	NA	NA	NA	NA	NA
<b>21-Aug-08</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	

Notes:

<: Not detected above the laboratory reporting limits.

<sup>b</sup> analysis was carried out past hold date, no analytical problems were encountered

FP: Not Analyzed due to Free Product

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

**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)
<b>B-7</b>	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>B-8 field</b>	31-Jan-01	0.45						58	
<b>B-10</b>	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>B-10-field</b>	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	
	1-Mar-07	10.53	1.8	0	0	3.30	0.25	-76.3	
	23-Aug-07	NM	NM	NM	NM	NM	NM	NM	
	20-Feb-08	NM	0.70	7.20	11.00	3.30	6.30	NM	
	25-Mar-08	NM	NM	NM	NM	NM	7.40	NM	
	<b>21-Aug-08</b>	<b>0.25</b>	<b>12.40</b>	<b>12.10</b>	<b>16.00</b>	<b>3.30</b>	<b>2.90</b>	<b>-60.20</b>	
<b>GW-2-field</b>	1-Nov-00	2.32						77	
<b>GW-2</b>	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	0.8	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	

**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)	
<b>GW-2</b>	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		
	28-Feb-07	6.51	1.5	14.4	48	0.12	<0.005	33.5		
	22-Aug-07	NM	NM	NM	NM	NM	NM	NM	NM	
20-Feb-08	NM	NM	NM	NM	NM	NM	NM	NM		
<b>22-Aug-08</b>	<b>0.12</b>	<b>0.00</b>	<b>0.00</b>	<b>29.00</b>	<b>0.00</b>	<b>&lt;0.005</b>	<b>114.80</b>			
<b>GW-3</b>	11-Aug-00						< 0.0005	395		
GW-3-field	11-Aug-00	0.72		1.0	46					
GW-3-field	1-Nov-00	7.76						81		
GW-3-field	29-Jan-01	8.80					0.0120			
	1-Feb-01	8.99						235		
GW-3 field	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		
	18-Oct-01	3.76	0.0	5.2	4.9	0.00	0.0041	131	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			
GW-3 field	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	0.00	<0.005	61		
	6-Jul-06	5.69	3.1	0.0	31	0.00	<0.005	63		
	1-Mar-07	7.27	0.6	4.3	15	0.00	<0.005	50.4		
	23-Aug-07	4.79	1.9	7.8	33	0.17	<0.005	178.3		
	20-Feb-08	0.22	0.0	35.0	0	0.00	<0.0065	71.1		
	<b>22-Aug-08</b>	<b>0.12</b>	<b>0.3</b>	<b>0.0</b>	<b>4</b>	<b>0.00</b>	<b>&lt;0.005</b>	<b>135.5</b>		
	<b>GW-4-field</b>	30-Jan-01	0.83						67	
	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	
<b>GW-4</b>	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		
30-Jul-03	5.38	6.1	0.0	0	3.30	1.30	-141			

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**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)	
<b>GW-4</b>	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	3.30	3.40	110		
	28-Feb-07	5.26	1.1	0.0	0	3.30	3.90	-119.5		
	22-Aug-07	NM	NM	NM	NM	NM	NM	NM		
	20-Feb-08	0.23	0.60	0.00	0.00	3.30	2.50	-108.70		
	<b>21-Aug-08</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>		
<b>MW-11</b>	10-Aug-00			2.8	63	< 0.1	< 0.0005	476		
	MW-11-field	10-Aug-00		4.1	67					
		1-Nov-00	2.52	< 0.010	15.0	90	< 0.1	0.0000		130
	MW-11-field	1-Nov-00	4.10		3.3	73	0.00		87	
	MW-11-field	1-Nov-00	4.01		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		
	28-Feb-07	6.68	0.4	0.0	41	0.63	<0.005	12.9		
	22-Aug-07	3.07	3.5	0.0	54	0.00	<0.005	237		
	19-Feb-08	0.23	0.8	0.0	27	0.00	<0.0065	48		
	<b>22-Aug-08</b>	<b>0.10</b>	<b>1.9</b>	<b>0.0</b>	<b>35</b>	<b>0.00</b>	<b>&lt;0.005</b>	<b>67.60</b>		
<b>LFR-1</b>	9-Aug-00							462		
	LFR-1-field	11-Aug-00					0.0096			
		9-Aug-00	3.63		5.5	30				1.5
		30-Oct-00	2.70	0.0	39.0	42	< 1.0	0.0004		
	LFR-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		

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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 <b>LFR-1</b>	18-Oct-01	1.03	0.0	6.9	24	0.18	0.0054	119	NM
	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	
	1-Mar-07	5.00	5.2	4.5	42	0.04	<0.005	62.9	
	23-Aug-07	0.88	2.7	4.7	23	0.15	<0.005	215	
19-Feb-08	0.20	0.0	0.0	11	0.00	<0.0065	43.9		
	<b>22-Aug-08</b>	<b>0.14</b>	<b>6.7</b>	<b>0.0</b>	<b>0</b>	<b>0.00</b>	<b>0.0059</b>	<b>119.2</b>	
<b>LFR-2</b>	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	
	28-Feb-07	3.03	4.2	0.0	0.0	3.30	11.00	-89.9	
	22-Aug-07	0.11	22.7	0.0	0.0	3.30	6.60	-24.0	
	20-Feb-08	0.20	0.0	0.0	0.0	0.76	4.70	-69.5	
	<b>21-Aug-08</b>	<b>0.13</b>	<b>21.4</b>	<b>0.0</b>	<b>0.0</b>	<b>3.30</b>	<b>5.80</b>	<b>-66.1</b>	

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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	
	1-Mar-07	3.78	1.6	5.3	12	0.72	<0.005	42.7	
	22-Aug-07	1.70	4.0	0.0	9	0.44	<0.005	192	
	20-Feb-08	0.22	6.2	0.0	0	0.00	<0.0065	58.9	
	<b>22-Aug-08</b>	<b>0.14</b>	<b>1.5</b>	<b>0.0</b>	<b>0</b>	<b>0.00</b>	<b>&lt;0.005</b>	<b>140.4</b>	
LFR-4	11-Aug-00			0.7	1	0.14	0.06	402	
LFR-4-field	11-Aug-00	1.13		< 0.10	2.9	1.10	3.20		1.1
	31-Oct-00	1.90	2.2	1.0		0.61			
LFR-4-field	31-Oct-00	0.64		1.5	2.8	1.80	2.20	-80	1.5
	1-Feb-01	3.20	2.8	8.0	0.0	1.50		59	
LFR-4-field	1-Feb-01	0.55	4.5	1.7	0.0	1.37	7.00	14	NM
LFR-4 Field	27-Apr-01	5.60	0.0	0.0	0.0	0.84	1.20	18	
LFR-4 Field	26-Jul-01	1.65	0.0	2.6	6.0	4.80	12.00	-4	
	16,17-Apr-02	0.00	1.0	0.0	0.0	>3.3	2.80	3	
	17,18-Jul-02	0.79	6.8	0.0	0.0	2.55	1.30	-63	
	22,23-Oct-02	0.00	4.0	0.0	0.0	3.30	4.40	-41	
	19-Feb-03	0.50	6.8	0.0	18	3.30	3.90	-49	
	30-Jul-03	0.28	5.1	0.0	0.0	3.30	4.00	1	
	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	
	1-Mar-07	3.97	1.7	0.0	0.0	3.30	3.00	-50	
	22-Aug-07	NM	NM	NM	NM	NM	NM	NM	
	19-Feb-08	NM	NM	NM	NM	NM	NM	NM	
	<b>21-Aug-08</b>	<b>0.14</b>	<b>4.40</b>	<b>0.00</b>	<b>0.00</b>	<b>3.20</b>	<b>6.20</b>	<b>-0.70</b>	

**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)
<b>SOMA-1</b>	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	0.00	0.60	156	
	5-Jul-06	6.79	1.8	0.0	13	0.00	1.10	66	
	28-Feb-07	2.13	10.1	0.0	12	0.00	2.50	37.3	
	22-Aug-07	0.14	3.3	0.0	9	0.39	0.79	177.0	
20-Feb-08	0.22	0.2	0.0	0	0.00	0.65	57.1		
<b>21-Aug-08</b>	<b>0.12</b>	<b>0.1</b>	<b>0.0</b>	<b>0</b>	<b>0.00</b>	<b>0.67</b>	<b>202.7</b>		
<b>SOMA-2</b>	18-Oct-01	0.57	0.0	0.4	0.0	40.00	6.60	-89	NM
	31-Jan-02	0.70	3.8	0.8	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	
	1-Mar-07	6.42	8.7	0.0	0.0	3.30	12.00	-137	
	23-Aug-07	0.43	0.0	0.0	0.0	2.87	8.60	-31.6	
20-Feb-08	0.25	2.9	0.0	0.0	3.30	11.00	-79.6		
25-Mar-08	NM	NM	NM	NM	NM	9.10	NM		
<b>21-Aug-08</b>	<b>0.26</b>	<b>3.10</b>	<b>0.00</b>	<b>0.00</b>	<b>3.30</b>	<b>7.50</b>	<b>-65.40</b>		
<b>SOMA-3</b>	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	
	6-Jul-06	10.52	0.5	0.0	0.0	0.37	1.40	-58	
	1-Mar-07	5.03	0.5	0.0	0.0	0.80	1.40	-51.9	
	23-Aug-07	9.68	0.0	0.0	35.0	0.28	2.70	11.8	
20-Feb-08	0.25	34.2	12.1	49.0	3.30	6.50	59.3		
<b>21-Aug-08</b>	<b>0.30</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.00</b>	<b>1.60</b>	<b>27.3</b>		



**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)
<b>SOMA-4</b>	18-Oct-01	0.83	4.0	22.0	17	0.22	1.20	88	NM
<b>SOMA-5</b>	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-Mar-07	NM	NM	NM	NM	NM	NM	NM	
	23-Aug-07	NM	NM	NM	NM	NM	NM	NM	
	20-Feb-08	NM	NM	NM	NM	NM	NM	NM	
	<b>21-Aug-08</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	

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

\*) Methane was measured by Microseep Laboratory.

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.

**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>SOMA-4</b>			
<b>2002</b>			
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
<b>2003</b>			
18-Jul-2003	17.70	7.20	10.50
<b>2004</b>			
28-Jan-2004	12.00	2.90	9.10
<b>2005</b>			
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
<b>2006</b>			
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 extracting free product using GeoTech pump		
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

**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>SOMA-4</b>			
<b>2006</b>			
6-Apr-2006	7.01	6.65	0.36
18-Apr-2006	moved GeoTech pump from SOMA-4 to B-8		
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
19-Jun-2006	9.39	9.38	0.01
27-Jun-2006	10.54	10.46	0.08
<b>2006</b>			
13-Jul-2006	10.75	10.15	0.60
24-Jul-2006	11.05	10.16	0.89
3-Aug-2006	12.02	10.32	1.70
14-Aug-2006	13.08	9.88	3.20
14-Aug-2006	began extracting free product using GeoTech pump		
25-Aug-2006	13.95	10.70	3.25
28-Aug-2006	11.50	10.73	0.77
9-Sep-2006	14.23	10.75	3.48
13-Sep-2006	12.95	10.70	2.25
27-Sep-2006	15.78	11.00	4.78
<b>2006</b>			
4-Oct-2006	14.61	11.26	3.35
11-Oct-2006	14.25	10.75	3.50
1-Nov-2006	17.23	10.92	6.31
22-Nov-2006	14.98	10.53	4.45
30-Nov-2006	15.16	10.29	4.87
8-Dec-2006	13.54	11.30	2.24
11-Dec-2006	12.24	10.66	1.58
<b>2007</b>			
8-Jan-2007	11.15	10.78	0.37
12-Jan-2007	10.79	10.38	0.41
16-Jan-2007	11.00	11.00	0.00
24-Jan-2007	11.10	10.83	0.27
31-Jan-2007	11.02	10.44	0.58
8-Feb-2007	11.50	10.64	0.86
14-Feb-2007	9.60	9.25	0.35
22-Feb-2007	9.94	9.81	0.13
9-Mar-2007	9.73	9.53	0.20
16-Mar-2007	10.02	10.01	0.01
22-Mar-2007	9.93	9.91	0.02
26-Mar-2007	10.67	10.67	0.00
26-Mar-2007	Moved GeoTech pump from SOMA-4 to B-8		

**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>SOMA-4</b>			
<b>2007</b>			
4-Apr-2007	10.56	10.39	0.17
9-Apr-2007	10.71	10.60	0.11
17-May-2007	16.05	15.32	0.73
21-May-2007	16.06	15.30	0.76
31-May-2007	16.31	15.31	1.00
8-Jun-2007	16.73	16.09	0.64
11-Jun-2007	16.85	16.02	0.83
20-Jun-2007	16.44	15.62	0.82
29-Jun-2007	16.63	15.90	0.73
2-Jul-2007	16.73	16.15	0.58
12-Jul-2007	17.30	16.64	0.66
12-Jul-2007	Installed new GeoTech pump system in SOMA-4 and began extraction of free product from both wells.		
20-Jul-2007	16.94	-	0.00
25-Jul-2007	16.61	16.58	0.03
7-Aug-2007	18.52	18.49	0.03
7-Aug-2007	FP recovery pump in SOMA-4 well not operating due to unknown internal fault; removed and returned to supplier for repair.		
16-Aug-2007	17.65	-	0.00
22-Aug-2007	18.04	-	0.00
30-Aug-2007	18.21	-	0.00
7-Sep-2007	17.96	-	0.00
14-Sep-2007	18.05	-	0.00
21-Sep-2007	17.90	-	-
29-Nov-2007	17.54	-	-
21-Dec-2007	17.04	-	-
<b>2008</b>			
4-Jan-2008	15.94	15.84	0.10
11-Jan-2008	15.23	14.72	0.51
14-Jan-2008	15.48	15.00	0.48
22-Jan-2008	15.79	15.35	0.44
23-Jan-2008	Geopump serviced by EI		
29-Jan-2008	15.66	15.54	0.12
4-Feb-2008	14.75	14.80	0.05
7-Feb-2008	14.95	14.92	0.03
12-Feb-2008	15.75	15.72	0.03
26-Feb-2008	16.19	16.02	0.17

**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>SOMA-4</b>			
<b>2008</b>			
4-Mar-2008	16.27	16.13	0.14
17-Mar-2008	16.65	16.56	0.09
25-Mar-2008	16.97	16.88	0.09
5-Aug-2008	13.95	13.55	0.40
<b>21-Aug-2008</b>	<b>13.82</b>	<b>13.22</b>	<b>0.60</b>
<b>B-8</b>			
<b>2001</b>			
18-Oct-2001	12.31	10.21	2.10
<b>2002</b>			
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
<b>2003</b>			
18-Jul-2003	9.40	9.17	0.23
<b>2005</b>			
29-Jun-2005	11.50	11.25	0.25
18-Jul-2005	10.90	10.10	0.80
25-Jul-2005	10.92	10.20	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
<b>2006</b>			
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

**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>B-8</b>			
<b>2006</b>			
6-Apr-2006	7.91	7.90	0.01
18-Apr-2006	began extracting 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
14-Jun-2006	10.58	9.73	0.85
27-Jun-2006	9.04	8.92	0.12
27-Jun-2006	removed GeoTech pump from well		
13-Jul-2006	9.61	9.30	0.31
24-Jul-2006	9.70	9.26	0.44
3-Aug-2006	10.01	9.05	0.96
14-Aug-2006	10.41	9.69	0.72
25-Aug-2006	10.60	9.64	0.96
28-Aug-2006	10.62	9.80	0.82
7-Sep-2006	10.68	9.73	0.95
13-Sep-2006	10.65	9.78	0.87
27-Sep-2006	11.03	10.23	0.80
4-Oct-2006	11.00	10.20	0.80
11-Oct-2006	10.68	9.73	0.95
1-Nov-2006	11.39	10.24	1.15
22-Nov-2006	11.53	9.78	1.75
30-Nov-2006	11.64	9.25	2.39
8-Dec-2006	11.53	9.76	1.77
11-Dec-2006	11.44	9.68	1.76
<b>2007</b>			
8-Jan-2007	11.56	9.33	2.23
12-Jan-2007	11.58	9.33	2.25
16-Jan-2007	11.59	9.49	2.10
24-Jan-2007	11.77	9.70	2.07
31-Jan-2007	11.76	9.62	2.14
8-Feb-2007	11.92	9.71	2.21
14-Feb-2007	10.91	7.61	3.30
22-Feb-2007	11.46	8.54	2.92
9-Mar-2007	11.34	8.20	3.14
16-Mar-2007	11.53	8.60	2.93
22-Mar-2007	11.72	8.71	3.01
26-Mar-2007	11.71	8.81	2.90
26-Mar-2007	Started extracting free product from well B-8. Moved GeoTech pump from SOMA-4 to B-8		

**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>B-8</b>			
4-Apr-2007	10.71	9.67	1.04
9-Apr-2007	10.83	9.91	0.92
17-May-2007	13.98	13.22	0.76
21-May-2007	13.98	13.20	0.78
31-May-2007			
	14.78	13.90	0.88
8-Jun-2007	15.44	14.72	0.72
11-Jun-2007	15.50	14.80	0.70
20-Jun-2007	15.43	14.80	0.63
29-Jun-2007	15.20	15.15	0.05
2-Jul-2007	15.32	15.29	0.03
12-Jul-2007	16.03	15.92	0.11
20-Jul-2007	15.95	15.85	0.10
25-Jul-2007	15.90	15.82	0.08
7-Aug-2007	17.18	17.12	0.06
16-Aug-2007	16.87	-	0.00
22-Aug-2007	17.16	-	0.00
30-Aug-2007	17.68	-	0.00
7-Sep-2007	17.10	-	0.00
14-Sep-2007	17.09	-	0.00
21-Sep-2007	17.00	-	-
29-Nov-2007	16.47	-	-
21-Dec-2007	14.18	-	-
<b>2008</b>			
4-Jan-2008	13.69	-	-
11-Jan-2008	10.69	10.68	0.01
14-Jan-2008	11.25	11.23	0.02
22-Jan-2008	13.18	-	0.00
23-Jan-2008		Geopump serviced by EI	
29-Jan-2008	10.68	-	0.00
4-Feb-2008	10.09	-	0.00
7-Feb-2008	10.26	10.24	0.02
12-Feb-2008	11.24	11.21	0.03
26-Feb-2008	10.85	NA	0.00
4-Mar-2008	12.97	NA	0.00
17-Mar-2008	14.92	NA	0.00
25-Mar-2008	15.41	NA	NA
5-Aug-2008	13.19	NA	NA
<b>21-Aug-2008</b>	<b>13.02</b>	<b>NA</b>	<b>NA</b>

**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>B-10</b>			
20-Feb-2008	11.75	8.99	2.76
26-Feb-2008	9.94	8.37	1.57
4-Mar-2008	9.23	9.21	0.02
17-Mar-2008	9.9	9.87	0.03
25-Mar-2008	10.15	10.12	0.03
5-Aug-2008	11.03	10.96	0.07
<b>21-Aug-2008</b>	<b>11.03</b>	<b>10.86</b>	<b>0.17</b>
<b>SOMA-2</b>			
20-Feb-2008	10	9.29	0.71
25-Mar-2008	10.67	10.02	0.65
5-Aug-2008	11.38	10.84	0.46
<b>21-Aug-2008</b>	<b>11.36</b>	<b>10.76</b>	<b>0.6</b>



# FIGURES

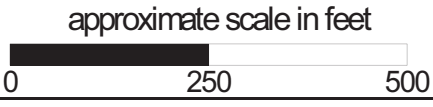


Figure 1: Site vicinity map.



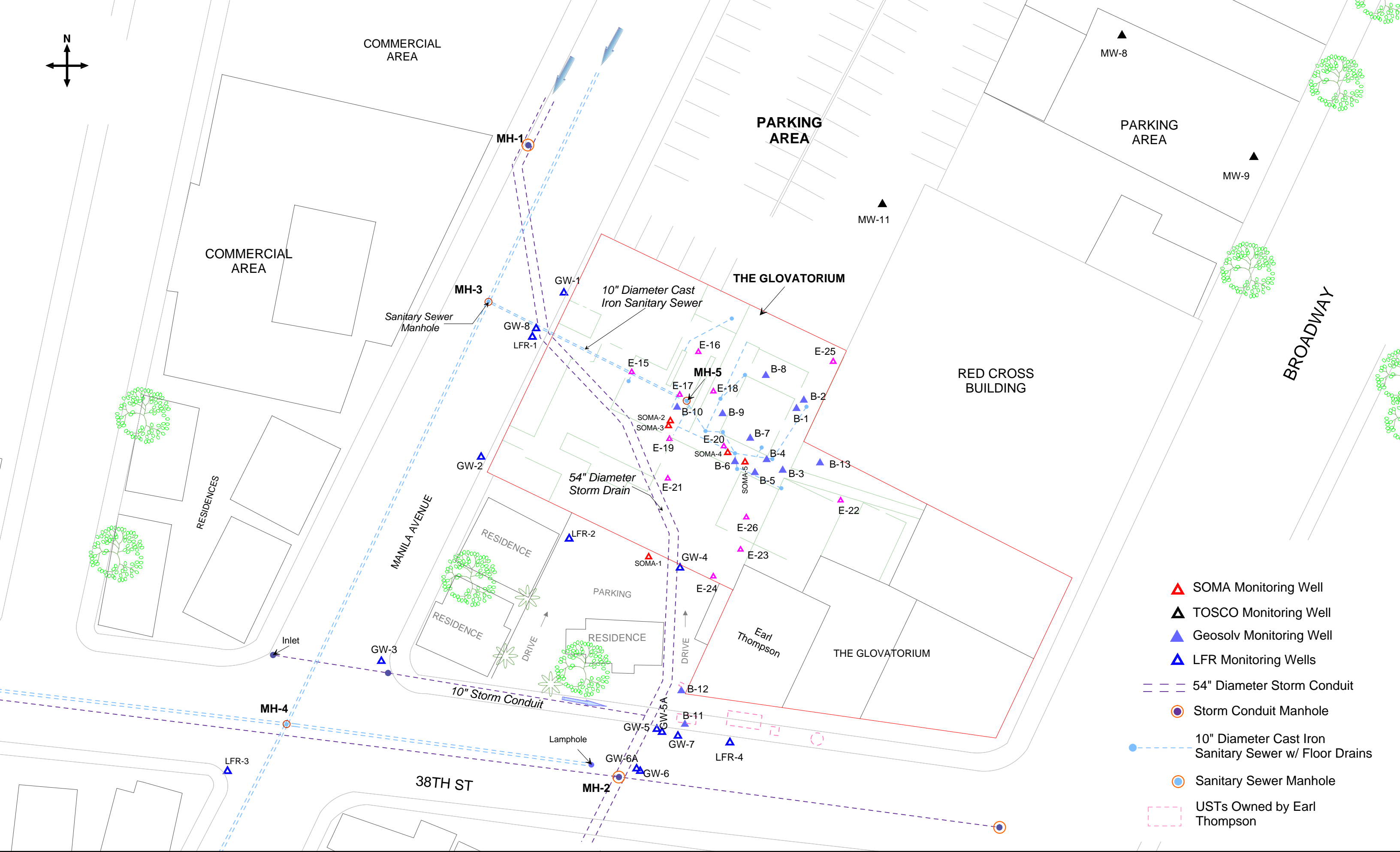


Figure 2: Map showing the approximate locations of groundwater monitoring wells.

