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Second Semi-Annual 2004 Groundwater Monitoring Report The Former Glovatorium Facility

3820 Manila Avenue

Oakland, California

September 8, 2004

Project 2511

Prepared for

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September 9, 2004

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

Project: 01-2511

Subject: Site Located at 3820 Manila Avenue, Oakland, California
Former Glovatorium Facility

Dear Mr. Levi:

Enclosed for your review is a copy of SOMA's "Second Semi-Annual 2004 Groundwater Monitoring Report" for the subject property.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 244-6600, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

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

Certification

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

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

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1.0 INTRODUCTION

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

This report summarizes the results of the groundwater monitoring event conducted at the Site from August 2, 2004 to August 3, 2004. Included in this report are the laboratory results of the groundwater samples, which were analyzed for:

- Total petroleum hydrocarbons as Stoddard solvents (TPH-ss) and gasoline (TPH-g), using EPA Method 8015;
- Volatile organic compounds (VOCs), such as tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), vinyl chloride, 1,2-dichloropropane and 1,1-dichloroethene, using EPA Method 8260B;
- Benzene, toluene, ethylbenzene, total xylenes (collectively referred to as BTEX), using EPA Method 8260B; and
- Methyl tertiary Butyl Ether (MtBE), using EPA Method 8260B.

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

geochemical indicators. The results of these analyses are also described in this report.

These activities were performed in accordance with the general guidelines of the Regional Water Quality Control Board (RWQCB) and the Alameda County Environmental Health Services (ACEHS).

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

1.1 Site Description

The Site is located between Manila Avenue and Broadway, near the intersection of 38th Street in Oakland, California. The ground surface at the Site is covered with concrete and asphalt and slopes gently southwest, with surface elevations ranging from approximately 78 to 84 feet above mean sea level (msl).

A 54-inch inside-diameter storm drain culvert passes under the property, from Manila Avenue on the west to 38th Street on the south (see Figure 2). The depth of the storm drain invert is approximately 8.5 feet under the sidewalk on the eastern side of Manila Avenue and approximately 13.2 feet below ground surface (bgs) at the far end, approximately 60 feet south of GW-4.

In addition to a storm drain system, a 10-inch diameter cast iron sanitary sewer conduit runs in a westerly direction from the on-site building and discharges into the sanitary sewer line, which runs north to south along Manila Avenue. The floor drain inside the building is less than 2 feet bgs. However, the depth of the

sanitary sewer line inside the building gradually increases and then slopes more steeply downward near the western wall of the building, where it plunges underneath the 54-inch storm drain (LFR, January 2001). Figure 2 shows the location of the storm drain and sanitary sewer system.

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

The surrounding properties are primarily commercial, businesses and residential housing. TOSCO Marketing Company (TOSCO) is located north and upgradient of the Site, at 40th Street and Broadway, and contains a number of groundwater monitoring wells. Figure 2 shows the location of the main building, fuel tank areas, and the on-site and off-site groundwater monitoring wells. The groundwater monitoring wells are currently monitored on a semi-annual basis. Past groundwater monitoring events have indicated the presence of VOCs and petroleum hydrocarbons in the groundwater beneath the Site. This report includes both the results of the historical groundwater monitoring events and the results of the Second Semi-Annual 2004 groundwater monitoring event.

1.2 Background

The following is a brief description of previous site investigations.

In August 1997, Geosolv, LLC (Geosolv) initiated the first soil and groundwater investigation at the Site. Geosolv using the direct push method drilled fourteen

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

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

In January, April, October, and November 2000, LFR conducted groundwater monitoring events at the Site. In July and August 2000, LFR installed four groundwater monitoring wells, namely LFR-1 through LFR-4, and conducted the Third Quarter 2000 groundwater monitoring event. This was the first sampling event in which bioattenuation parameters were collected. The measured bioattenuation parameters included: dissolved oxygen (DO), nitrate (NO_3^-), sulfate (SO_4^{-2}) ferrous iron (Fe^{+2}), total iron, methane, oxidation-reduction potential (ORP), alkalinity, chloride, carbon dioxide, nitrite, sulfide, ethene, and ethane. The bioattenuation parameters provided a baseline for these parameters and a means to compare their concentrations at locations within the apparent

source area against surrounding up-gradient, down-gradient, and cross-gradient locations.

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 which suggested the occurrence of strong anaerobic biodegradation activities and dechlorination of PCE beneath the Site.

On April 26-27, 2001 SOMA conducted a groundwater monitoring event at the Site. This was the first time SOMA performed a monitoring event onsite. The results of the Second Quarter 2001 monitoring event indicated a strong occurrence of the dechlorination process of PCE in the subsurface. In SOMA's June 2001 workplan, a recommendation was made to replace the existing small diameter monitoring wells, B-7 and B-10, with larger diameter wells, to better evaluate the bioattenuation parameters.

After receiving approval of the workplan on August 27, 2001, SOMA installed five groundwater monitoring wells, SOMA-1 through SOMA-5, at the Site on October 4, 11, and 12, 2001. During the installation of the groundwater monitoring wells, boreholes were continuously logged and soil samples were collected at 5-foot depth intervals. The objective of this investigation was to delineate the vertical extent of soil and groundwater contamination and install larger diameter monitoring wells at the suspected chemical source areas, in order to collect more reliable bioattenuation parameters (i. e., DO) in the groundwater.

SOMA's workplan also proposed a two-phase approach for assessing the nature and extent of the soil and groundwater contamination and defining the Site's regulatory status. The first phase included installing additional groundwater monitoring wells, soil and groundwater sampling, conducting hydraulic testing,

and a sensitive receptor survey. Phase II of the workplan included defining the Site's regulatory status by conducting groundwater flow, chemical fate and transport modeling, and a Risk-Based Corrective Action (RBCA). SOMA's "Report on Conducting Additional Field Investigation to Evaluate the Site's Conceptual Model," dated January 3, 2002, describes the results of the investigations conducted in Phase I. The modeling aspect of Phase II was conducted using the results collected in Phase I and the analytical data from