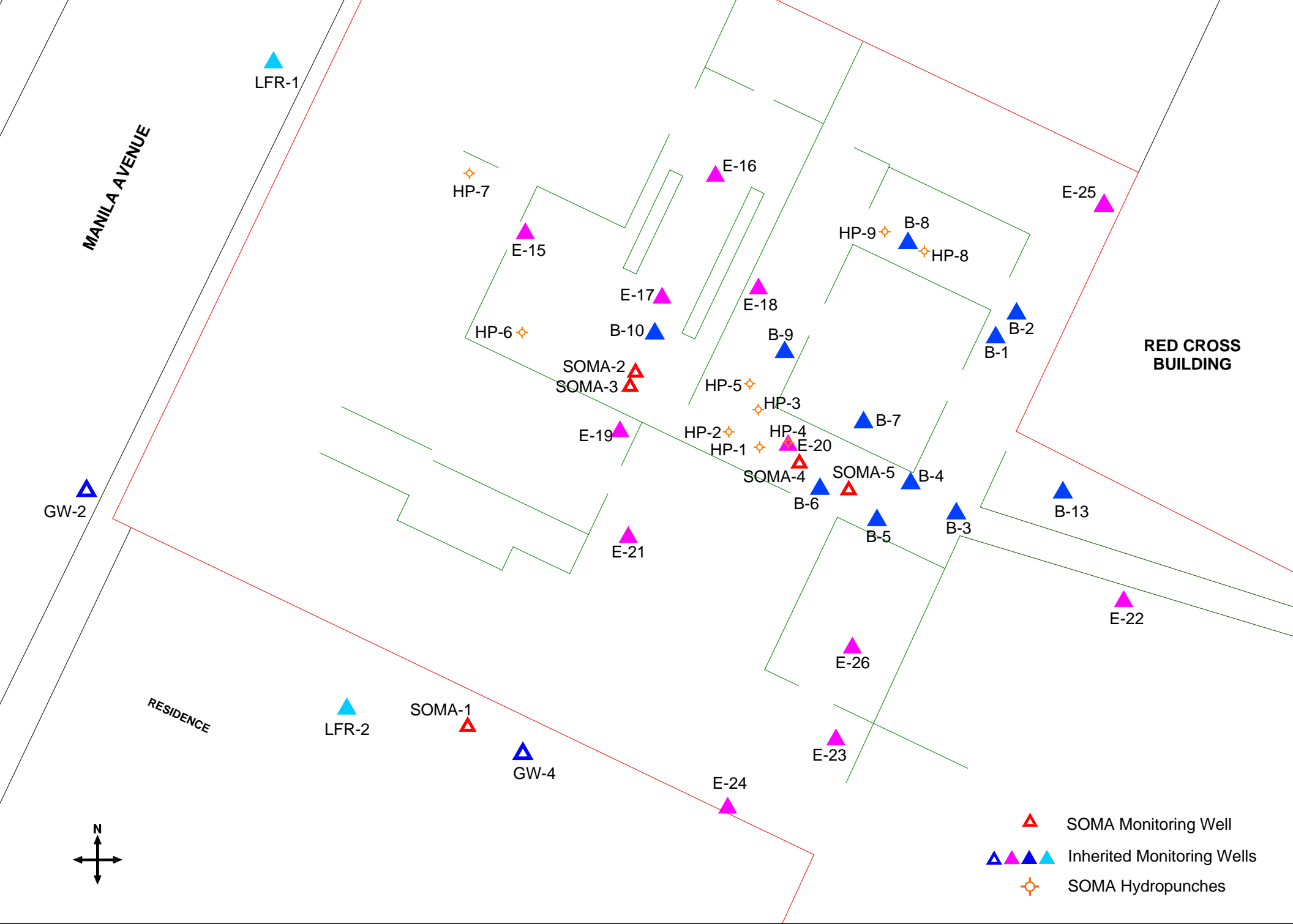


Figure 2a: Map showing the approximate locations of SOMA monitoring wells, SOMA hydropunches, and inherited monitoring locations within the former Glovatorium building.

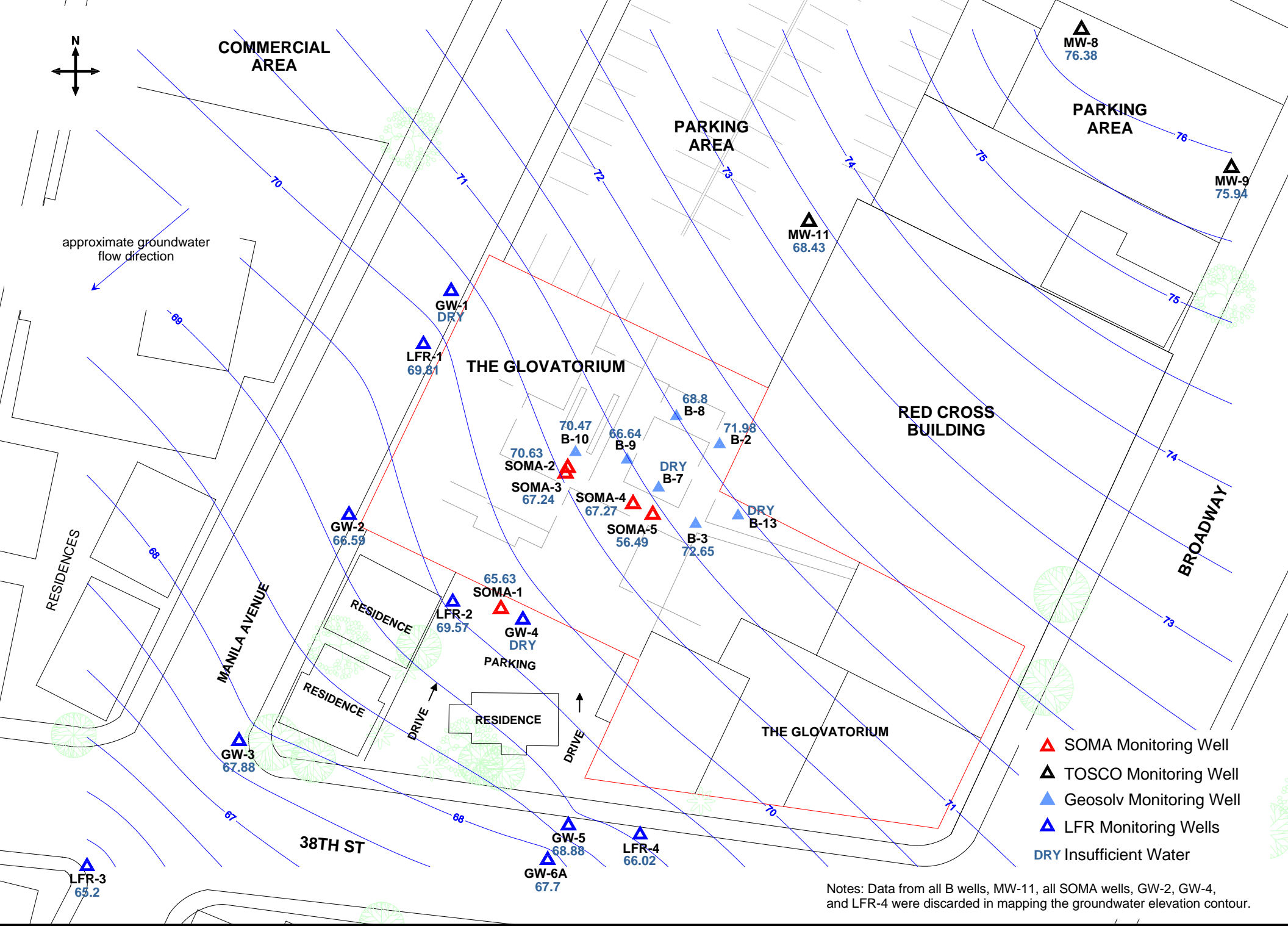


Figure 3: Groundwater elevation contour map in feet. August 21, 2008.

- ▲ SOMA Monitoring Well
- ▲ TOSCO Monitoring Well
- ▲ Geosolv Monitoring Well
- ▲ LFR Monitoring Wells
- ▲ DRY Insufficient Water

COMMERCIAL AREA

PARKING AREA

PARKING AREA

THE GLOVATORIUM

RED CROSS BUILDING

THE GLOVATORIUM

BROADWAY

MANILA AVENUE

38TH ST

RESIDENCES

RESIDENCE

RESIDENCE

RESIDENCE

DRIVE

DRIVE

PARKING

LFR-2

SOMA-1

GW-2

LFR-1

GW-1

SOMA-3

SOMA-2

B-10

B-9

SOMA-4

SOMA-5

B-8

B-7

B-2

B-3

DRY B-13

GW-5

GW-6A

LFR-3

LFR-4

MW-8

MW-9

MW-11

65.2

65.63

66.59

67.81

67.24

70.47

66.64

67.27

56.49

70.63

68.8

71.98

72.65

67.88

67.7

66.02

68.43

75.94

76.38

70

71

72

73

74

75

76

77

78

79

80

81

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90

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92

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99

100

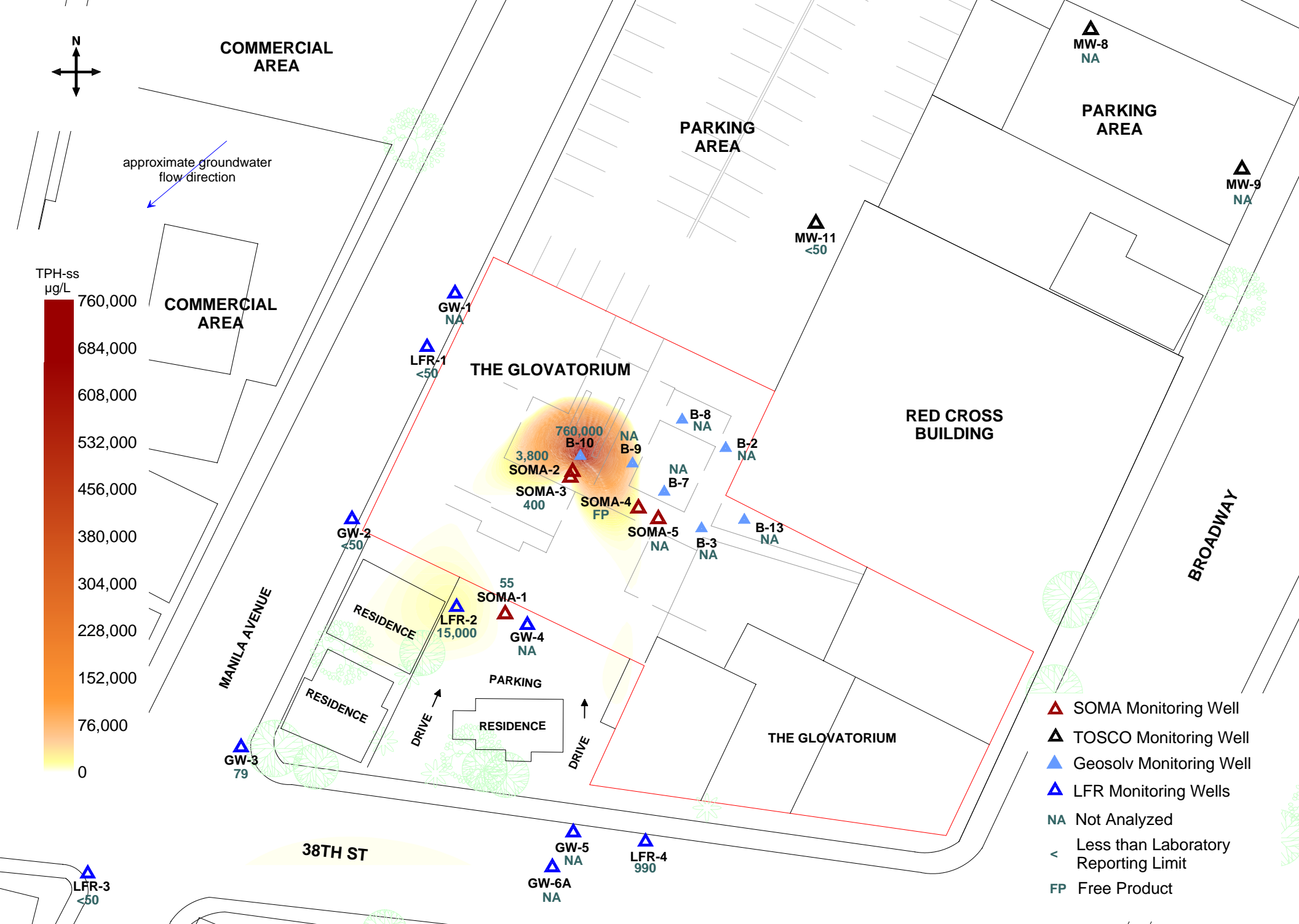


Figure 4: Contour map of TPH-ss concentrations in groundwater. August 21 and 22, 2008.

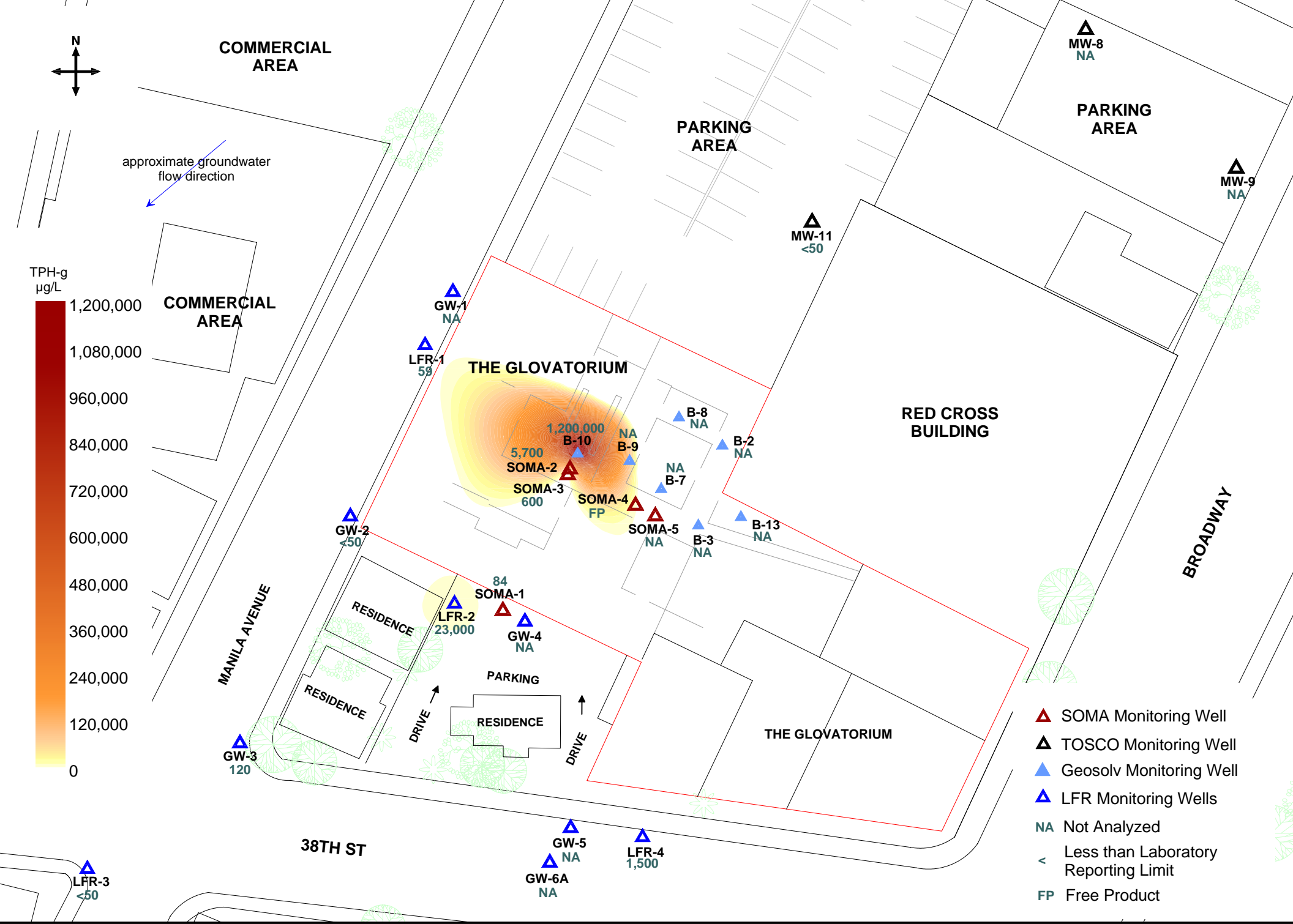


Figure 5: Contour map of TPH-g concentrations in groundwater. August 21 and 22, 2008.

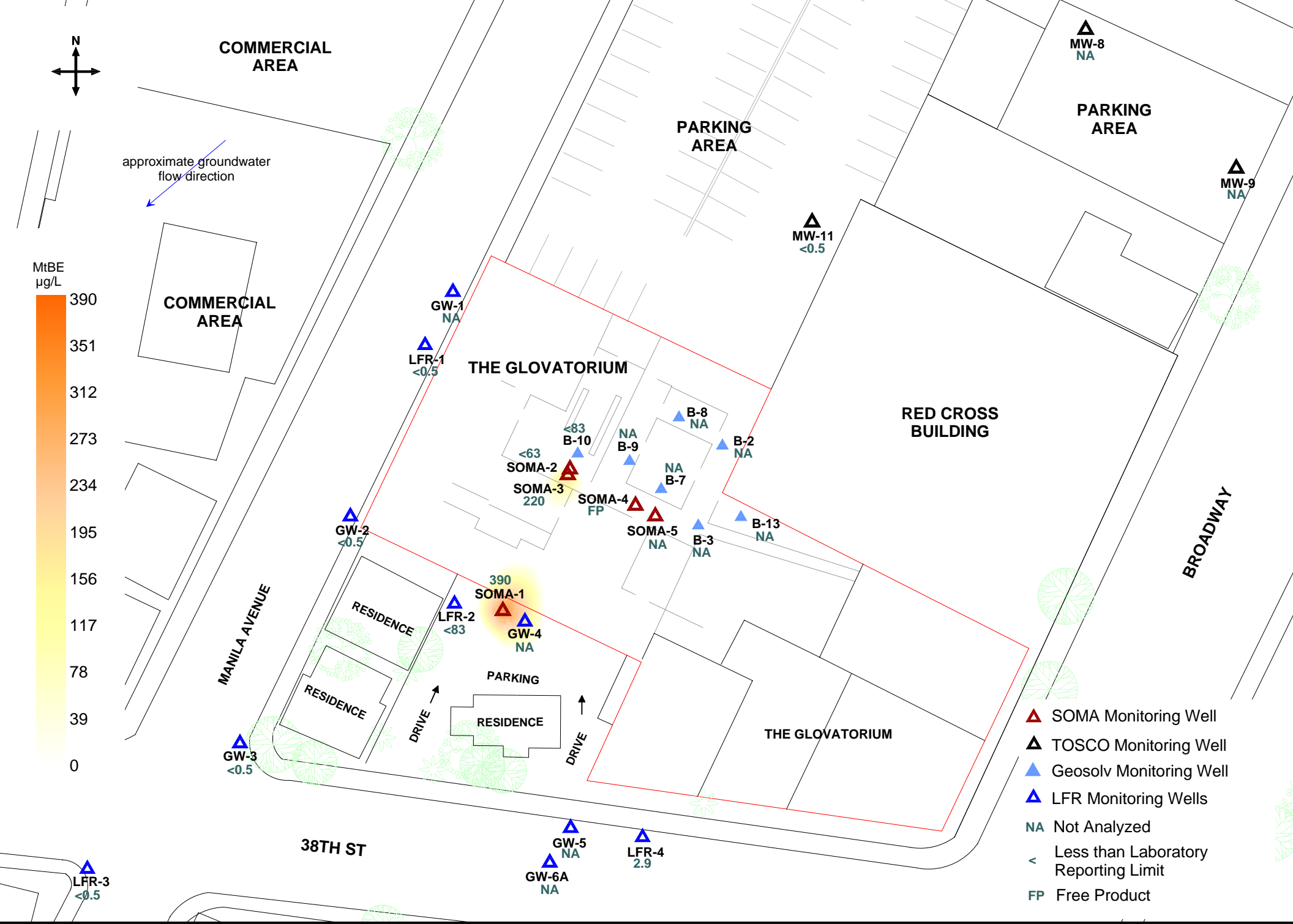
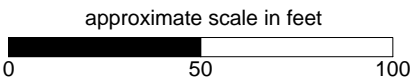
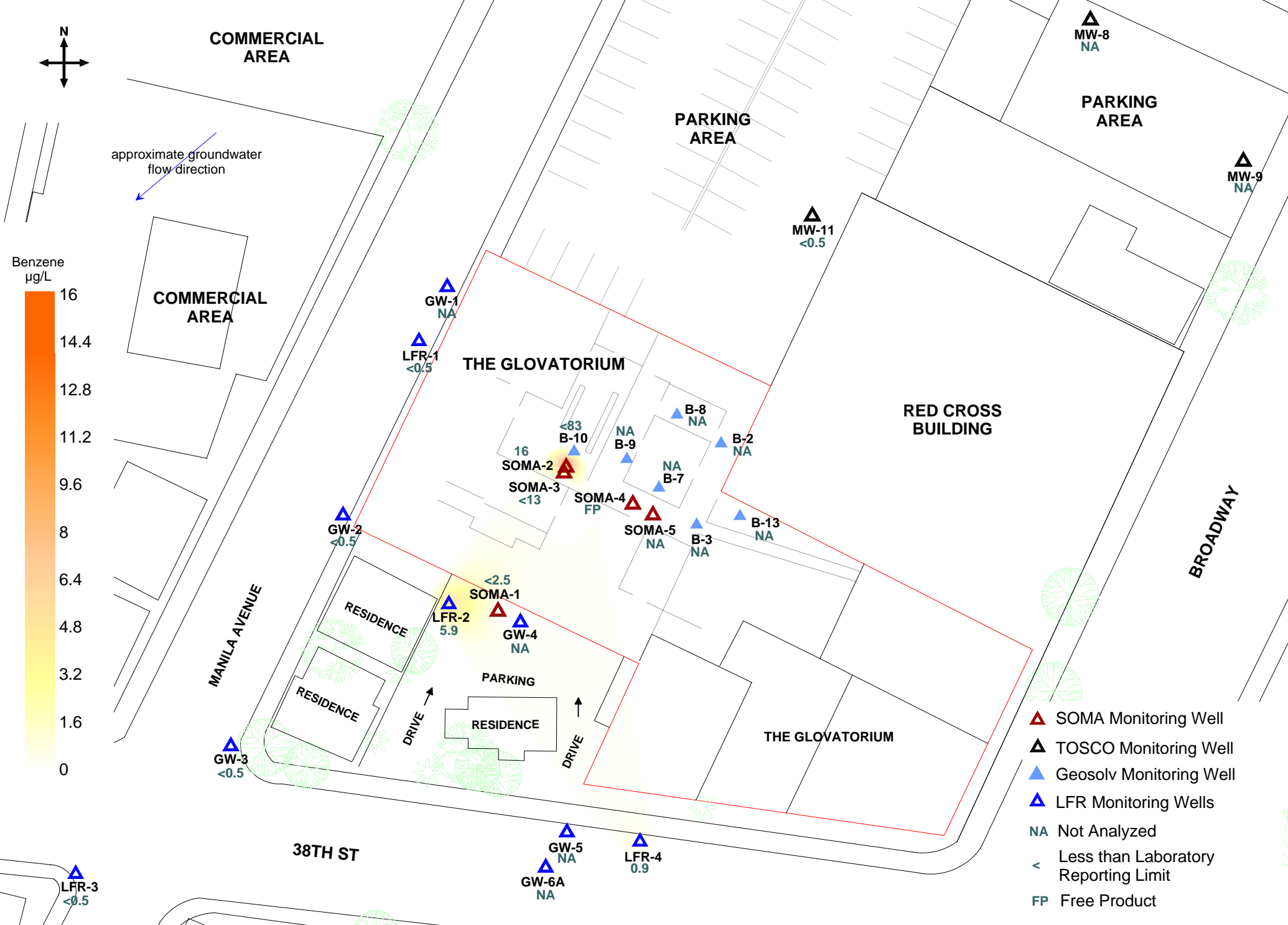


Figure 6: Contour map of MtBE concentrations in groundwater (EPA Method 8260B). August 21 and 22, 2008.







approximate scale in feet

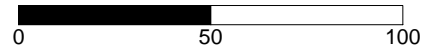


Figure 7: Contour map of benzene concentrations in groundwater. August 21 and 22, 2008.

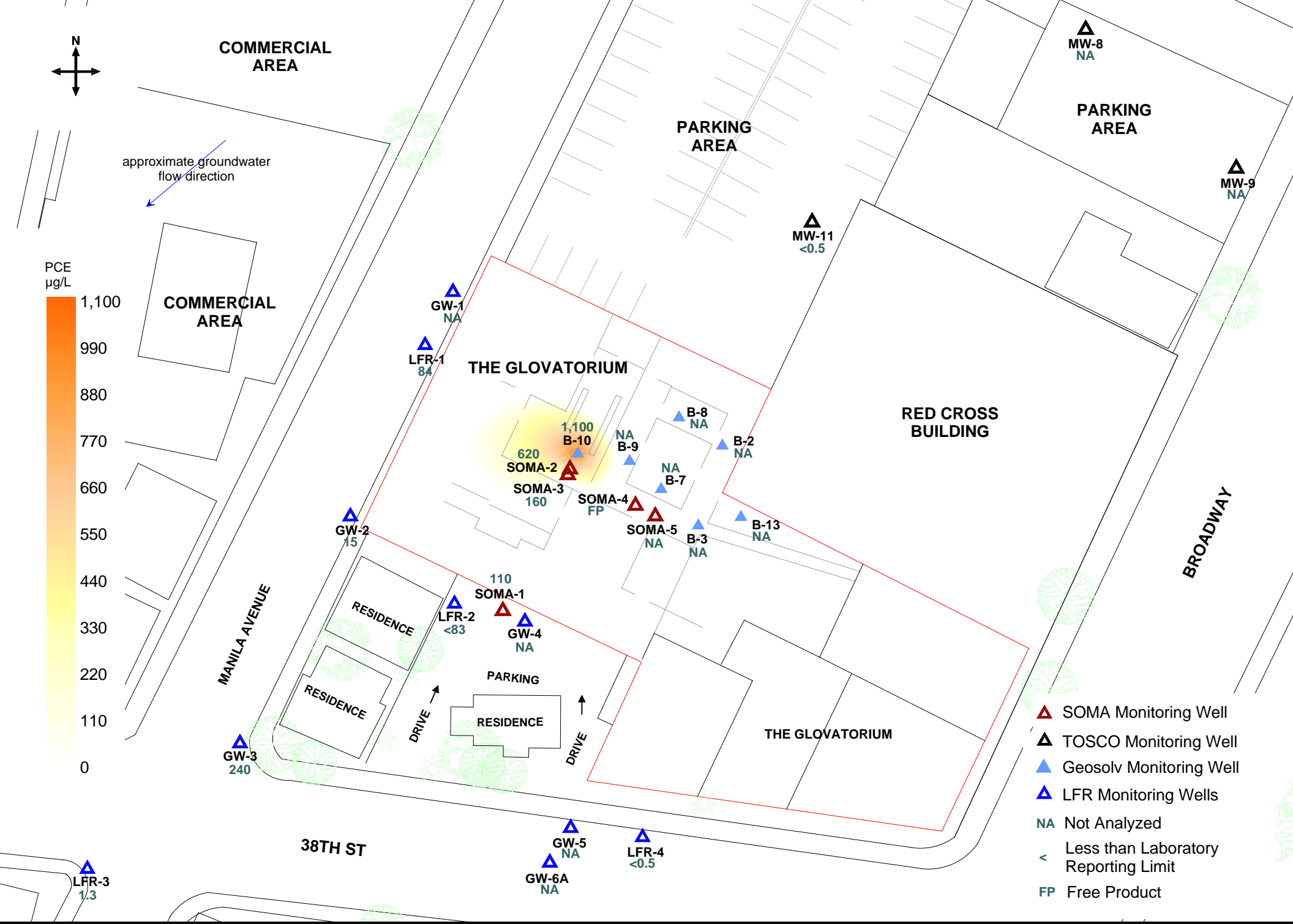


Figure 8: Contour map of PCE concentrations in groundwater. August 21 and 22, 2008.

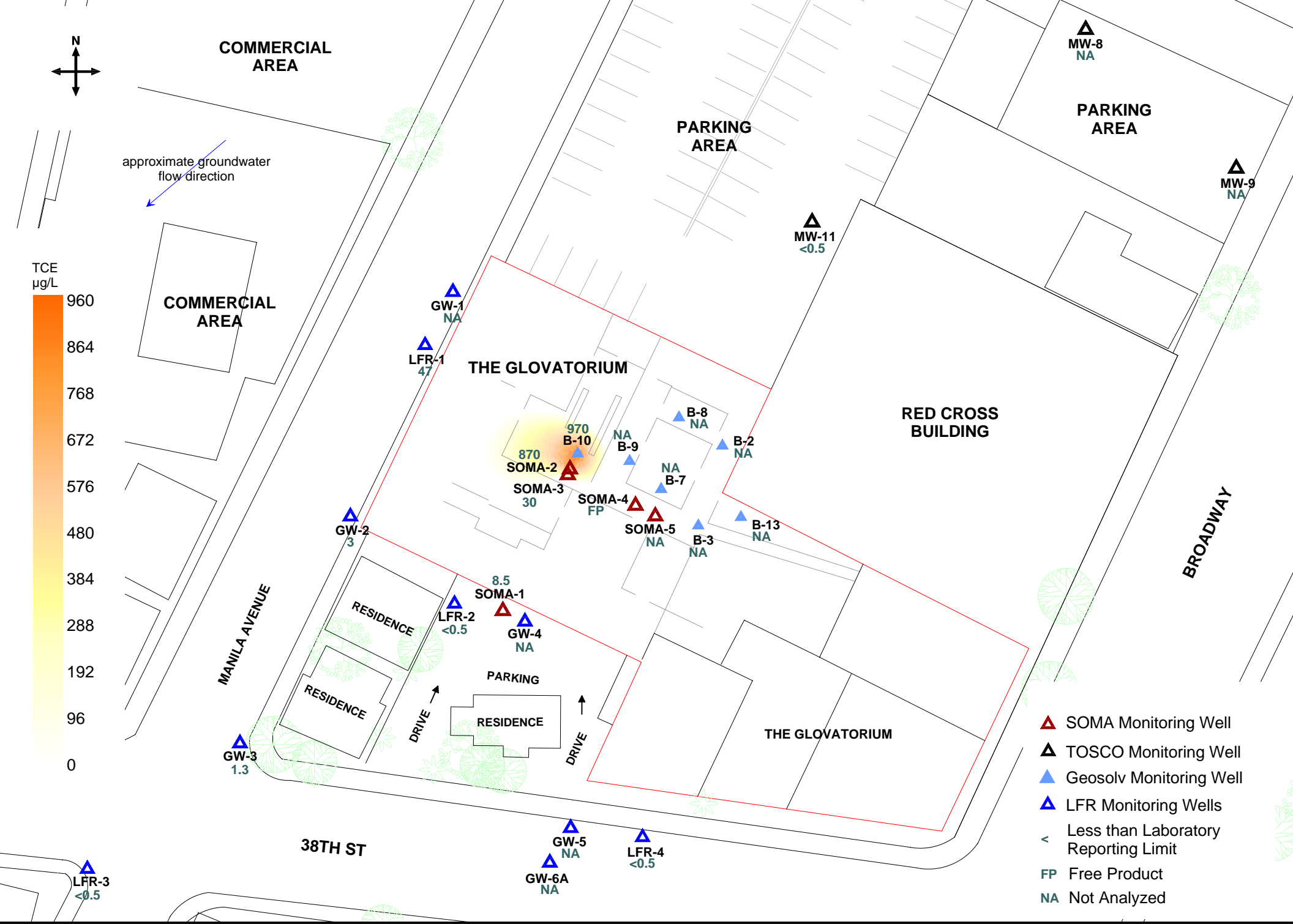
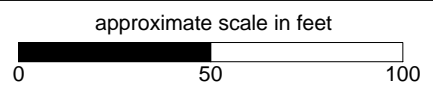


Figure 9: Contour map of TCE concentrations in groundwater. August 21 and 22, 2008.



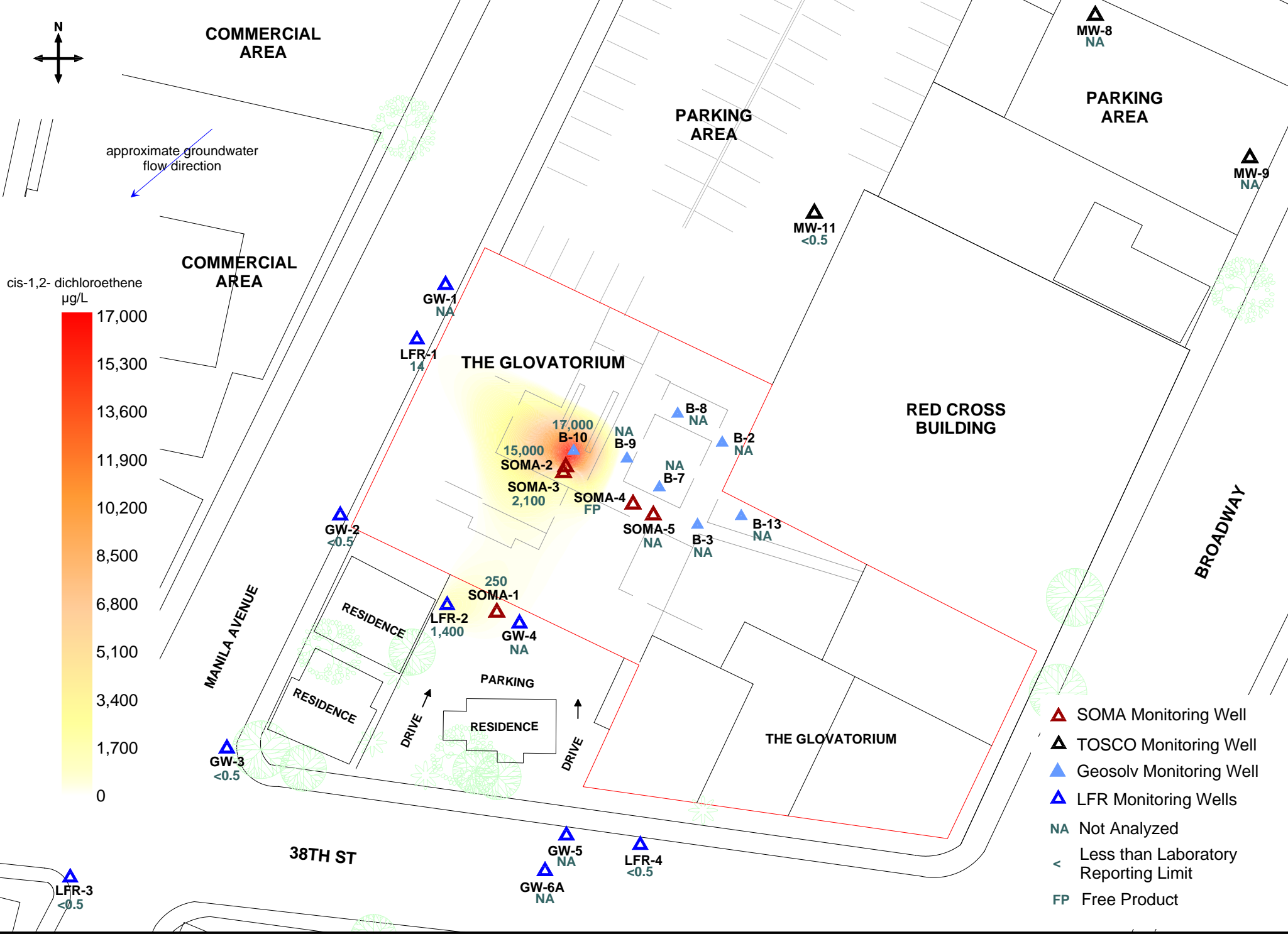
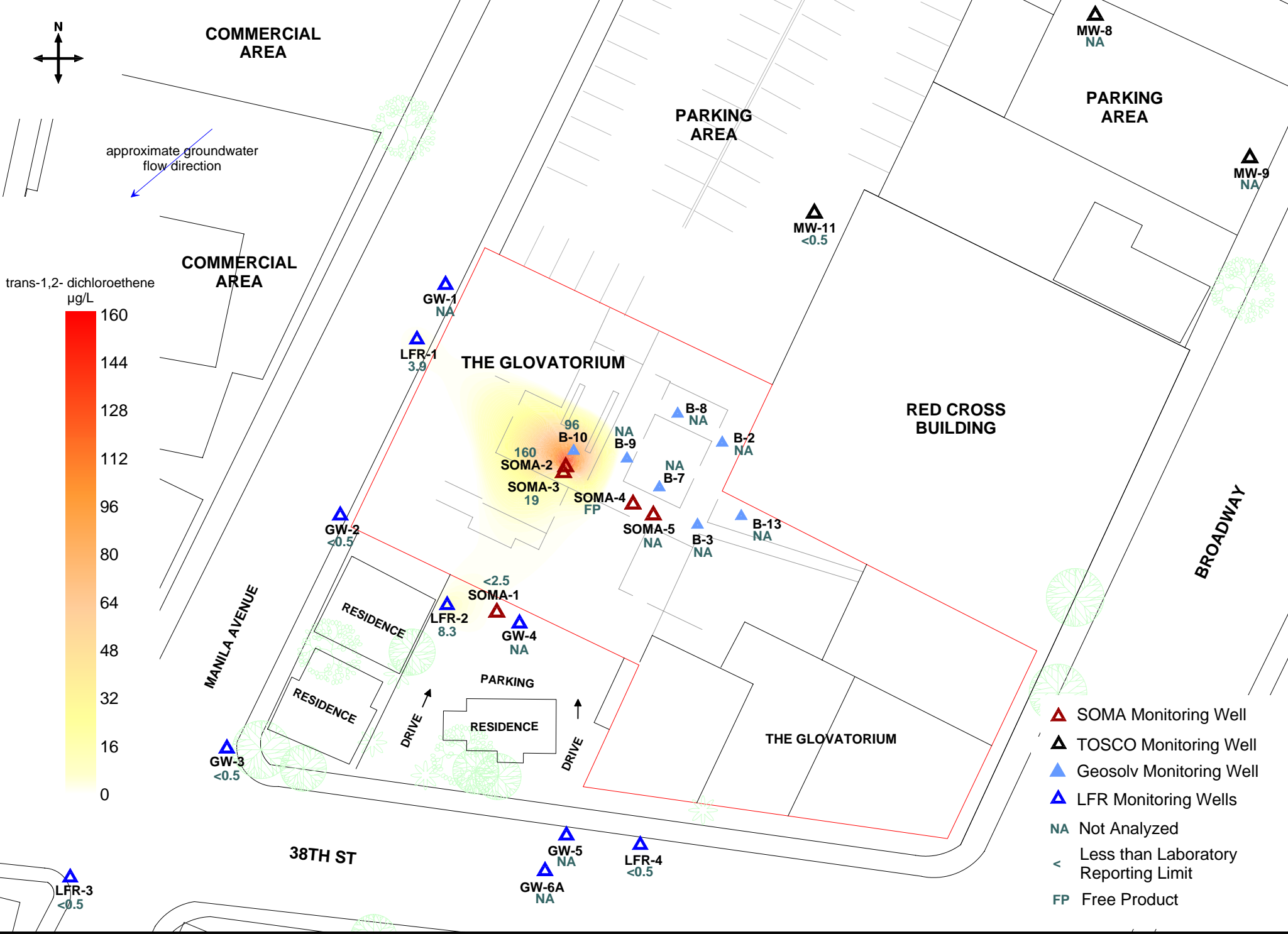
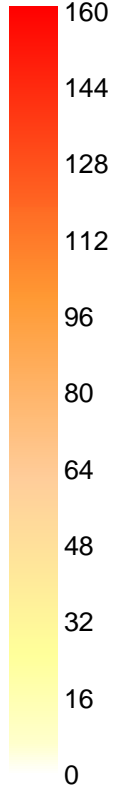


Figure 10: Contour map of cis-1,2-dichloroethene concentrations in groundwater. August 21 and 22, 2008.



trans-1,2- dichloroethene  
µg/L



- ▲ SOMA Monitoring Well
- ▲ TOSCO Monitoring Well
- ▲ Geosolv Monitoring Well
- ▲ LFR Monitoring Wells
- NA Not Analyzed
- < Less than Laboratory Reporting Limit
- FP Free Product

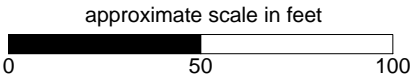


Figure 11: Contour map of trans-1,2-dichloroethene concentrations in groundwater. August 21 and 22, 2008.

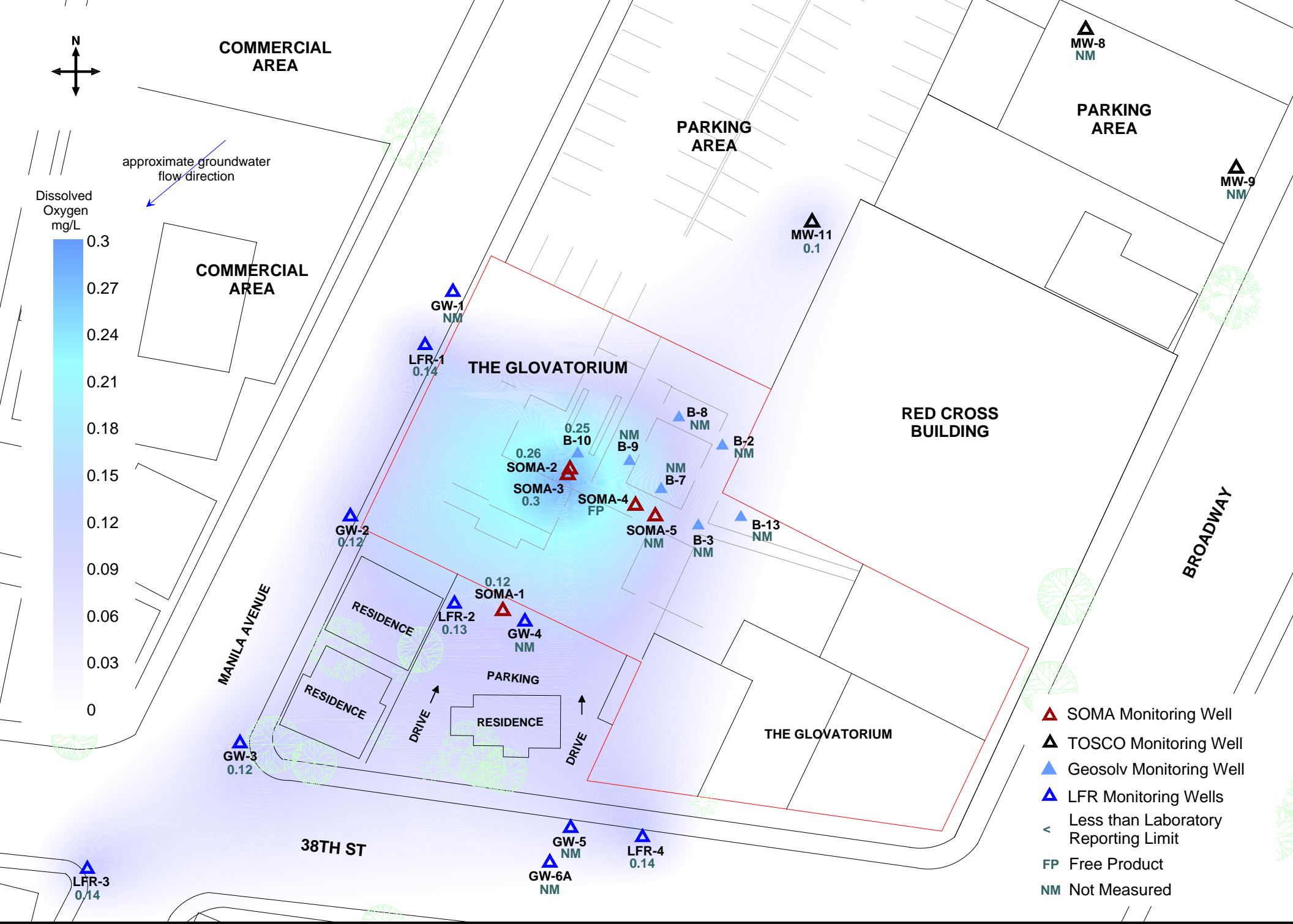


Figure 12: Contour map of dissolved oxygen concentrations in groundwater. August 21 and 22, 2008.

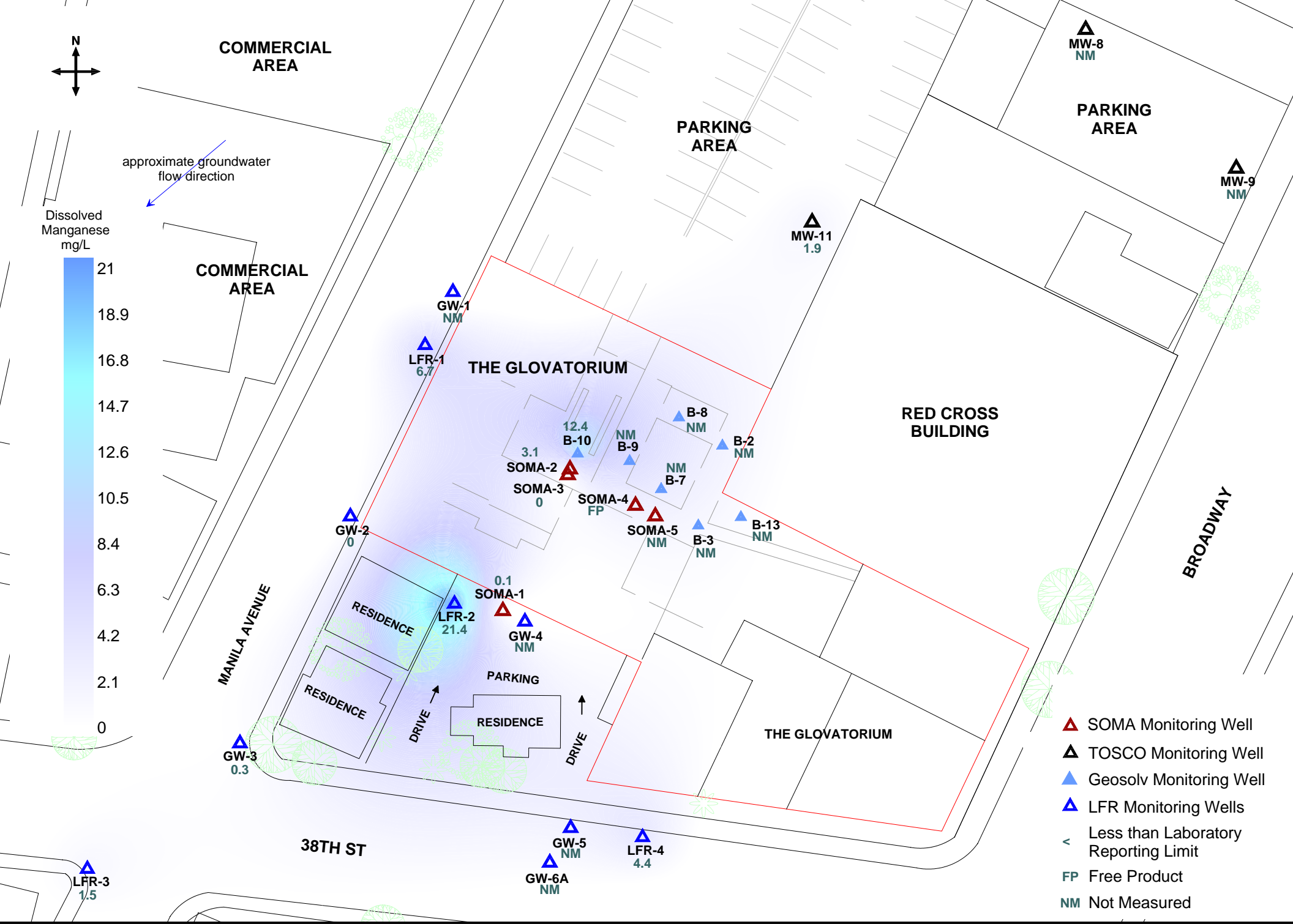


Figure 13: Contour map of dissolved manganese concentrations in groundwater. August 21 and 22, 2008.

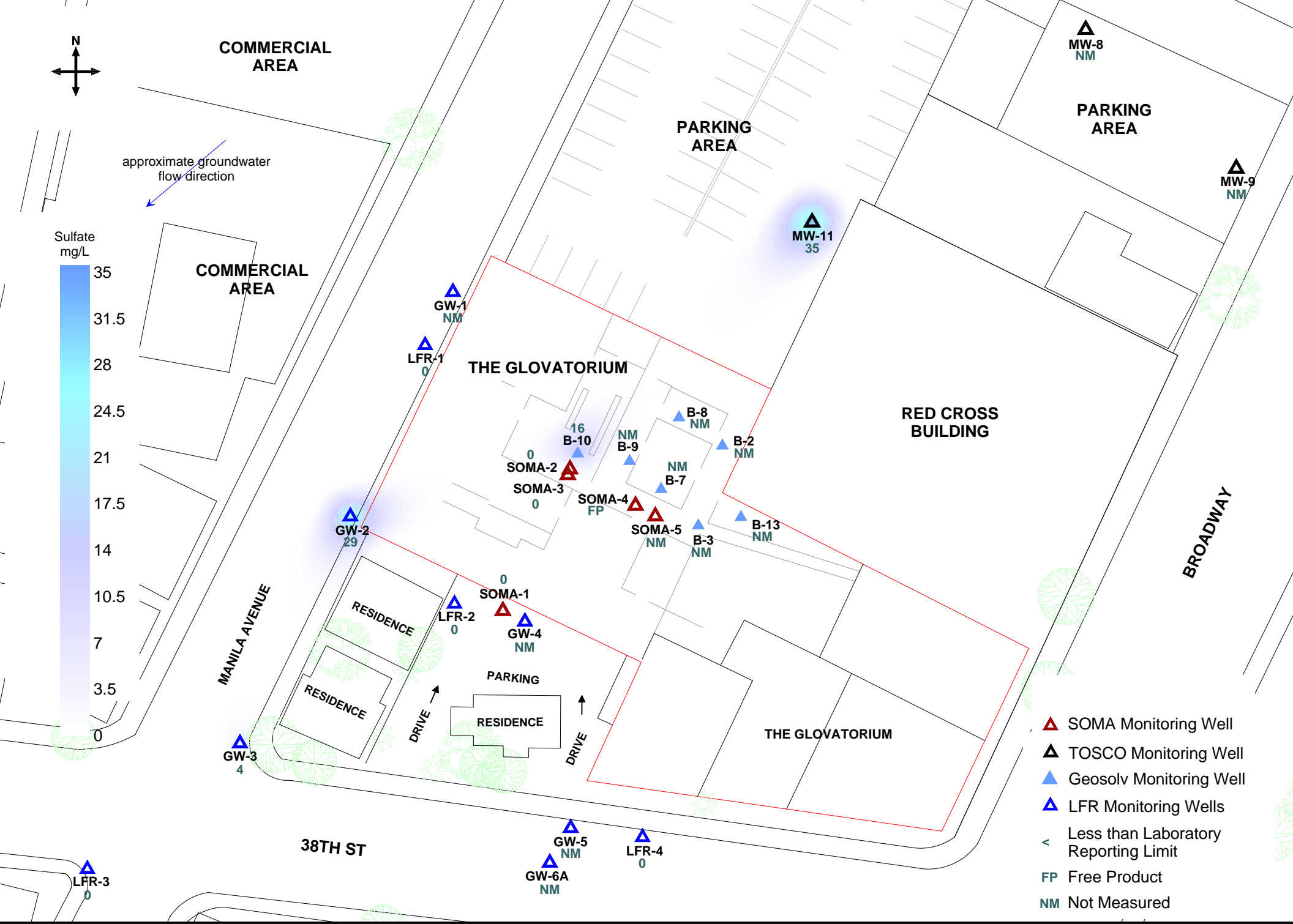


Figure 14: Contour map of sulfate concentrations in groundwater. August 21 and 22, 2008.



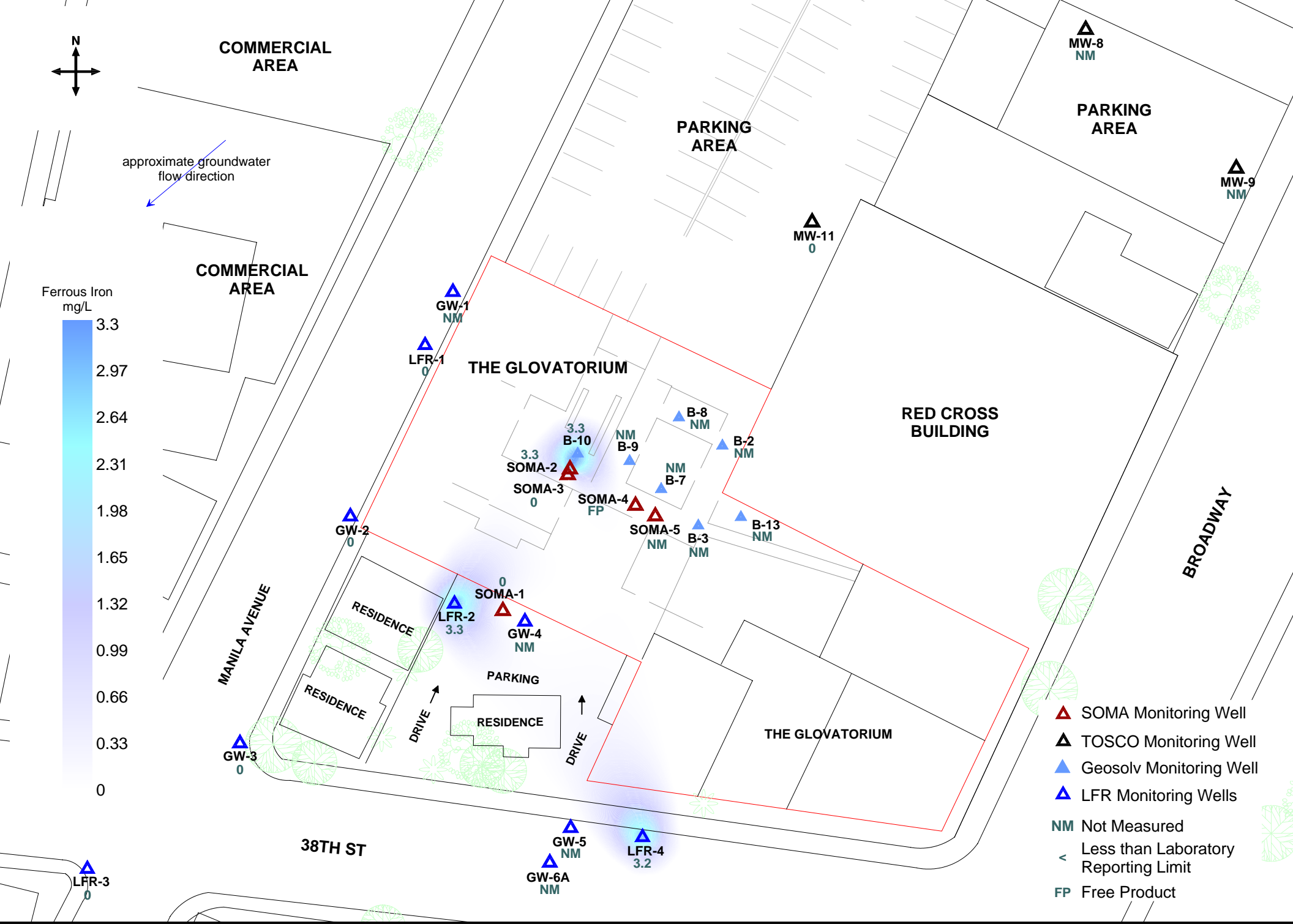
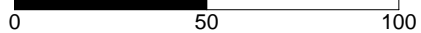


Figure 15: Contour map of ferrous iron concentrations in groundwater. August 21 and 22, 2008.

approximate scale in feet



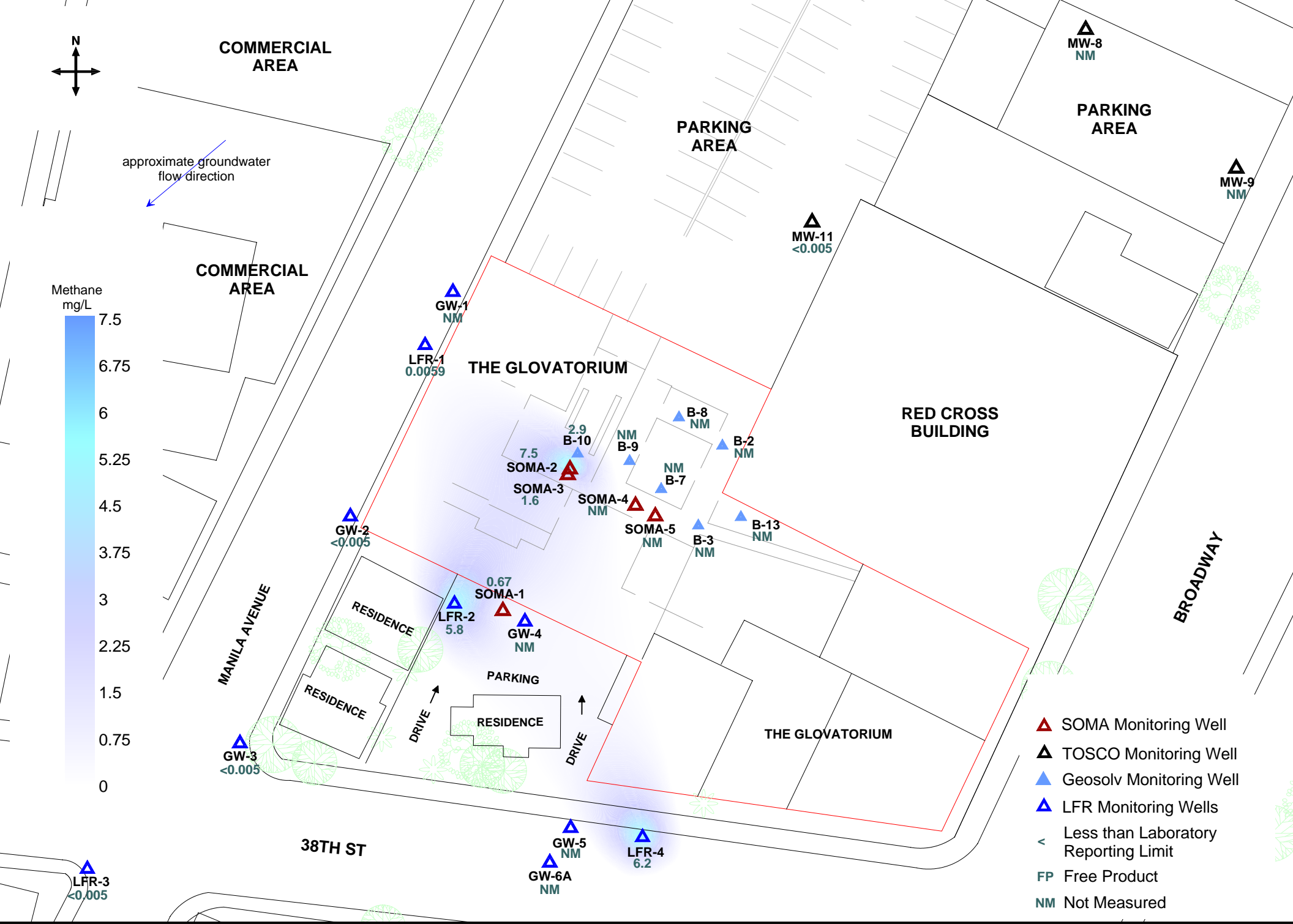
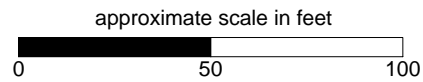
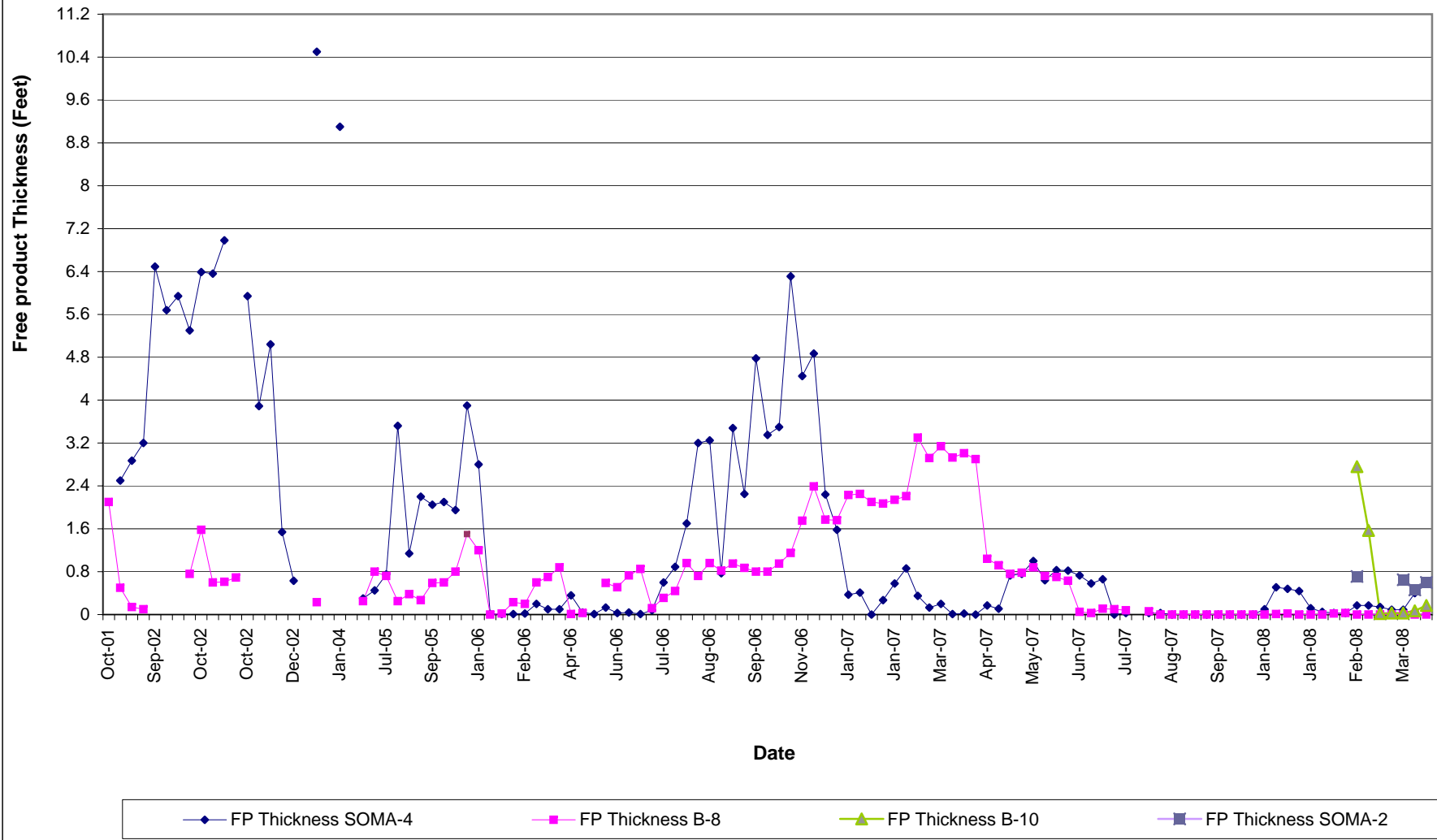


Figure 16: Contour map of methane concentrations in groundwater. August 21 and 22, 2008.



**Figure 17**  
**Free Product Thickness**  
**Former Glovatorium Site**  
**3185 Broadway, Oakland, California**



# **APPENDIX A**

## **SOMA's Groundwater Monitoring Procedures**

## **Field Activities**

Field activities were conducted on August 21 and 22, 2008. During this event, 11 monitoring wells were sampled. Depths to groundwater were measured in 25 groundwater monitoring wells and temporary sampling points. GW-4 and SOMA-5 were not sampled due to insufficient water for purging and sampling in these wells. Figure 2 shows locations of groundwater monitoring wells and temporary sampling points.

On August 21, 2008, SOMA's field crew measured 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 sample collection, each well was purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC) or a GeoTech pump (for the smaller ¾-inch diameter temporary wells). During the purging activities, the groundwater was measured for parameters such as DO, pH, temperature, EC, and the ORP using a Hanna HI-9828 multi-parameter instrument. Turbidity was measured using a Hanna HI-98703 portable turbidimeter. 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 NitraVer 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-phenanthroline indicator in the ferrous iron reagent reacts with  $\text{Fe}^{+2}$  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 3/4-inch temporary wells were collected using the GeoTech pump and a battery pack. A 1/4-inch poly tube was placed in the temporary well, and groundwater was extracted through the tubing using the GeoTech pump.

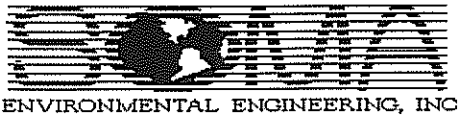
The groundwater sample was transferred to nine 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. The VOA vials containing the samples were immediately placed on ice and maintained at 4°C in a cooler. A chain of custody 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**



Well Name: B-2  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 82.09 feet  
 Depth to Groundwater: 10.11 feet  
 Groundwater Elevation: 71.98 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:





ENVIRONMENTAL ENGINEERING, INC

Well Name: B-3  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 82.57 feet  
 Depth to Groundwater: 9.92 feet  
 Groundwater Elevation: 72.65 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511

Address: 3815 Broadway  
 Oakland, California

Date: August 21-~~20~~ 2008

Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

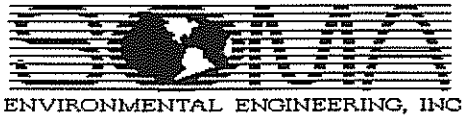
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 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: B-7  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 76.96 feet  
 Depth to Groundwater: DRY feet  
 Groundwater Elevation: N/A feet  
 Water Column Height: N/A feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

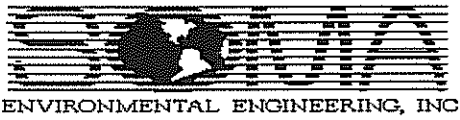
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 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: B-8  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 81.82 feet  
 Depth to Groundwater: 13.02 feet  
 Groundwater Elevation: 68.80 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

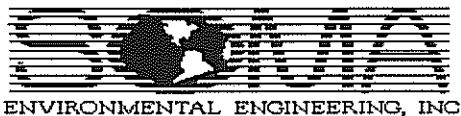
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Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: B-9  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 77.37 feet  
 Depth to Groundwater: 10.73 feet  
 Groundwater Elevation: 66.64 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

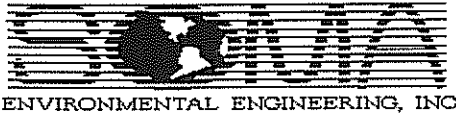
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Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: B-10  
 Casing Diameter: 3/4 inch  
 Depth of Well: 17.90 feet  
 Top of Casing Elevation: 81.50 feet  
 Depth to Groundwater: 11.03 feet  
 Groundwater Elevation: 70.47 feet  
 Water Column Height: 6.87 feet  
 Purged Volume: .5 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Depth to product: 10.86 ft.  
 Amount of product: 0.17 ft.

Purging Method: Bailer   
 Sampling Method: Bailer

Pump  Geopump  
 Pump

Color: No   
 Sheen: No   
 Odor: No

Yes  Describe: F.P. → clear  
 Yes  Describe: F.P.  
 Yes  Describe: stroke penro

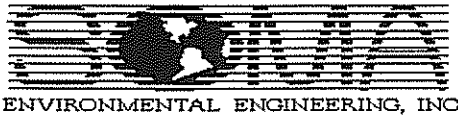
Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1501	Started purging well						
1502	0.5	6.83	20.43	0.25	380	1000	-60.2
1503	Dried						
1506	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1506	3.30	3.30	<del>1.96</del>	0.196	16	12.4

12.10

Notes:



Well Name: B-13  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 84.58 feet  
 Depth to Groundwater: Dry feet  
 Groundwater Elevation: N/A feet  
 Water Column Height: N/M feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21~~st~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

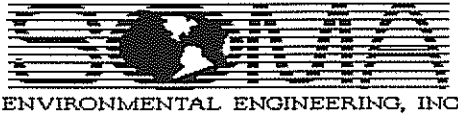
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 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: GW-1  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 79.94 feet  
 Depth to Groundwater: DRY feet  
 Groundwater Elevation: NA feet  
 Water Column Height: NA feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

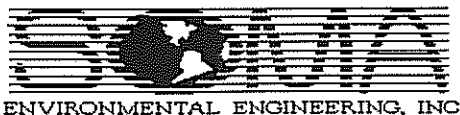
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 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



ENVIRONMENTAL ENGINEERING, INC

Well Name: GW-2  
 Casing Diameter: 3/4 inch  
 Depth of Well: 20.00 feet  
 Top of Casing Elevation: 79.14 feet  
 Depth to Groundwater: 12.55 feet  
 Groundwater Elevation: 66.59 feet  
 Water Column Height: 7.45 feet  
 Purged Volume: 0.25 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August ~~21~~ 22, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer   
 Sampling Method: Bailer

Pump  Geotech  
 Pump

Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

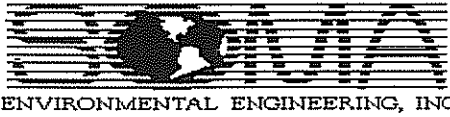
Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1019	Started purging well						
1020	0.25	<del>6.55</del>	22.66	0.12	422	497	+114.8
1020	Dry						
1024	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1024	0	0.30	0	0.032	29	0

Notes:





Well Name: GW-3  
 Casing Diameter: 3/4 inch  
 Depth of Well: 20.00 feet  
 Top of Casing Elevation: 77.92 feet  
 Depth to Groundwater: 10.04 feet  
 Groundwater Elevation: 67.88 feet  
 Water Column Height: 8.96 feet  
 Purged Volume: 0.5 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August ~~21~~ 22, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer   
 Sampling Method: Bailer

Pump  Geotech  
 Pump  Geotech

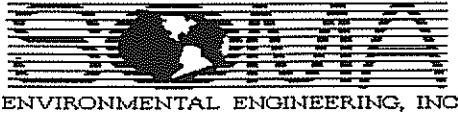
Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1058	started purging well						
1059	0.5	6.10	21.52	0.12	463	27.2	+135.5
1100	Dried						
1105	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1105	0	0	0	0	4	0.3

Notes:



Well Name: GW-4  
 Casing Diameter: 3/4 inch  
 Depth of Well: 12.00 feet  
 Top of Casing Elevation: 82.37 feet  
 Depth to Groundwater: Dry feet  
 Groundwater Elevation: N/m feet  
 Water Column Height: N/m feet  
 Purged Volume: — gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
Well was dry - no water available for field measurements or sampling.							

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
N/A	—	—	—	—	—	—

Notes:



Well Name: GW-5  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 81.01 feet  
 Depth to Groundwater: 12.13 feet  
 Groundwater Elevation: 68.88 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

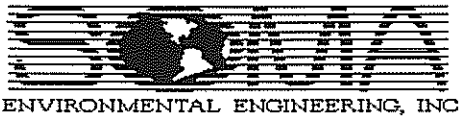
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 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: GW-6A  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 81.61 feet  
 Depth to Groundwater: 13.91 feet  
 Groundwater Elevation: 67.70 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

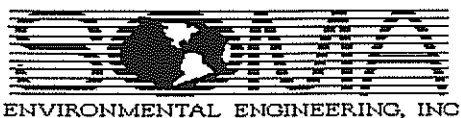
Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



ENVIRONMENTAL ENGINEERING, INC

Well Name: MW-8  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 87.44 feet  
 Depth to Groundwater: 11.06 feet  
 Groundwater Elevation: 76.38 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: MW-9  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 86.56 feet  
 Depth to Groundwater: 10.62 feet  
 Groundwater Elevation: 75.94 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~26~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: / Bailer  Pump   
 Sampling Method: Bailer  Pump

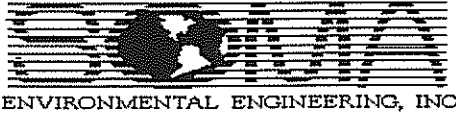
Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:



Well Name: MW-11  
 Casing Diameter: 2 inch  
 Depth of Well: 19.00 feet  
 Top of Casing Elevation: 84.13 feet  
 Depth to Groundwater: 15.70 feet  
 Groundwater Elevation: 68.43 feet  
 Water Column Height: 3.30 feet  
 Purged Volume: 1.5 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August ~~21~~ 22, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

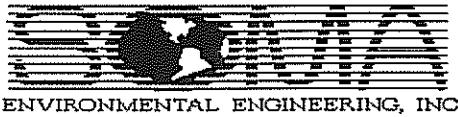
Color: No  Yes  Describe: Slightly Cloudy  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
0853	Started purging			well			
0854	0.5	6.92	22.33	0.11	641	18.5	+49.4
0855	1	6.63	21.76	0.10	685	10.7	+67.6
0856	1.5	6.61	22.07	0.10	676	36.1	
0859	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
0859	0	0	0	0	35	1.9

Notes:



Well Name: LFR-1  
 Casing Diameter: 2 inch  
 Depth of Well: 19.00 feet  
 Top of Casing Elevation: 79.97 feet  
 Depth to Groundwater: 10.16 feet  
 Groundwater Elevation: 69.81 feet  
 Water Column Height: 8.84 feet  
 Purged Volume: 4 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August ~~21~~-22, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Cloudy  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
933	started purging well						
935	1	6.13	21.61	0.18	328	155	+86.7
937	2	6.77	21.09	0.11	431	612	+102.1
939	3	6.52	21.21	0.10	463	1000	+112.6
941	4	6.50	21.13	0.14	432	999	+119.2
945	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
945	0	0	0	0	0	6.7

Notes:





ENVIRONMENTAL ENGINEERING, INC

Well Name: LFR-2  
 Casing Diameter: 2 inch  
 Depth of Well: 19.00 feet  
 Top of Casing Elevation: 81.89 feet  
 Depth to Groundwater: 12.32 feet  
 Groundwater Elevation: 69.57 feet  
 Water Column Height: 6.68 feet  
 Purged Volume: 3 gallons

Project #: 2511

Address: 3815 Broadway  
 Oakland, California

Date: August 21-~~22~~ 2008

Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

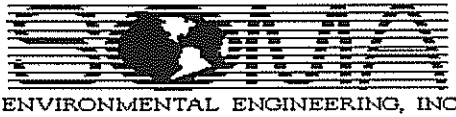
Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: Chemical

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1055	Started						
1057	1	7.08	20.34	0.13	567	4.10	-76.0
1100	2	6.72	24.43	0.12	557	30.2	-65.6
1104	3	6.68	23.60	0.13	610	45.4	-66.1
1107	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1107	3.30	3.30	0	0.092	0	21.4

Notes:



Well Name: LFR-3  
 Casing Diameter: 2 inch  
 Depth of Well: 22.00 feet  
 Top of Casing Elevation: 77.96 feet  
 Depth to Groundwater: 12.76 feet  
 Groundwater Elevation: 65.20 feet  
 Water Column Height: 9.24 feet  
 Purged Volume: 4 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August ~~21~~ 22, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump   
 Color: No  Yes  Describe: Cloudy  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1133	started purging well						
1135	1	6.86	21.78	0.13	465	75.0	+121.1
1137	2	6.84	21.37	0.13	482	203	+129.9
1139	3	6.66	21.13	0.14	407	360	+135.9
1141	4	6.63	21.09	0.14	406	604	+140.4
1144	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1144	0	0	0	0	0	1.5

Notes:



Well Name: LF R-4  
 Casing Diameter: 2 inch  
 Depth of Well: 19.30 feet  
 Top of Casing Elevation: 81.65 feet  
 Depth to Groundwater: 15.63 feet  
 Groundwater Elevation: 66.02 feet  
 Water Column Height: 3.67 feet  
 Purged Volume: ~~2~~ 1 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21~~st~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

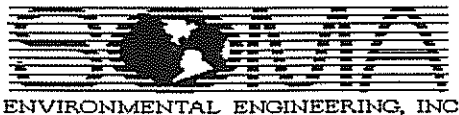
Color: No  Yes  Describe: cloudy  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: Slight chemical

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1138	Started purging well						
1140	.5	6.86	29.33	0.10	271	98.8	-11.1
1142	1	6.13	21.38	0.14	353	508	-0.7
1144	7.5 dried						
1148	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1148	3.20	3.30	0	0	0	4.4

Notes:



Well Name: SOMA-1  
 Casing Diameter: 4 inch  
 Depth of Well: 40.00 feet  
 Top of Casing Elevation: 81.64 feet  
 Depth to Groundwater: 16.01 feet  
 Groundwater Elevation: 65.63 feet  
 Water Column Height: 23.99 feet  
 Purged Volume: 15 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

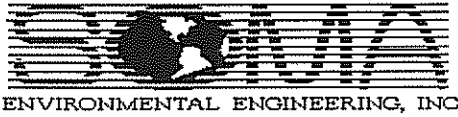
Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: \_\_\_\_\_

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1007	Started purging well						
1008	2	6.58	19.25	0.10	809	11.1	+188.8
1010	6	6.35	19.26	0.11	825	8.19	+194.3
1012	10	6.30	19.29	0.12	830	6.01	+177.1
1014	14	6.26	19.29	0.11	831	3.92	+200.8
1015	16	6.21	19.33	0.12	834	2.60	+202.7
1018	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1018	0	0	0	0	0	0.1

Notes:



Well Name: SOMA-2  
 Casing Diameter: 2 inch  
 Depth of Well: 20.00 feet  
 Top of Casing Elevation: 81.39 feet  
 Depth to Groundwater: 11.36 feet  
 Groundwater Elevation: 70.63 feet  
 Water Column Height: 8.64 feet  
 Purged Volume: 4.0 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~ 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Depth to free product: 10.76 ft.  
 Amount of free product: 0.60 ft.

Purging Method: Bailer   
 Sampling Method: Bailer

Pump  Geotech  
 Pump  Geotech

Color: No   
 Sheen: No   
 Odor: No

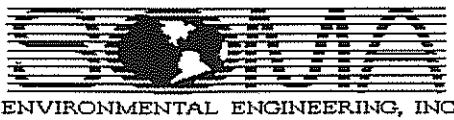
Yes  Describe: F.P. → clear  
 Yes  Describe: F.P.  
 Yes  Describe: petro

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1335	started purging well						
1339	1	7.64	17.98	0.18	758	34.4	-121.0
1344	2	7.29	17.75	0.25	772	16.0	-70.8
1349	3	7.23	17.51	0.29	793	5.75	-65.7
1354	4	7.19	17.59	0.26	834	4.23	-65.4
1359	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1359	3.30	3.30	0	0	0	3.10

Notes:



Well Name: SOMA-3  
 Casing Diameter: 3/4 inch  
 Depth of Well: 30.00 feet  
 Top of Casing Elevation: 81.42 feet  
 Depth to Groundwater: 14.18 feet  
 Groundwater Elevation: 67.24 feet  
 Water Column Height: 15.82 feet  
 Purged Volume: .5 gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Purging Method: Bailer   
 Sampling Method: Bailer

Pump  geotech  
 Pump

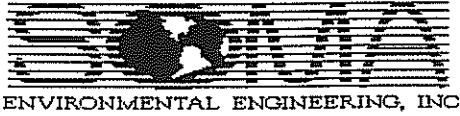
Color: No  Yes  Describe: \_\_\_\_\_  
 Sheen: No  Yes  Describe: \_\_\_\_\_  
 Odor: No  Yes  Describe: petro

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
1421	started plugging well						
1422	.5	6.62	19.87	0.30	341	+27.3	122
1423	1	dried					
1428	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1428	0	0.27	0	0	0	0

Notes:



Well Name: SOMA-4  
 Casing Diameter: \_\_\_\_\_ inch  
 Depth of Well: \_\_\_\_\_ feet  
 Top of Casing Elevation: 81.09 feet  
 Depth to Groundwater: 13.82 feet  
 Groundwater Elevation: 67.27 feet  
 Water Column Height: \_\_\_\_\_ feet  
 Purged Volume: \_\_\_\_\_ gallons

Project #: 2511  
 Address: 3815 Broadway  
 Oakland, California  
 Date: August 21-~~22~~, 2008  
 Sampler: Lizzie Hightower  
 Eric Gassner-Wollwage

Depth to free product: 13.22 ft.  
 Amount of free product: 0.60 ft.

Purging Method: Bailer  Pump   
 Sampling Method: Bailer  Pump

Color: No  Yes  Describe: Unknown  
 Sheen: No  Yes  Describe: Unknown  
 Odor: No  Yes  Describe: Unknown

Field Measurements:

Time	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)

Notes:





# **APPENDIX C**

## Chain of Custody Forms and Laboratory Reports

# CHAIN OF CUSTODY

ok per Julie

8/15

## Curtis & Tompkins, Ltd.

Analytical Laboratory Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510)486-0900 Phone  
 (510)486-0532 Fax

C&T LOGIN # 205543

Sampler: ERIC GROSSNER - WALLAGE / HIGHWAY <sup>UZZIE</sup>

Project No: 2511

Report To: Joyce Bobek

Project Name: 3815 Broadway, Oakland, CA

Company: SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				TPHg (including Stoddard Solvent) 8260B	8260 (Full List)	Methane	
			Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE				
1	GW-2	8/22/08 1024	*			9-40ml VOAs	*			*				
2	GW-3	8/22/08 1105	*			9-40ml VOAs	*			*				
	<del>GW-4</del>		*			<del>9-40ml VOAs</del>	<del>*</del>			<del>*</del>				
3	MW-11	8/22/08 859	*			9-40ml VOAs	*			*				
4	LFR-1	8/22/08 945	*			9-40ml VOAs	*			*				
5	LFR-2	8/21/08 1107	*			9-40ml VOAs	*			*				
6	LFR-3	8/22/08 1144	*			9-40ml VOAs	*			*				
7	LFR-4	8/21/08 1148	*			9-40ml VOAs	*			*				
8	SOMA-1	8/21/08 10:18	*			9-40ml VOAs	*			*				
9	SOMA-2	8/21/08 1359	*			9-40ml VOAs	*			*				
10	SOMA-3	8/21/08 1428	*			9-40ml VOAs	*			*				
	<del>SOMA-5</del>		*			<del>9-40ml VOAs</del>	<del>*</del>			<del>*</del>				
11	B-10	8/21/08 1506	*			9-40ml VOAs	*			*				

**Notes:**

EDF Output required  
 8260B List to include gasoline oxygenates &  
 lead scavengers, BTEX, MtBE

**RELINQUISHED BY:**

*[Signature]* 8/22/08 1407  
 DATE/TIME

**RECEIVED BY:**

*[Signature]* 8/22/08 1407  
 DATE/TIME

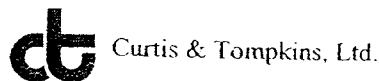
DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

COOLER RECEIPT CHECKLIST



Login # 205543 Date Received 8/22/08 Number of coolers 2
Client SOMA Project 3815 Broadway

Date Opened 8/22 By (print) K Wellbrock (sign) [Signature]
Date Logged in 8/23 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc)? Shipping info YES NO

2A. Were custody seals present? How many Name Date YES NO

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)
Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation:
Type of ice used: Wet, Blue/Gel, None Temp(C)

Samples Received on ice & cold without a temperature blank
Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? If YES, what time were they transferred to freezer? YES NO

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? If YES, Who was called? By Date: 8-25-08

COMMENTS

Unable to do Stoddard Solvent by 260. Logging in like last time TPH-Gasoline & Stoddard by 8015.



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

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

Laboratory Job Number 205543
ANALYTICAL REPORT

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

Project : 2511
Location : 3815 Broadway, Oakland
Level : II

Table with 2 columns: Sample ID and Lab ID. Rows include GW-2, GW-3, MW-11, LFR-1 through LFR-4, SOMA-1 through SOMA-3, and B-10.

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. This report may be reproduced only in its entirety.

Signature: [Handwritten Signature]
Project Manager

Date: 09/04/2008

Signature: [Handwritten Signature]
Senior Program Manager

Date: 09/08/2008

## CASE NARRATIVE

Laboratory number: 205543  
Client: SOMA Environmental Engineering Inc.  
Project: 2511  
Location: 3815 Broadway, Oakland  
Request Date: 08/22/08  
Samples Received: 08/22/08

This hardcopy data package contains sample and QC results for eleven water samples, requested for the above referenced project on 08/22/08. The samples were received cold and intact.

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

High surrogate recovery was observed for bromofluorobenzene (FID) in LFR-2 (lab # 205543-005), due to interference from coeluting hydrocarbon peaks; the corresponding trifluorotoluene (FID) surrogate recovery was within limits. High surrogate recovery was observed for trifluorotoluene (FID) in LFR-4 (lab # 205543-007), due to interference from coeluting hydrocarbon peaks; the corresponding bromofluorobenzene (FID) surrogate recovery was within limits. No other analytical problems were encountered.

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

High responses were observed for tert-butyl alcohol (TBA) in the CCV analyzed 08/27/08 11:30 and the CCV analyzed 08/28/08 13:53; affected data was qualified with "b". High recoveries were observed for tert-butyl alcohol (TBA) in the BS/BSD for batch 141873; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. High recoveries were observed for ethyl tert-butyl ether (ETBE) in the BS/BSD for batch 141928; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. Low recovery was observed for trichloroethene in the MSD for batch 142030; the parent sample was not a project sample, and the LCS was within limits. Responses exceeding the instrument's linear range were observed for trichloroethene in the MS/MSD for batch 142030; affected data was qualified with "b". No other analytical problems were encountered.

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

No analytical problems were encountered.

Total Volatile Hydrocarbons			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	141789
Units:	ug/L	Received:	08/22/08

Field ID: GW-2 Diln Fac: 1.000  
 Type: SAMPLE Sampled: 08/22/08  
 Lab ID: 205543-001 Analyzed: 08/25/08

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	61-149
Bromofluorobenzene (FID)	110	65-146

Field ID: GW-3 Diln Fac: 1.000  
 Type: SAMPLE Sampled: 08/22/08  
 Lab ID: 205543-002 Analyzed: 08/25/08

Analyte	Result	RL
Gasoline C7-C12	120 Y Z	50
Stoddard Solvent C7-C12	79 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	61-149
Bromofluorobenzene (FID)	113	65-146

Field ID: MW-11 Diln Fac: 1.000  
 Type: SAMPLE Sampled: 08/22/08  
 Lab ID: 205543-003 Analyzed: 08/26/08

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	61-149
Bromofluorobenzene (FID)	117	65-146

Field ID: LFR-1 Diln Fac: 1.000  
 Type: SAMPLE Sampled: 08/22/08  
 Lab ID: 205543-004 Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	59 Y Z	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	61-149
Bromofluorobenzene (FID)	113	65-146

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit

### Total Volatile Hydrocarbons

Lab #: 205543	Location: 3815 Broadway, Oakland
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2511	Analysis: EPA 8015B
Matrix: Water	Batch#: 141789
Units: ug/L	Received: 08/22/08

Field ID: LFR-2	Diln Fac: 10.00
Type: SAMPLE	Sampled: 08/22/08
Lab ID: 205543-005	Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	23,000 Y	500
Stoddard Solvent C7-C12	15,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	61-149
Bromofluorobenzene (FID)	194 *	65-146

Field ID: LFR-3	Diln Fac: 1.000
Type: SAMPLE	Sampled: 08/22/08
Lab ID: 205543-006	Analyzed: 08/26/08

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	61-149
Bromofluorobenzene (FID)	116	65-146

Field ID: LFR-4	Diln Fac: 1.000
Type: SAMPLE	Sampled: 08/21/08
Lab ID: 205543-007	Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	1,500 Y	50
Stoddard Solvent C7-C12	990 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	241 *	61-149
Bromofluorobenzene (FID)	144	65-146

Field ID: SOMA-1	Diln Fac: 1.000
Type: SAMPLE	Sampled: 08/21/08
Lab ID: 205543-008	Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	84 Y Z	50
Stoddard Solvent C7-C12	55 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	61-149
Bromofluorobenzene (FID)	117	65-146

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit

Total Volatile Hydrocarbons			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	141789
Units:	ug/L	Received:	08/22/08

Field ID: SOMA-2 Diln Fac: 10.00  
 Type: SAMPLE Sampled: 08/21/08  
 Lab ID: 205543-009 Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	5,700 Y	500
Stoddard Solvent C7-C12	3,800	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	61-149
Bromofluorobenzene (FID)	124	65-146

Field ID: SOMA-3 Diln Fac: 1.000  
 Type: SAMPLE Sampled: 08/21/08  
 Lab ID: 205543-010 Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	600 Y	50
Stoddard Solvent C7-C12	400	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	61-149
Bromofluorobenzene (FID)	133	65-146

Field ID: B-10 Diln Fac: 1,000  
 Type: SAMPLE Sampled: 08/21/08  
 Lab ID: 205543-011 Analyzed: 08/26/08

Analyte	Result	RL
Gasoline C7-C12	1,200,000 Y	50,000
Stoddard Solvent C7-C12	760,000	50,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	61-149
Bromofluorobenzene (FID)	137	65-146

Type: BLANK Diln Fac: 1.000  
 Lab ID: QC457222 Analyzed: 08/25/08

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	61-149
Bromofluorobenzene (FID)	111	65-146

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC457223	Batch#:	141789
Matrix:	Water	Analyzed:	08/25/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,102	110	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	133	61-149
Bromofluorobenzene (FID)	118	65-146

## Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	141789
MSS Lab ID:	205549-002	Sampled:	08/25/08
Matrix:	Water	Received:	08/25/08
Units:	ug/L	Analyzed:	08/25/08
Diln Fac:	1.000		

Type: MS Lab ID: QC457224

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	17.28	2,000	1,937	96	65-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	146	61-149
Bromofluorobenzene (FID)	126	65-146

Type: MSD Lab ID: QC457225

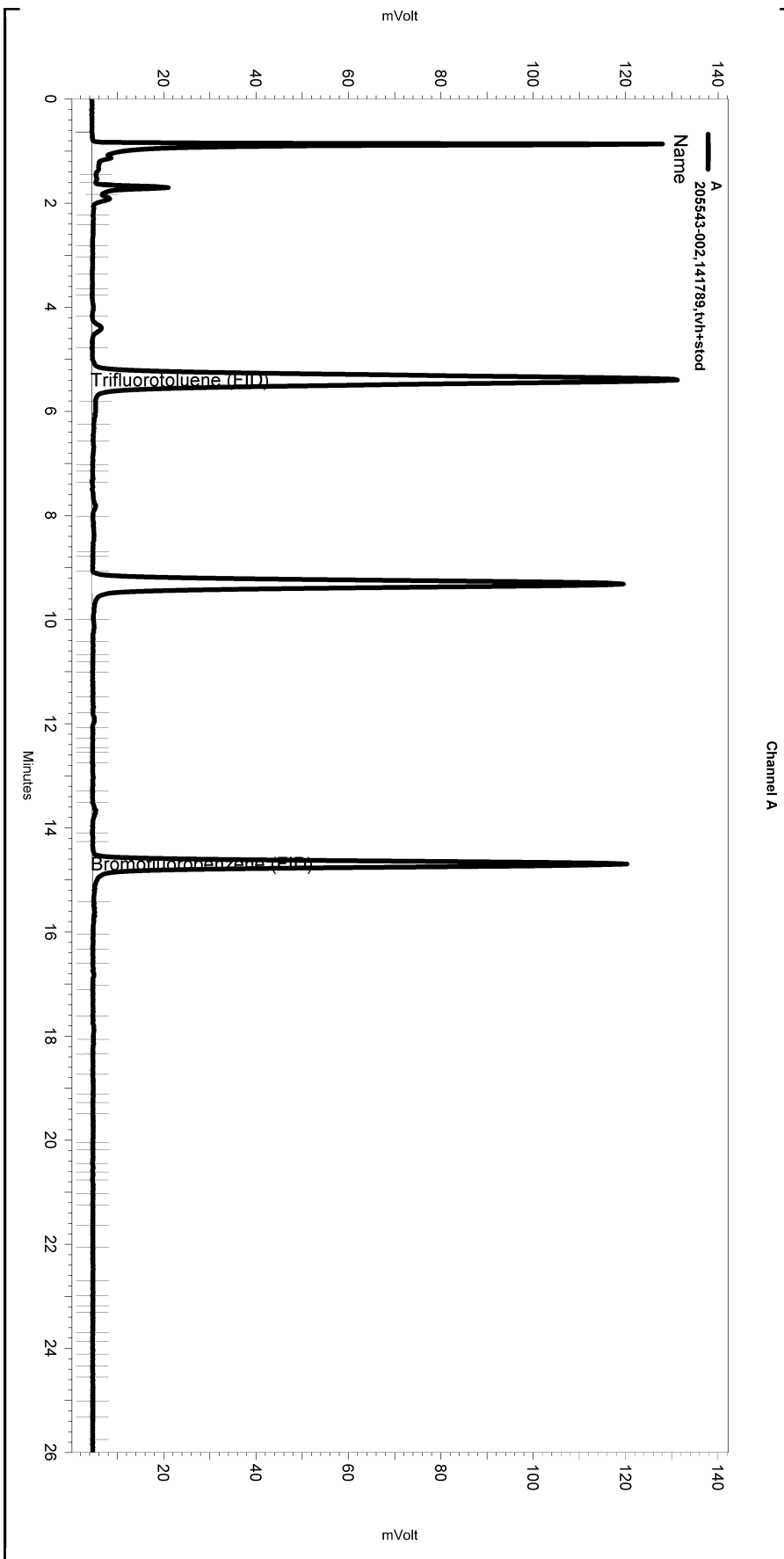
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,923	95	65-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	147	61-149
Bromofluorobenzene (FID)	130	65-146

RPD= Relative Percent Difference

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Software Version 3.1.7  
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 Analysis Date: 8/26/2008 8:01:42 AM  
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Yes	Threshold	0	0	50

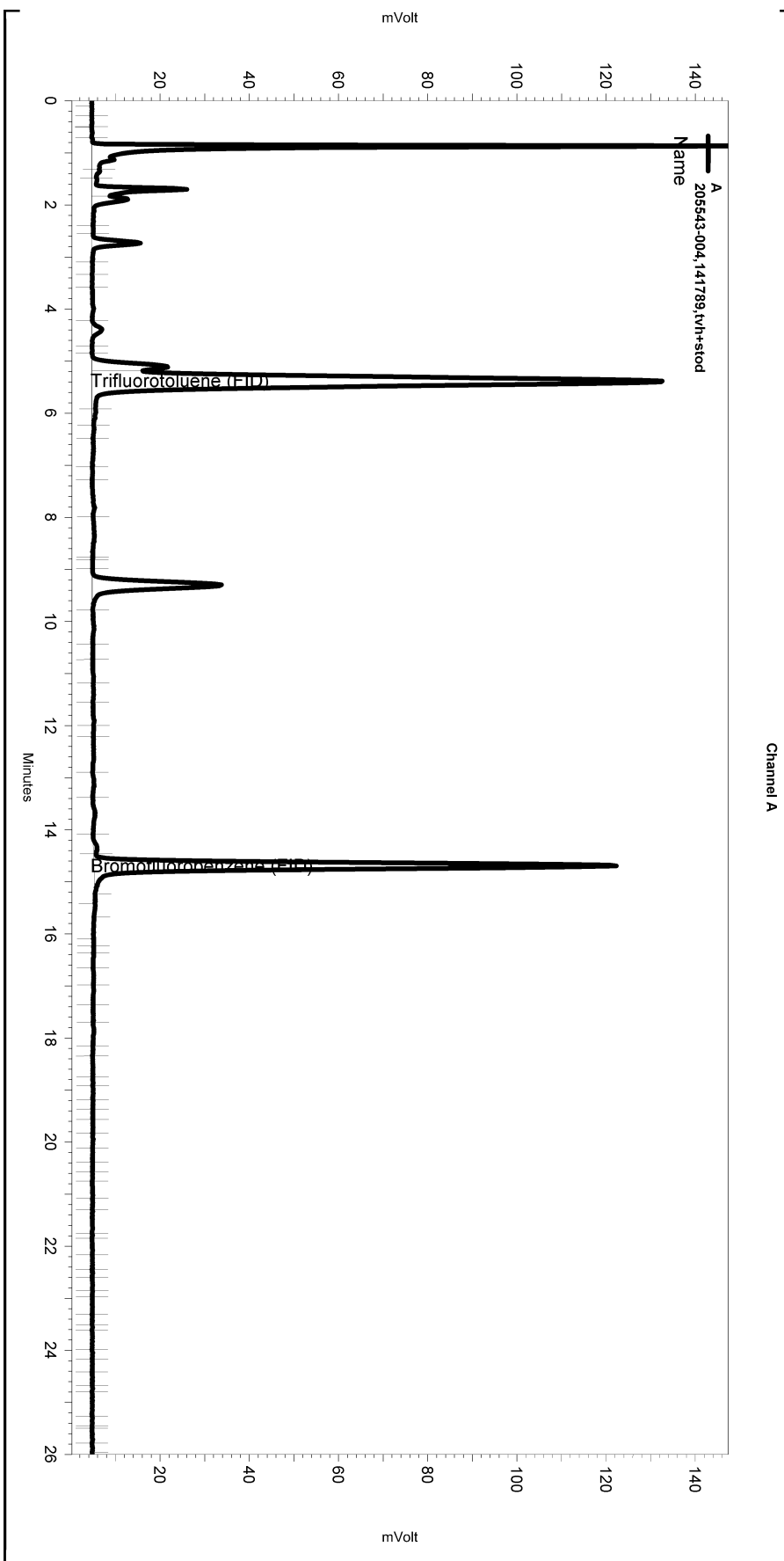
Manual Integration Fixes

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Software Version 3.1.7  
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 Analysis Date: 8/26/2008 8:02:28 AM  
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Yes	Threshold	0	0	50

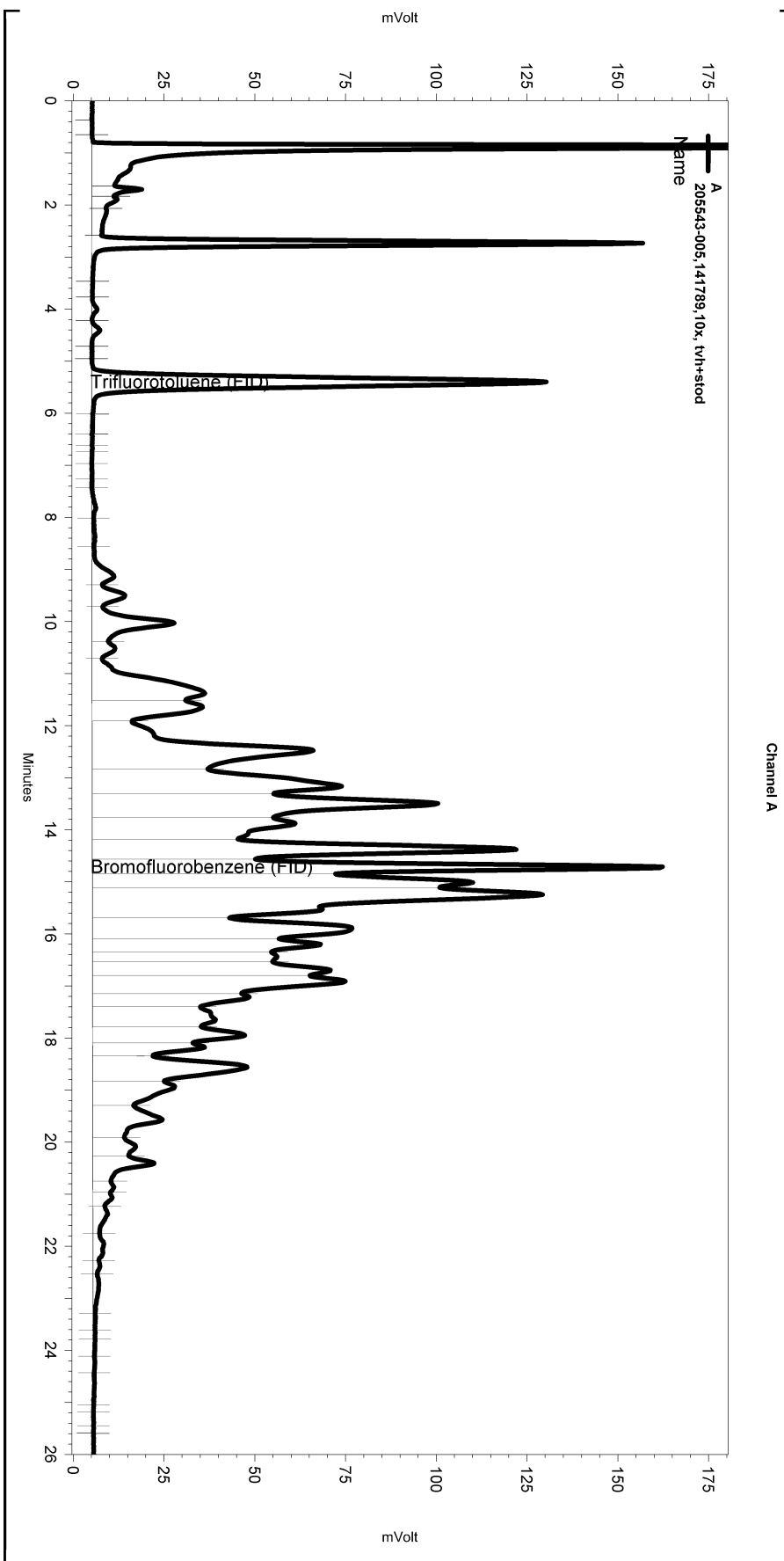
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Yes	Threshold	0	0	50

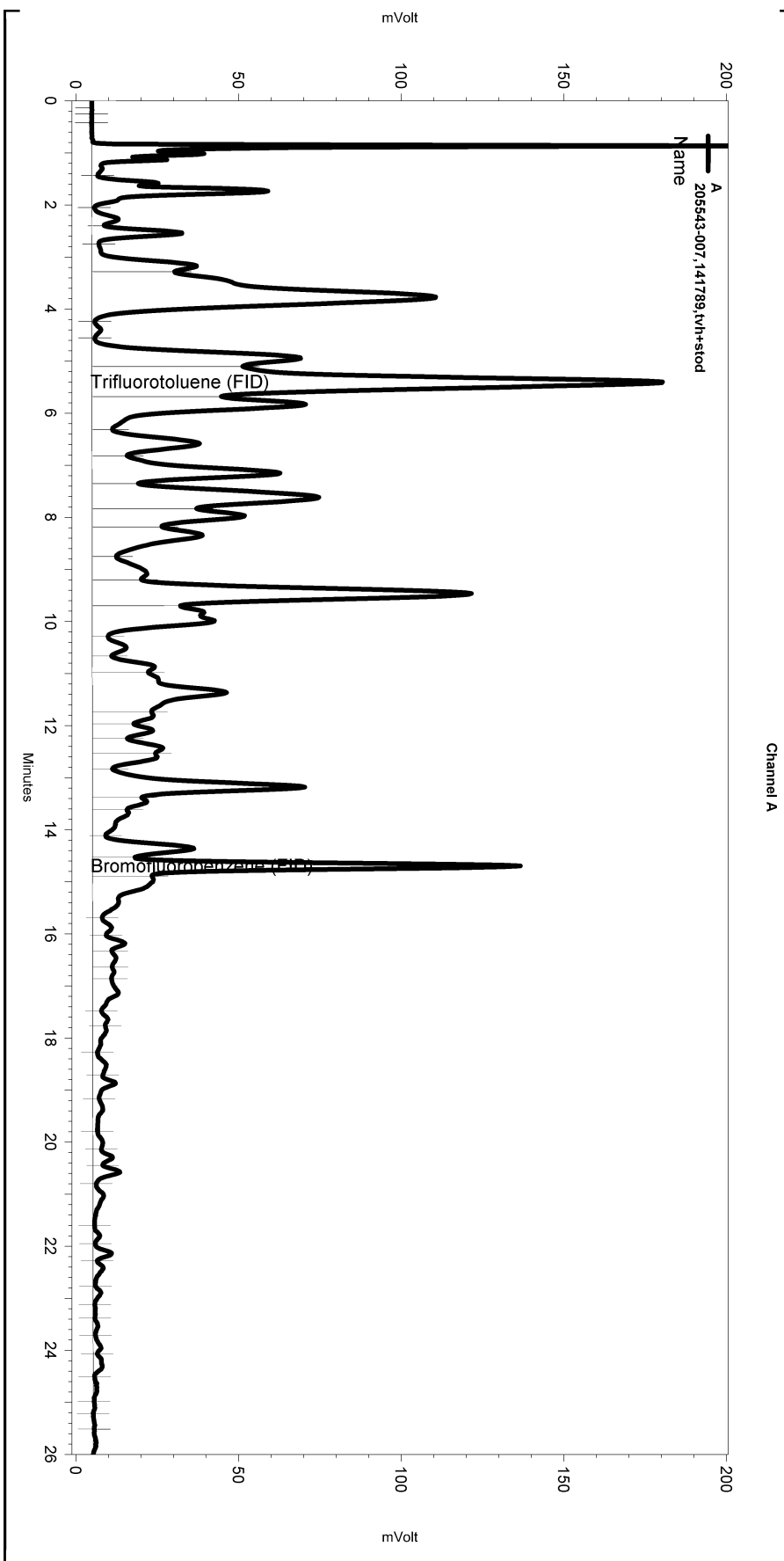
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 Manual Integration Fixes  
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 Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\238\_026  
 Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
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Software Version 3.1.7  
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 Analysis Date: 8/26/2008 8:02:51 AM  
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Yes	Threshold	0	0	50

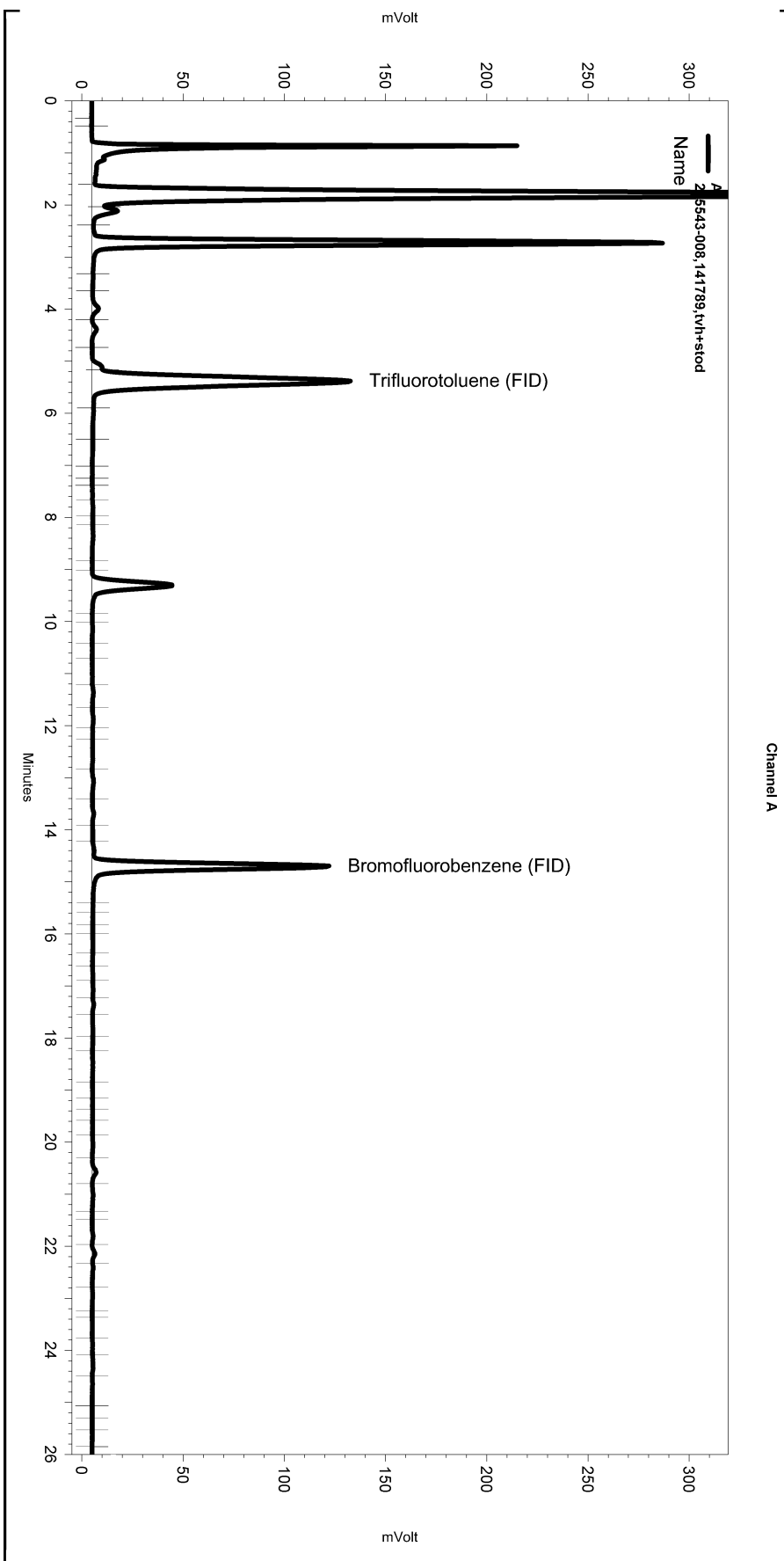
Manual Integration Fixes

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Software Version 3.1.7  
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 Analysis Date: 8/27/2008 10:43:49 AM  
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Yes	Threshold	0	0	50

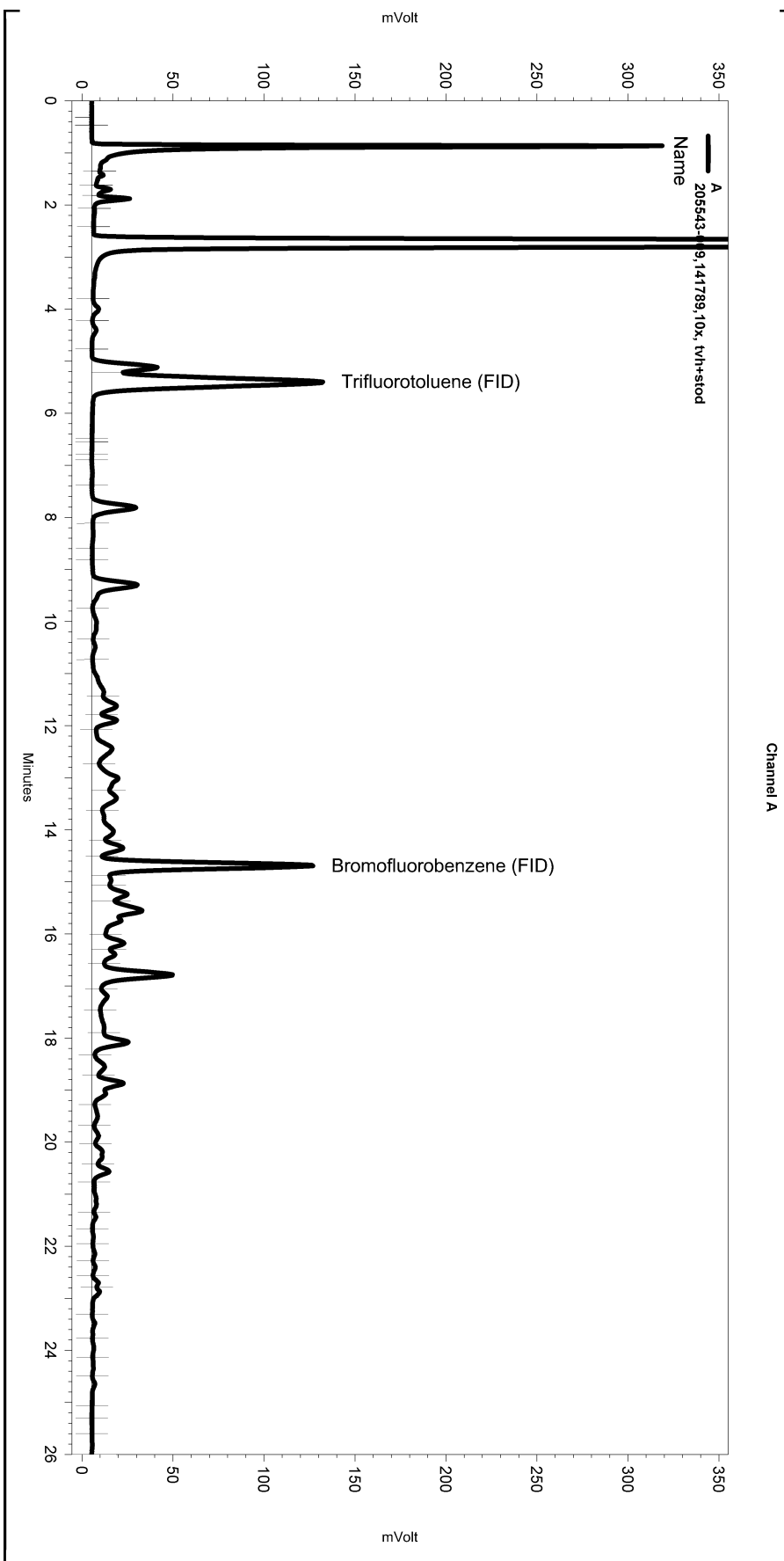
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 Manual Integration Fixes  
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 Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data238\_036  
 Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
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Software Version 3.1.7  
 Run Date: 8/26/2008 9:28:05 AM  
 Analysis Date: 8/26/2008 10:49:24 AM  
 Sample Amount: 5 Multiplier: 5  
 Vial & pH or Core ID: c1.3



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Integration Events

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Yes	Threshold	0	0	50

Manual Integration Fixes

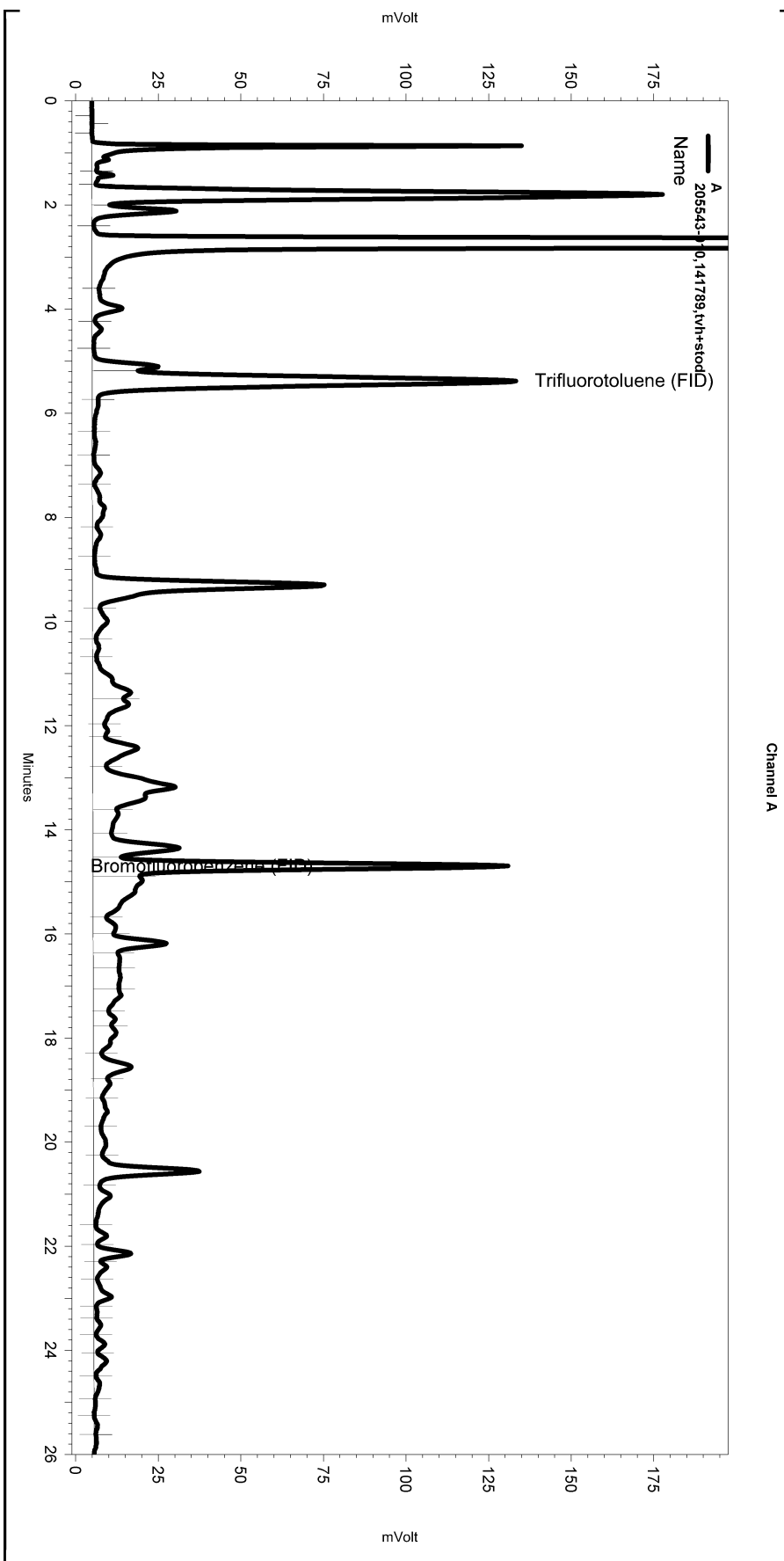
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Software Version 3.1.7  
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 Analysis Date: 8/26/2008 8:03:11 AM  
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 Integration Events  
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Yes	Threshold	0	0	50

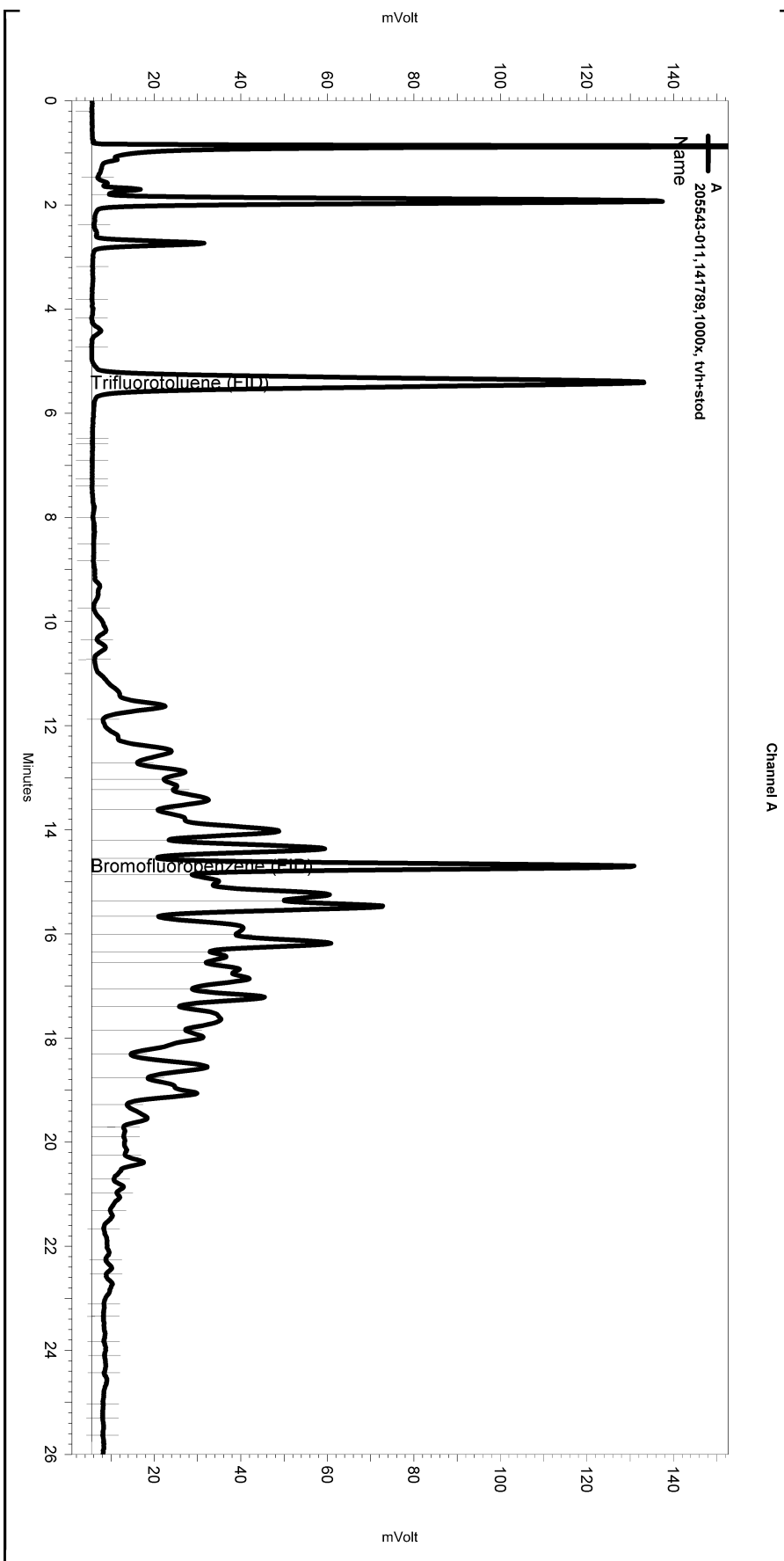
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 Manual Integration Fixes  
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Software Version 3.1.7  
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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50

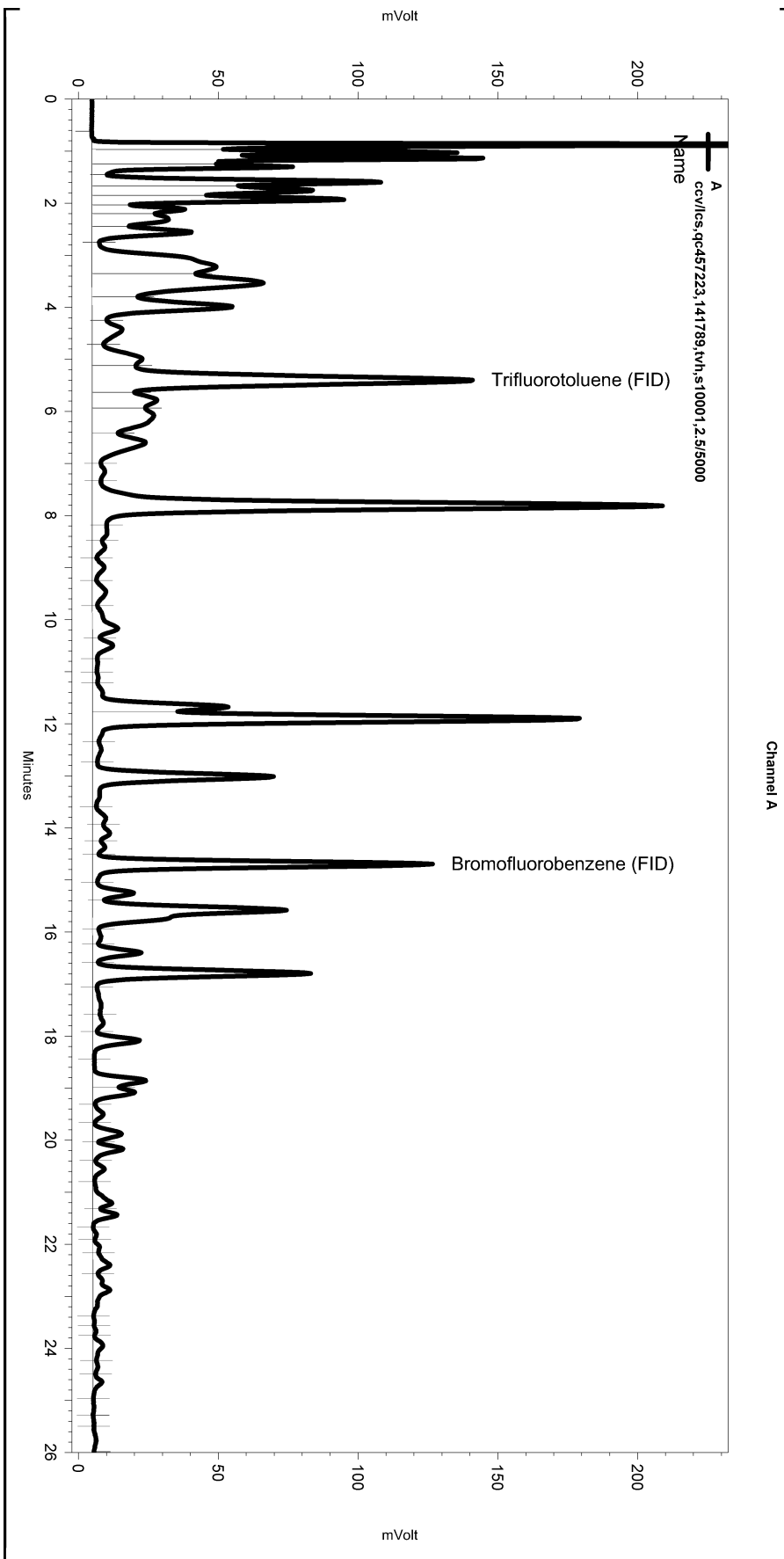
Manual Integration Fixes

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Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseline	0.082	26.017	0

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\238.seq  
 Sample Name: ccv/lcs,qc457223,141789,tvh,s10001,2.5/5000  
 Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\238\_004  
 Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe224.met

Software Version 3.1.7  
 Run Date: 8/25/2008 12:56:51 PM  
 Analysis Date: 8/26/2008 7:59:57 AM  
 Sample Amount: 5 Multiplier: 5  
 Vial & pH or Core ID: {Data Description}



-----  
 ---< General Method Parameters >-----  
 -----

No items selected for this section

-----< A >-----  
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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

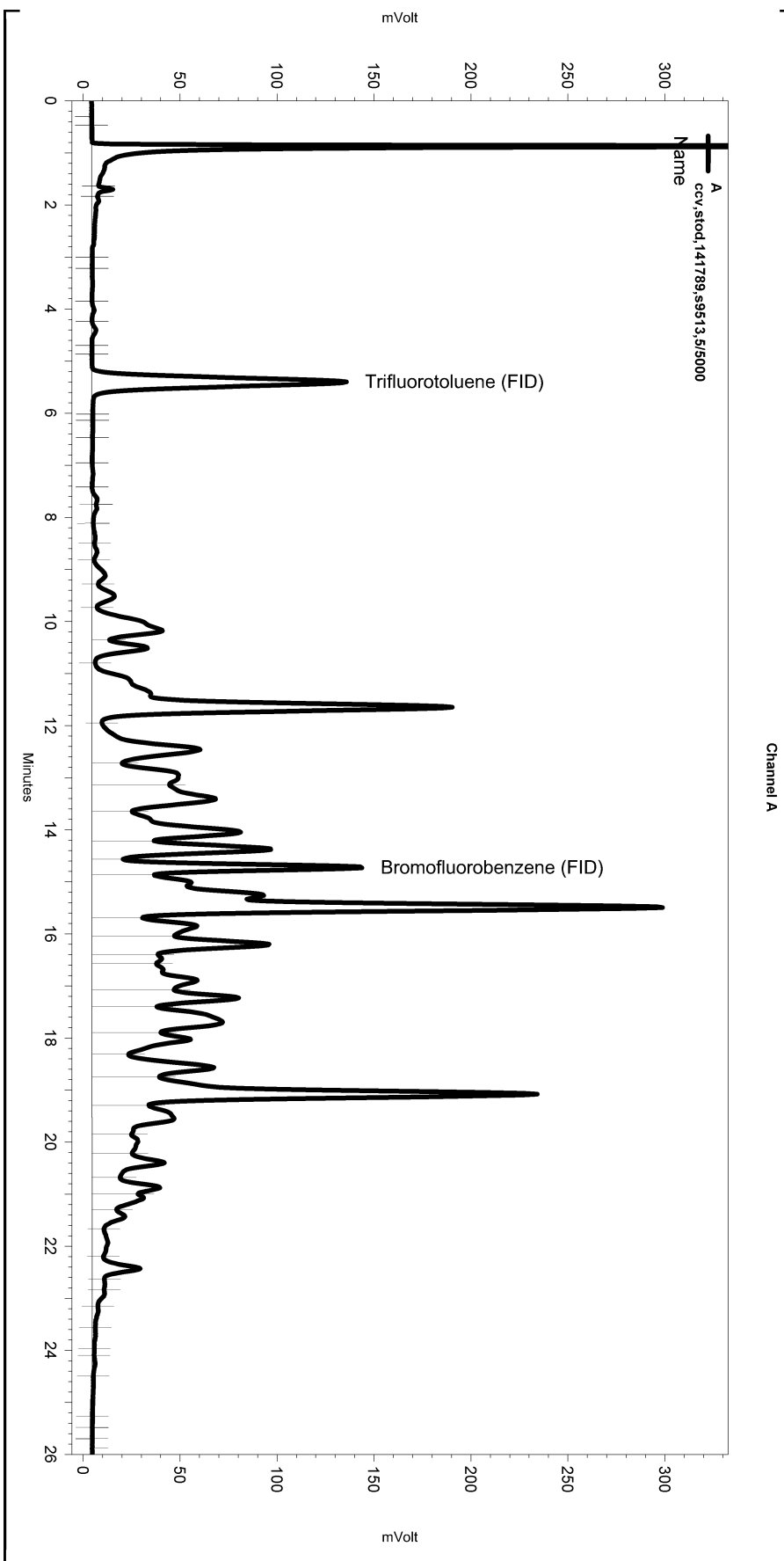
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\238\_004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence238.seq  
 Sample Name: ccv,stod,141789,s9513,5/5000  
 Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data238\_007  
 Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\TVHBTXE224.met

Software Version 3.1.7  
 Run Date: 8/25/2008 3:38:25 PM  
 Analysis Date: 8/26/2008 8:00:27 AM  
 Sample Amount: 5 Multiplier: 5  
 Vial & pH or Core ID: {Data Description}



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 ---< General Method Parameters >-----  
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No items selected for this section

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 ---< A >-----  
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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data238\_007

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-2	Batch#:	141873
Lab ID:	205543-001	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	3.0	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	15	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

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-2	Batch#:	141873
Lab ID:	205543-001	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-3	Sampled:	08/22/08
Lab ID:	205543-002	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln	Fac	Batch#
Freon 12	ND	1.0	1.000		141873
tert-Butyl Alcohol (TBA)	ND	10	1.000		141873
Chloromethane	ND	1.0	1.000		141873
Isopropyl Ether (DIPE)	ND	0.5	1.000		141873
Vinyl Chloride	ND	0.5	1.000		141873
Bromomethane	ND	1.0	1.000		141873
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000		141873
Chloroethane	ND	1.0	1.000		141873
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000		141873
Trichlorofluoromethane	ND	1.0	1.000		141873
Acetone	ND	10	1.000		141873
Freon 113	ND	2.0	1.000		141873
1,1-Dichloroethene	ND	0.5	1.000		141873
Methylene Chloride	ND	10	1.000		141873
Carbon Disulfide	ND	0.5	1.000		141873
MTBE	ND	0.5	1.000		141873
trans-1,2-Dichloroethene	ND	0.5	1.000		141873
Vinyl Acetate	ND	10	1.000		141873
1,1-Dichloroethane	ND	0.5	1.000		141873
2-Butanone	ND	10	1.000		141873
cis-1,2-Dichloroethene	ND	0.5	1.000		141873
2,2-Dichloropropane	ND	0.5	1.000		141873
Chloroform	ND	0.5	1.000		141873
Bromochloromethane	ND	0.5	1.000		141873
1,1,1-Trichloroethane	ND	0.5	1.000		141873
1,1-Dichloropropene	ND	0.5	1.000		141873
Carbon Tetrachloride	ND	0.5	1.000		141873
1,2-Dichloroethane	ND	0.5	1.000		141873
Benzene	ND	0.5	1.000		141873
Trichloroethene	1.3	0.5	1.000		141873
1,2-Dichloropropane	ND	0.5	1.000		141873
Bromodichloromethane	ND	0.5	1.000		141873
Dibromomethane	ND	0.5	1.000		141873
4-Methyl-2-Pentanone	ND	10	1.000		141873
cis-1,3-Dichloropropene	ND	0.5	1.000		141873
Toluene	ND	0.5	1.000		141873
trans-1,3-Dichloropropene	ND	0.5	1.000		141873
1,1,2-Trichloroethane	ND	0.5	1.000		141873
2-Hexanone	ND	10	1.000		141873
1,3-Dichloropropane	ND	0.5	1.000		141873
Tetrachloroethene	240	2.5	5.000		141928
Dibromochloromethane	ND	0.5	1.000		141873
1,2-Dibromoethane	ND	0.5	1.000		141873
Chlorobenzene	ND	0.5	1.000		141873
1,1,1,2-Tetrachloroethane	ND	0.5	1.000		141873
Ethylbenzene	ND	0.5	1.000		141873
m,p-Xylenes	ND	0.5	1.000		141873
o-Xylene	ND	0.5	1.000		141873
Styrene	ND	0.5	1.000		141873
Bromoform	ND	1.0	1.000		141873
Isopropylbenzene	ND	0.5	1.000		141873
1,1,2,2-Tetrachloroethane	ND	0.5	1.000		141873
1,2,3-Trichloropropane	ND	0.5	1.000		141873
Propylbenzene	ND	0.5	1.000		141873
Bromobenzene	ND	0.5	1.000		141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-3	Sampled:	08/22/08
Lab ID:	205543-002	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#
1,3,5-Trimethylbenzene	ND	0.5	1.000	141873
2-Chlorotoluene	ND	0.5	1.000	141873
4-Chlorotoluene	ND	0.5	1.000	141873
tert-Butylbenzene	ND	0.5	1.000	141873
1,2,4-Trimethylbenzene	ND	0.5	1.000	141873
sec-Butylbenzene	ND	0.5	1.000	141873
para-Isopropyl Toluene	ND	0.5	1.000	141873
1,3-Dichlorobenzene	ND	0.5	1.000	141873
1,4-Dichlorobenzene	ND	0.5	1.000	141873
n-Butylbenzene	ND	0.5	1.000	141873
1,2-Dichlorobenzene	ND	0.5	1.000	141873
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	141873
1,2,4-Trichlorobenzene	ND	0.5	1.000	141873
Hexachlorobutadiene	ND	2.0	1.000	141873
Naphthalene	ND	2.0	1.000	141873
1,2,3-Trichlorobenzene	ND	0.5	1.000	141873

Surrogate	%REC	Limits	Diln Fac	Batch#
Dibromofluoromethane	107	80-125	1.000	141873
1,2-Dichloroethane-d4	103	80-137	1.000	141873
Toluene-d8	100	80-120	1.000	141873
Bromofluorobenzene	108	80-122	1.000	141873

ND= Not Detected  
 RL= Reporting Limit



Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	141928
Lab ID:	205543-003	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	141928
Lab ID:	205543-003	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-1	Sampled:	08/22/08
Lab ID:	205543-004	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln	Fac	Batch#
Freon 12	ND	1.0	1.000		141873
tert-Butyl Alcohol (TBA)	ND	10	1.000		141873
Chloromethane	ND	1.0	1.000		141873
Isopropyl Ether (DIPE)	ND	0.5	1.000		141873
Vinyl Chloride	ND	0.5	1.000		141873
Bromomethane	ND	1.0	1.000		141873
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000		141873
Chloroethane	ND	1.0	1.000		141873
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000		141873
Trichlorofluoromethane	ND	1.0	1.000		141873
Acetone	ND	10	1.000		141873
Freon 113	ND	2.0	1.000		141873
1,1-Dichloroethene	ND	0.5	1.000		141873
Methylene Chloride	ND	10	1.000		141873
Carbon Disulfide	ND	0.5	1.000		141873
MTBE	ND	0.5	1.000		141873
trans-1,2-Dichloroethene	3.9	0.5	1.000		141873
Vinyl Acetate	ND	10	1.000		141873
1,1-Dichloroethane	ND	0.5	1.000		141873
2-Butanone	ND	10	1.000		141873
cis-1,2-Dichloroethene	14	0.5	1.000		141873
2,2-Dichloropropane	ND	0.5	1.000		141873
Chloroform	0.6	0.5	1.000		141873
Bromochloromethane	ND	0.5	1.000		141873
1,1,1-Trichloroethane	ND	0.5	1.000		141873
1,1-Dichloropropene	ND	0.5	1.000		141873
Carbon Tetrachloride	1.9	0.5	1.000		141873
1,2-Dichloroethane	ND	0.5	1.000		141873
Benzene	ND	0.5	1.000		141873
Trichloroethene	47	0.5	1.000		141873
1,2-Dichloropropane	ND	0.5	1.000		141873
Bromodichloromethane	ND	0.5	1.000		141873
Dibromomethane	ND	0.5	1.000		141873
4-Methyl-2-Pentanone	ND	10	1.000		141873
cis-1,3-Dichloropropene	ND	0.5	1.000		141873
Toluene	ND	0.5	1.000		141873
trans-1,3-Dichloropropene	ND	0.5	1.000		141873
1,1,2-Trichloroethane	ND	0.5	1.000		141873
2-Hexanone	ND	10	1.000		141873
1,3-Dichloropropane	ND	0.5	1.000		141873
Tetrachloroethene	84	1.0	2.000		141928
Dibromochloromethane	ND	0.5	1.000		141873
1,2-Dibromoethane	ND	0.5	1.000		141873
Chlorobenzene	ND	0.5	1.000		141873
1,1,1,2-Tetrachloroethane	ND	0.5	1.000		141873
Ethylbenzene	ND	0.5	1.000		141873
m,p-Xylenes	ND	0.5	1.000		141873
o-Xylene	ND	0.5	1.000		141873
Styrene	ND	0.5	1.000		141873
Bromoform	ND	1.0	1.000		141873
Isopropylbenzene	ND	0.5	1.000		141873
1,1,2,2-Tetrachloroethane	ND	0.5	1.000		141873
1,2,3-Trichloropropane	ND	0.5	1.000		141873
Propylbenzene	ND	0.5	1.000		141873
Bromobenzene	ND	0.5	1.000		141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-1	Sampled:	08/22/08
Lab ID:	205543-004	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#
1,3,5-Trimethylbenzene	ND	0.5	1.000	141873
2-Chlorotoluene	ND	0.5	1.000	141873
4-Chlorotoluene	ND	0.5	1.000	141873
tert-Butylbenzene	ND	0.5	1.000	141873
1,2,4-Trimethylbenzene	ND	0.5	1.000	141873
sec-Butylbenzene	ND	0.5	1.000	141873
para-Isopropyl Toluene	ND	0.5	1.000	141873
1,3-Dichlorobenzene	ND	0.5	1.000	141873
1,4-Dichlorobenzene	ND	0.5	1.000	141873
n-Butylbenzene	ND	0.5	1.000	141873
1,2-Dichlorobenzene	ND	0.5	1.000	141873
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	141873
1,2,4-Trichlorobenzene	ND	0.5	1.000	141873
Hexachlorobutadiene	ND	2.0	1.000	141873
Naphthalene	ND	2.0	1.000	141873
1,2,3-Trichlorobenzene	ND	0.5	1.000	141873

Surrogate	%REC	Limits	Diln Fac	Batch#
Dibromofluoromethane	106	80-125	1.000	141873
1,2-Dichloroethane-d4	104	80-137	1.000	141873
Toluene-d8	102	80-120	1.000	141873
Bromofluorobenzene	106	80-122	1.000	141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-2	Sampled:	08/22/08
Lab ID:	205543-005	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln	Fac	Batch#
Freon 12	ND	1.0	1.000		141873
tert-Butyl Alcohol (TBA)	ND	10	1.000		141873
Chloromethane	ND	1.0	1.000		141873
Isopropyl Ether (DIPE)	ND	0.5	1.000		141873
Vinyl Chloride	89	0.5	1.000		141873
Bromomethane	ND	1.0	1.000		141873
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000		141873
Chloroethane	ND	1.0	1.000		141873
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000		141873
Trichlorofluoromethane	ND	1.0	1.000		141873
Acetone	ND	10	1.000		141873
Freon 113	ND	2.0	1.000		141873
1,1-Dichloroethene	0.6	0.5	1.000		141873
Methylene Chloride	ND	10	1.000		141873
Carbon Disulfide	ND	0.5	1.000		141873
MTBE	ND	8.3	16.67		141928
trans-1,2-Dichloroethene	8.3	0.5	1.000		141873
Vinyl Acetate	ND	10	1.000		141873
1,1-Dichloroethane	0.6	0.5	1.000		141873
2-Butanone	ND	10	1.000		141873
cis-1,2-Dichloroethene	1,400	8.3	16.67		141928
2,2-Dichloropropane	ND	0.5	1.000		141873
Chloroform	ND	0.5	1.000		141873
Bromochloromethane	ND	0.5	1.000		141873
1,1,1-Trichloroethane	ND	0.5	1.000		141873
1,1-Dichloropropene	ND	0.5	1.000		141873
Carbon Tetrachloride	ND	0.5	1.000		141873
1,2-Dichloroethane	ND	0.5	1.000		141873
Benzene	5.9	0.5	1.000		141873
Trichloroethene	ND	0.5	1.000		141873
1,2-Dichloropropane	0.9	0.5	1.000		141873
Bromodichloromethane	ND	0.5	1.000		141873
Dibromomethane	ND	0.5	1.000		141873
4-Methyl-2-Pentanone	ND	10	1.000		141873
cis-1,3-Dichloropropene	ND	0.5	1.000		141873
Toluene	1.7	0.5	1.000		141873
trans-1,3-Dichloropropene	ND	0.5	1.000		141873
1,1,2-Trichloroethane	ND	0.5	1.000		141873
2-Hexanone	ND	10	1.000		141873
1,3-Dichloropropane	ND	0.5	1.000		141873
Tetrachloroethene	ND	8.3	16.67		141928
Dibromochloromethane	ND	0.5	1.000		141873
1,2-Dibromoethane	ND	0.5	1.000		141873
Chlorobenzene	ND	0.5	1.000		141873
1,1,1,2-Tetrachloroethane	ND	0.5	1.000		141873
Ethylbenzene	ND	0.5	1.000		141873
m,p-Xylenes	ND	0.5	1.000		141873
o-Xylene	ND	0.5	1.000		141873
Styrene	ND	0.5	1.000		141873
Bromoform	ND	1.0	1.000		141873
Isopropylbenzene	ND	0.5	1.000		141873
1,1,2,2-Tetrachloroethane	ND	0.5	1.000		141873
1,2,3-Trichloropropane	ND	0.5	1.000		141873
Propylbenzene	ND	0.5	1.000		141873
Bromobenzene	ND	0.5	1.000		141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-2	Sampled:	08/22/08
Lab ID:	205543-005	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#
1,3,5-Trimethylbenzene	ND	0.5	1.000	141873
2-Chlorotoluene	ND	0.5	1.000	141873
4-Chlorotoluene	ND	0.5	1.000	141873
tert-Butylbenzene	ND	0.5	1.000	141873
1,2,4-Trimethylbenzene	ND	0.5	1.000	141873
sec-Butylbenzene	0.6	0.5	1.000	141873
para-Isopropyl Toluene	ND	0.5	1.000	141873
1,3-Dichlorobenzene	ND	0.5	1.000	141873
1,4-Dichlorobenzene	ND	0.5	1.000	141873
n-Butylbenzene	ND	0.5	1.000	141873
1,2-Dichlorobenzene	ND	0.5	1.000	141873
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	141873
1,2,4-Trichlorobenzene	ND	0.5	1.000	141873
Hexachlorobutadiene	ND	2.0	1.000	141873
Naphthalene	ND	2.0	1.000	141873
1,2,3-Trichlorobenzene	ND	0.5	1.000	141873

Surrogate	%REC	Limits	Diln Fac	Batch#
Dibromofluoromethane	107	80-125	1.000	141873
1,2-Dichloroethane-d4	105	80-137	1.000	141873
Toluene-d8	102	80-120	1.000	141873
Bromofluorobenzene	104	80-122	1.000	141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-3	Batch#:	141928
Lab ID:	205543-006	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	ND	0.5
Tetrachloroethene	1.3	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

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-3	Batch#:	141928
Lab ID:	205543-006	Sampled:	08/22/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/28/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected  
 RL= Reporting Limit



Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-4	Batch#:	142005
Lab ID:	205543-007	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/31/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	2.9	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	0.9	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

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-4	Batch#:	142005
Lab ID:	205543-007	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/31/08
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	1.0	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	0.9	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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	118	80-122

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-1	Batch#:	141955
Lab ID:	205543-008	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/29/08
Diln Fac:	5.000		

Analyte	Result	RL
Freon 12	ND	5.0
tert-Butyl Alcohol (TBA)	ND	50
Chloromethane	ND	5.0
Isopropyl Ether (DIPE)	5.9	2.5
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	2.5
Chloroethane	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	2.5
Trichlorofluoromethane	ND	5.0
Acetone	ND	50
Freon 113	ND	10
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	50
Carbon Disulfide	ND	2.5
MTBE	390	2.5
trans-1,2-Dichloroethene	ND	2.5
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	2.5
2-Butanone	ND	50
cis-1,2-Dichloroethene	250	2.5
2,2-Dichloropropane	ND	2.5
Chloroform	ND	2.5
Bromochloromethane	ND	2.5
1,1,1-Trichloroethane	ND	2.5
1,1-Dichloropropene	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Benzene	ND	2.5
Trichloroethene	8.5	2.5
1,2-Dichloropropane	3.1	2.5
Bromodichloromethane	ND	2.5
Dibromomethane	ND	2.5
4-Methyl-2-Pentanone	ND	50
cis-1,3-Dichloropropene	ND	2.5
Toluene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
2-Hexanone	ND	50
1,3-Dichloropropane	ND	2.5
Tetrachloroethene	110	2.5
Dibromochloromethane	ND	2.5
1,2-Dibromoethane	ND	2.5
Chlorobenzene	ND	2.5
1,1,1,2-Tetrachloroethane	ND	2.5
Ethylbenzene	ND	2.5
m,p-Xylenes	ND	2.5
o-Xylene	ND	2.5
Styrene	ND	2.5
Bromoform	ND	5.0
Isopropylbenzene	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,2,3-Trichloropropane	ND	2.5
Propylbenzene	ND	2.5

ND= Not Detected  
 RL= Reporting Limit

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-1	Batch#:	141955
Lab ID:	205543-008	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08
Units:	ug/L	Analyzed:	08/29/08
Diln Fac:	5.000		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Bromobenzene	ND	2.5
1,3,5-Trimethylbenzene	ND	2.5
2-Chlorotoluene	ND	2.5
4-Chlorotoluene	ND	2.5
tert-Butylbenzene	ND	2.5
1,2,4-Trimethylbenzene	ND	2.5
sec-Butylbenzene	ND	2.5
para-Isopropyl Toluene	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
n-Butylbenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5
1,2-Dibromo-3-Chloropropane	ND	10
1,2,4-Trichlorobenzene	ND	2.5
Hexachlorobutadiene	ND	10
Naphthalene	ND	10
1,2,3-Trichlorobenzene	ND	2.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	115	80-122

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-2	Sampled:	08/21/08
Lab ID:	205543-009	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln	Fac	Batch#
Freon 12	ND	13	12.50		141873
tert-Butyl Alcohol (TBA)	ND	130	12.50		141873
Chloromethane	ND	13	12.50		141873
Isopropyl Ether (DIPE)	ND	6.3	12.50		141873
Vinyl Chloride	ND	6.3	12.50		141873
Bromomethane	ND	13	12.50		141873
Ethyl tert-Butyl Ether (ETBE)	ND	6.3	12.50		141873
Chloroethane	ND	13	12.50		141873
Methyl tert-Amyl Ether (TAME)	ND	6.3	12.50		141873
Trichlorofluoromethane	ND	13	12.50		141873
Acetone	ND	130	12.50		141873
Freon 113	ND	25	12.50		141873
1,1-Dichloroethene	27	6.3	12.50		141873
Methylene Chloride	ND	130	12.50		141873
Carbon Disulfide	ND	6.3	12.50		141873
MTBE	ND	6.3	12.50		141873
trans-1,2-Dichloroethene	160	6.3	12.50		141873
Vinyl Acetate	ND	130	12.50		141873
1,1-Dichloroethane	ND	6.3	12.50		141873
2-Butanone	ND	130	12.50		141873
cis-1,2-Dichloroethene	15,000	83	166.7		141928
2,2-Dichloropropane	ND	6.3	12.50		141873
Chloroform	ND	6.3	12.50		141873
Bromochloromethane	ND	6.3	12.50		141873
1,1,1-Trichloroethane	ND	6.3	12.50		141873
1,1-Dichloropropene	ND	6.3	12.50		141873
Carbon Tetrachloride	ND	6.3	12.50		141873
1,2-Dichloroethane	ND	6.3	12.50		141873
Benzene	16	6.3	12.50		141873
Trichloroethene	870	6.3	12.50		141873
1,2-Dichloropropane	ND	6.3	12.50		141873
Bromodichloromethane	ND	6.3	12.50		141873
Dibromomethane	ND	6.3	12.50		141873
4-Methyl-2-Pentanone	ND	130	12.50		141873
cis-1,3-Dichloropropene	ND	6.3	12.50		141873
Toluene	120	6.3	12.50		141873
trans-1,3-Dichloropropene	ND	6.3	12.50		141873
1,1,2-Trichloroethane	ND	6.3	12.50		141873
2-Hexanone	ND	130	12.50		141873
1,3-Dichloropropane	ND	6.3	12.50		141873
Tetrachloroethene	620	6.3	12.50		141873
Dibromochloromethane	ND	6.3	12.50		141873
1,2-Dibromoethane	ND	6.3	12.50		141873
Chlorobenzene	ND	6.3	12.50		141873
1,1,1,2-Tetrachloroethane	ND	6.3	12.50		141873
Ethylbenzene	14	6.3	12.50		141873
m,p-Xylenes	58	6.3	12.50		141873
o-Xylene	36	6.3	12.50		141873
Styrene	ND	6.3	12.50		141873
Bromoform	ND	13	12.50		141873
Isopropylbenzene	16	6.3	12.50		141873
1,1,2,2-Tetrachloroethane	ND	6.3	12.50		141873
1,2,3-Trichloropropane	ND	6.3	12.50		141873
Propylbenzene	26	6.3	12.50		141873
Bromobenzene	ND	6.3	12.50		141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-2	Sampled:	08/21/08
Lab ID:	205543-009	Received:	08/22/08
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL	Diln Fac	Batch#
1,3,5-Trimethylbenzene	51	6.3	12.50	141873
2-Chlorotoluene	ND	6.3	12.50	141873
4-Chlorotoluene	ND	6.3	12.50	141873
tert-Butylbenzene	ND	6.3	12.50	141873
1,2,4-Trimethylbenzene	180	6.3	12.50	141873
sec-Butylbenzene	9.0	6.3	12.50	141873
para-Isopropyl Toluene	ND	6.3	12.50	141873
1,3-Dichlorobenzene	ND	6.3	12.50	141873
1,4-Dichlorobenzene	ND	6.3	12.50	141873
n-Butylbenzene	ND	6.3	12.50	141873
1,2-Dichlorobenzene	ND	6.3	12.50	141873
1,2-Dibromo-3-Chloropropane	ND	25	12.50	141873
1,2,4-Trichlorobenzene	ND	6.3	12.50	141873
Hexachlorobutadiene	ND	25	12.50	141873
Naphthalene	ND	25	12.50	141873
1,2,3-Trichlorobenzene	ND	6.3	12.50	141873

Surrogate	%REC	Limits	Diln Fac	Batch#
Dibromofluoromethane	97	80-125	12.50	141873
1,2-Dichloroethane-d4	90	80-137	12.50	141873
Toluene-d8	98	80-120	12.50	141873
Bromofluorobenzene	97	80-122	12.50	141873

ND= Not Detected  
 RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-3	Units:	ug/L
Lab ID:	205543-010	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	25	25.00	142030	09/02/08
tert-Butyl Alcohol (TBA)	ND	250	25.00	142030	09/02/08
Chloromethane	ND	25	25.00	142030	09/02/08
Isopropyl Ether (DIPE)	16	13	25.00	142030	09/02/08
Vinyl Chloride	ND	13	25.00	142030	09/02/08
Bromomethane	ND	25	25.00	142030	09/02/08
Ethyl tert-Butyl Ether (ETBE)	ND	13	25.00	142030	09/02/08
Chloroethane	ND	25	25.00	142030	09/02/08
Methyl tert-Amyl Ether (TAME)	ND	13	25.00	142030	09/02/08
Trichlorofluoromethane	ND	25	25.00	142030	09/02/08
Acetone	ND	250	25.00	142030	09/02/08
Freon 113	ND	50	25.00	142030	09/02/08
1,1-Dichloroethene	ND	13	25.00	142030	09/02/08
Methylene Chloride	ND	250	25.00	142030	09/02/08
Carbon Disulfide	ND	13	25.00	142030	09/02/08
MTBE	220	13	25.00	142030	09/02/08
trans-1,2-Dichloroethene	19	13	25.00	142030	09/02/08
Vinyl Acetate	ND	250	25.00	142030	09/02/08
1,1-Dichloroethane	ND	13	25.00	142030	09/02/08
2-Butanone	ND	250	25.00	142030	09/02/08
cis-1,2-Dichloroethene	2,100	36	71.43	142005	08/31/08
2,2-Dichloropropane	ND	13	25.00	142030	09/02/08
Chloroform	ND	13	25.00	142030	09/02/08
Bromochloromethane	ND	13	25.00	142030	09/02/08
1,1,1-Trichloroethane	ND	13	25.00	142030	09/02/08
1,1-Dichloropropene	ND	13	25.00	142030	09/02/08
Carbon Tetrachloride	ND	13	25.00	142030	09/02/08
1,2-Dichloroethane	ND	13	25.00	142030	09/02/08
Benzene	ND	13	25.00	142030	09/02/08
Trichloroethene	30	13	25.00	142030	09/02/08
1,2-Dichloropropane	ND	13	25.00	142030	09/02/08
Bromodichloromethane	ND	13	25.00	142030	09/02/08
Dibromomethane	ND	13	25.00	142030	09/02/08
4-Methyl-2-Pentanone	ND	250	25.00	142030	09/02/08
cis-1,3-Dichloropropene	ND	13	25.00	142030	09/02/08
Toluene	ND	13	25.00	142030	09/02/08
trans-1,3-Dichloropropene	ND	13	25.00	142030	09/02/08
1,1,2-Trichloroethane	ND	13	25.00	142030	09/02/08
2-Hexanone	ND	250	25.00	142030	09/02/08

ND= Not Detected

RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-3	Units:	ug/L
Lab ID:	205543-010	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
1,3-Dichloropropane	ND	13	25.00	142030	09/02/08
Tetrachloroethene	160	13	25.00	142030	09/02/08
Dibromochloromethane	ND	13	25.00	142030	09/02/08
1,2-Dibromoethane	ND	13	25.00	142030	09/02/08
Chlorobenzene	ND	13	25.00	142030	09/02/08
1,1,1,2-Tetrachloroethane	ND	13	25.00	142030	09/02/08
Ethylbenzene	ND	13	25.00	142030	09/02/08
m,p-Xylenes	ND	13	25.00	142030	09/02/08
o-Xylene	ND	13	25.00	142030	09/02/08
Styrene	ND	13	25.00	142030	09/02/08
Bromoform	ND	25	25.00	142030	09/02/08
Isopropylbenzene	ND	13	25.00	142030	09/02/08
1,1,2,2-Tetrachloroethane	ND	13	25.00	142030	09/02/08
1,2,3-Trichloropropane	ND	13	25.00	142030	09/02/08
Propylbenzene	ND	13	25.00	142030	09/02/08
Bromobenzene	ND	13	25.00	142030	09/02/08
1,3,5-Trimethylbenzene	ND	13	25.00	142030	09/02/08
2-Chlorotoluene	ND	13	25.00	142030	09/02/08
4-Chlorotoluene	ND	13	25.00	142030	09/02/08
tert-Butylbenzene	ND	13	25.00	142030	09/02/08
1,2,4-Trimethylbenzene	ND	13	25.00	142030	09/02/08
sec-Butylbenzene	ND	13	25.00	142030	09/02/08
para-Isopropyl Toluene	ND	13	25.00	142030	09/02/08
1,3-Dichlorobenzene	ND	13	25.00	142030	09/02/08
1,4-Dichlorobenzene	ND	13	25.00	142030	09/02/08
n-Butylbenzene	ND	13	25.00	142030	09/02/08
1,2-Dichlorobenzene	ND	13	25.00	142030	09/02/08
1,2-Dibromo-3-Chloropropane	ND	50	25.00	142030	09/02/08
1,2,4-Trichlorobenzene	ND	13	25.00	142030	09/02/08
Hexachlorobutadiene	ND	50	25.00	142030	09/02/08
Naphthalene	ND	50	25.00	142030	09/02/08
1,2,3-Trichlorobenzene	ND	13	25.00	142030	09/02/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	104	80-125	25.00	142030	09/02/08
1,2-Dichloroethane-d4	107	80-137	25.00	142030	09/02/08
Toluene-d8	100	80-120	25.00	142030	09/02/08
Bromofluorobenzene	115	80-122	25.00	142030	09/02/08

ND= Not Detected  
 RL= Reporting Limit



Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	B-10	Units:	ug/L
Lab ID:	205543-011	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	170	166.7	141928	08/28/08
tert-Butyl Alcohol (TBA)	ND	1,700	166.7	141928	08/28/08
Chloromethane	ND	170	166.7	141928	08/28/08
Isopropyl Ether (DIPE)	ND	83	166.7	141928	08/28/08
Vinyl Chloride	ND	83	166.7	141928	08/28/08
Bromomethane	ND	170	166.7	141928	08/28/08
Ethyl tert-Butyl Ether (ETBE)	ND	83	166.7	141928	08/28/08
Chloroethane	ND	170	166.7	141928	08/28/08
Methyl tert-Amyl Ether (TAME)	ND	83	166.7	141928	08/28/08
Trichlorofluoromethane	ND	170	166.7	141928	08/28/08
Acetone	ND	1,700	166.7	141928	08/28/08
Freon 113	ND	330	166.7	141928	08/28/08
1,1-Dichloroethene	ND	83	166.7	141928	08/28/08
Methylene Chloride	ND	1,700	166.7	141928	08/28/08
Carbon Disulfide	ND	83	166.7	141928	08/28/08
MTBE	ND	83	166.7	141928	08/28/08
trans-1,2-Dichloroethene	96	83	166.7	141928	08/28/08
Vinyl Acetate	ND	1,700	166.7	141928	08/28/08
1,1-Dichloroethane	ND	83	166.7	141928	08/28/08
2-Butanone	ND	1,700	166.7	141928	08/28/08
cis-1,2-Dichloroethene	17,000	170	333.3	142005	08/31/08
2,2-Dichloropropane	ND	83	166.7	141928	08/28/08
Chloroform	ND	83	166.7	141928	08/28/08
Bromochloromethane	ND	83	166.7	141928	08/28/08
1,1,1-Trichloroethane	ND	83	166.7	141928	08/28/08
1,1-Dichloropropene	ND	83	166.7	141928	08/28/08
Carbon Tetrachloride	ND	83	166.7	141928	08/28/08
1,2-Dichloroethane	ND	83	166.7	141928	08/28/08
Benzene	ND	83	166.7	141928	08/28/08
Trichloroethene	970	83	166.7	141928	08/28/08
1,2-Dichloropropane	ND	83	166.7	141928	08/28/08
Bromodichloromethane	ND	83	166.7	141928	08/28/08
Dibromomethane	ND	83	166.7	141928	08/28/08
4-Methyl-2-Pentanone	ND	1,700	166.7	141928	08/28/08
cis-1,3-Dichloropropene	ND	83	166.7	141928	08/28/08
Toluene	ND	83	166.7	141928	08/28/08
trans-1,3-Dichloropropene	ND	83	166.7	141928	08/28/08
1,1,2-Trichloroethane	ND	83	166.7	141928	08/28/08
2-Hexanone	ND	1,700	166.7	141928	08/28/08

ND= Not Detected

RL= Reporting Limit

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	B-10	Units:	ug/L
Lab ID:	205543-011	Sampled:	08/21/08
Matrix:	Water	Received:	08/22/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
1,3-Dichloropropane	ND	83	166.7	141928	08/28/08
Tetrachloroethene	1,100	83	166.7	141928	08/28/08
Dibromochloromethane	ND	83	166.7	141928	08/28/08
1,2-Dibromoethane	ND	83	166.7	141928	08/28/08
Chlorobenzene	ND	83	166.7	141928	08/28/08
1,1,1,2-Tetrachloroethane	ND	83	166.7	141928	08/28/08
Ethylbenzene	ND	83	166.7	141928	08/28/08
m,p-Xylenes	ND	83	166.7	141928	08/28/08
o-Xylene	ND	83	166.7	141928	08/28/08
Styrene	ND	83	166.7	141928	08/28/08
Bromoform	ND	170	166.7	141928	08/28/08
Isopropylbenzene	ND	83	166.7	141928	08/28/08
1,1,2,2-Tetrachloroethane	ND	83	166.7	141928	08/28/08
1,2,3-Trichloropropane	ND	83	166.7	141928	08/28/08
Propylbenzene	ND	83	166.7	141928	08/28/08
Bromobenzene	ND	83	166.7	141928	08/28/08
1,3,5-Trimethylbenzene	ND	83	166.7	141928	08/28/08
2-Chlorotoluene	ND	83	166.7	141928	08/28/08
4-Chlorotoluene	ND	83	166.7	141928	08/28/08
tert-Butylbenzene	ND	83	166.7	141928	08/28/08
1,2,4-Trimethylbenzene	90	83	166.7	141928	08/28/08
sec-Butylbenzene	ND	83	166.7	141928	08/28/08
para-Isopropyl Toluene	ND	83	166.7	141928	08/28/08
1,3-Dichlorobenzene	ND	83	166.7	141928	08/28/08
1,4-Dichlorobenzene	ND	83	166.7	141928	08/28/08
n-Butylbenzene	ND	83	166.7	141928	08/28/08
1,2-Dichlorobenzene	ND	83	166.7	141928	08/28/08
1,2-Dibromo-3-Chloropropane	ND	330	166.7	141928	08/28/08
1,2,4-Trichlorobenzene	ND	83	166.7	141928	08/28/08
Hexachlorobutadiene	ND	330	166.7	141928	08/28/08
Naphthalene	ND	330	166.7	141928	08/28/08
1,2,3-Trichlorobenzene	ND	83	166.7	141928	08/28/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	103	80-125	166.7	141928	08/28/08
1,2-Dichloroethane-d4	102	80-137	166.7	141928	08/28/08
Toluene-d8	103	80-120	166.7	141928	08/28/08
Bromofluorobenzene	104	80-122	166.7	141928	08/28/08

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	141873
Units:	ug/L	Analyzed:	08/27/08
Diln Fac:	1.000		

Type: BS Lab ID: QC457594

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	171.8 b	172 *	59-152
Isopropyl Ether (DIPE)	20.00	23.05	115	67-126
Ethyl tert-Butyl Ether (ETBE)	20.00	25.03	125	69-127
Methyl tert-Amyl Ether (TAME)	20.00	23.60	118	80-122
1,1-Dichloroethene	20.00	21.71	109	73-133
Benzene	20.00	18.80	94	80-120
Trichloroethene	20.00	21.78	109	80-120
Toluene	20.00	20.02	100	80-120
Chlorobenzene	20.00	19.63	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-122

Type: BSD Lab ID: QC457595

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	161.1 b	161 *	59-152	6	20
Isopropyl Ether (DIPE)	20.00	23.16	116	67-126	0	20
Ethyl tert-Butyl Ether (ETBE)	20.00	24.90	125	69-127	1	20
Methyl tert-Amyl Ether (TAME)	20.00	23.34	117	80-122	1	20
1,1-Dichloroethene	20.00	21.85	109	73-133	1	20
Benzene	20.00	19.17	96	80-120	2	20
Trichloroethene	20.00	22.50	112	80-120	3	20
Toluene	20.00	20.52	103	80-120	2	20
Chlorobenzene	20.00	19.88	99	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-122

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457682	Batch#:	141873
Matrix:	Water	Analyzed:	08/27/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457682	Batch#:	141873
Matrix:	Water	Analyzed:	08/27/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	98	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457866	Batch#:	141928
Matrix:	Water	Analyzed:	08/28/08
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457866	Batch#:	141928
Matrix:	Water	Analyzed:	08/28/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	141928
Units:	ug/L	Analyzed:	08/28/08
Diln Fac:	1.000		

Type: BS Lab ID: QC457867

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	151.8 b	152	59-152
Isopropyl Ether (DIPE)	20.00	24.42	122	67-126
Ethyl tert-Butyl Ether (ETBE)	20.00	25.58	128 *	69-127
Methyl tert-Amyl Ether (TAME)	20.00	23.41	117	80-122
1,1-Dichloroethene	20.00	23.15	116	73-133
Benzene	20.00	19.17	96	80-120
Trichloroethene	20.00	21.16	106	80-120
Toluene	20.00	19.69	98	80-120
Chlorobenzene	20.00	18.92	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	91	80-122

Type: BSD Lab ID: QC457868

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	147.7 b	148	59-152	3	20
Isopropyl Ether (DIPE)	20.00	24.41	122	67-126	0	20
Ethyl tert-Butyl Ether (ETBE)	20.00	26.02	130 *	69-127	2	20
Methyl tert-Amyl Ether (TAME)	20.00	24.12	121	80-122	3	20
1,1-Dichloroethene	20.00	25.06	125	73-133	8	20
Benzene	20.00	20.20	101	80-120	5	20
Trichloroethene	20.00	22.82	114	80-120	8	20
Toluene	20.00	20.63	103	80-120	5	20
Chlorobenzene	20.00	19.56	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-122

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference



**Batch QC Report**

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457966	Batch#:	141955
Matrix:	Water	Analyzed:	08/29/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC457966	Batch#:	141955
Matrix:	Water	Analyzed:	08/29/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	141955
Units:	ug/L	Analyzed:	08/29/08
Diln Fac:	1.000		

Type: BS Lab ID: QC457967

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	108.9	87	59-152
Isopropyl Ether (DIPE)	25.00	20.65	83	67-126
Ethyl tert-Butyl Ether (ETBE)	25.00	21.04	84	69-127
Methyl tert-Amyl Ether (TAME)	25.00	24.22	97	80-122
1,1-Dichloroethene	25.00	20.64	83	73-133
Benzene	25.00	23.59	94	80-120
Trichloroethene	25.00	22.66	91	80-120
Toluene	25.00	22.65	91	80-120
Chlorobenzene	25.00	26.16	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	101	80-122

Type: BSD Lab ID: QC457968

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	104.9	84	59-152	4	20
Isopropyl Ether (DIPE)	25.00	18.99	76	67-126	8	20
Ethyl tert-Butyl Ether (ETBE)	25.00	19.61	78	69-127	7	20
Methyl tert-Amyl Ether (TAME)	25.00	22.89	92	80-122	6	20
1,1-Dichloroethene	25.00	19.43	78	73-133	6	20
Benzene	25.00	21.99	88	80-120	7	20
Trichloroethene	25.00	20.97	84	80-120	8	20
Toluene	25.00	20.84	83	80-120	8	20
Chlorobenzene	25.00	24.32	97	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	101	80-122

**Batch QC Report**

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458162	Batch#:	142005
Matrix:	Water	Analyzed:	08/31/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458162	Batch#:	142005
Matrix:	Water	Analyzed:	08/31/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	142005
Units:	ug/L	Analyzed:	08/31/08
Diln Fac:	1.000		

Type: BS Lab ID: QC458163

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	134.6	108	59-152
Isopropyl Ether (DIPE)	25.00	26.01	104	67-126
Ethyl tert-Butyl Ether (ETBE)	25.00	24.63	99	69-127
Methyl tert-Amyl Ether (TAME)	25.00	25.41	102	80-122
1,1-Dichloroethene	25.00	25.98	104	73-133
Benzene	25.00	23.94	96	80-120
Trichloroethene	25.00	23.09	92	80-120
Toluene	25.00	24.47	98	80-120
Chlorobenzene	25.00	22.27	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	108	80-122

Type: BSD Lab ID: QC458164

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	143.4	115	59-152	6	20
Isopropyl Ether (DIPE)	25.00	25.30	101	67-126	3	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.35	97	69-127	1	20
Methyl tert-Amyl Ether (TAME)	25.00	25.00	100	80-122	2	20
1,1-Dichloroethene	25.00	25.09	100	73-133	3	20
Benzene	25.00	22.80	91	80-120	5	20
Trichloroethene	25.00	22.35	89	80-120	3	20
Toluene	25.00	23.09	92	80-120	6	20
Chlorobenzene	25.00	21.31	85	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-125
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-122

**Batch QC Report**

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC458249	Batch#:	142030
Matrix:	Water	Analyzed:	09/02/08
Units:	ug/L		

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
tert-Butyl Alcohol (TBA)	125.0	112.0	90	59-152
Isopropyl Ether (DIPE)	25.00	23.46	94	67-126
Ethyl tert-Butyl Ether (ETBE)	25.00	22.70	91	69-127
Methyl tert-Amyl Ether (TAME)	25.00	23.48	94	80-122
1,1-Dichloroethene	25.00	21.51	86	73-133
Benzene	25.00	22.75	91	80-120
Trichloroethene	25.00	22.02	88	80-120
Toluene	25.00	21.68	87	80-120
Chlorobenzene	25.00	24.83	99	80-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-122

**Batch QC Report**

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	142030
MSS Lab ID:	205469-004	Sampled:	08/20/08
Matrix:	Water	Received:	08/21/08
Units:	ug/L	Analyzed:	09/03/08
Diln Fac:	1.667		

Type: MS Lab ID: QC458324

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<4.368	208.3	216.7	104	65-150
Isopropyl Ether (DIPE)	<0.1667	41.67	51.43	123	73-127
Ethyl tert-Butyl Ether (ETBE)	<0.1667	41.67	47.11	113	74-125
Methyl tert-Amyl Ether (TAME)	<0.1667	41.67	43.65	105	80-120
1,1-Dichloroethene	2.156	41.67	44.75	102	76-133
Benzene	<0.1667	41.67	44.04	106	80-121
Trichloroethene	162.9	41.67	196.2 >LR b	80	74-129
Toluene	<0.1667	41.67	40.24	97	80-120
Chlorobenzene	<0.1667	41.67	44.32	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-122

Type: MSD Lab ID: QC458325

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	208.3	212.9	102	65-150	2	20
Isopropyl Ether (DIPE)	41.67	47.28	113	73-127	8	20
Ethyl tert-Butyl Ether (ETBE)	41.67	43.78	105	74-125	7	20
Methyl tert-Amyl Ether (TAME)	41.67	41.84	100	80-120	4	20
1,1-Dichloroethene	41.67	41.69	95	76-133	7	20
Benzene	41.67	41.48	100	80-121	6	20
Trichloroethene	41.67	186.1 >LR b	56 *	74-129	NC	20
Toluene	41.67	38.57	93	80-120	4	20
Chlorobenzene	41.67	43.41	104	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-125
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

\*= Value outside of QC limits; see narrative  
 b= See narrative  
 NC= Not Calculated  
 >LR= Response exceeds instrument's linear range  
 RPD= Relative Percent Difference



**Batch QC Report**

<b>Volatile Organics</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458326	Batch#:	142030
Matrix:	Water	Analyzed:	09/02/08
Units:	ug/L		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
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	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

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Volatile Organics			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC458326	Batch#:	142030
Matrix:	Water	Analyzed:	09/02/08
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	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-125
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	111	80-122

ND= Not Detected  
 RL= Reporting Limit

<b>Dissolved Gases</b>			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2511	Analysis:	RSK-175
Analyte:	Methane	Batch#:	141861
Matrix:	Water	Received:	08/22/08
Units:	mg/L	Analyzed:	08/27/08

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled
GW-2	SAMPLE	205543-001	ND	0.0050	1.000	08/22/08
GW-3	SAMPLE	205543-002	ND	0.0050	1.000	08/22/08
MW-11	SAMPLE	205543-003	ND	0.0050	1.000	08/22/08
LFR-1	SAMPLE	205543-004	0.0059	0.0050	1.000	08/22/08
LFR-2	SAMPLE	205543-005	5.8	0.025	5.000	08/22/08
LFR-3	SAMPLE	205543-006	ND	0.0050	1.000	08/22/08
LFR-4	SAMPLE	205543-007	6.2	0.025	5.000	08/21/08
SOMA-1	SAMPLE	205543-008	0.67	0.0050	1.000	08/21/08
SOMA-2	SAMPLE	205543-009	7.5	0.025	5.000	08/21/08
SOMA-3	SAMPLE	205543-010	1.6	0.0050	1.000	08/21/08
B-10	SAMPLE	205543-011	2.9	0.025	5.000	08/21/08
	BLANK	QC457536	ND	0.0050	1.000	

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Dissolved Gases			
Lab #:	205543	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2511	Analysis:	RSK-175
Analyte:	Methane	Diln Fac:	1.000
Matrix:	Water	Batch#:	141861
Units:	mg/L	Analyzed:	08/27/08

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC457534	0.6544	0.5840	89	80-120		
BSD	QC457535	0.6544	0.5574	85	80-120	5	20

RPD= Relative Percent Difference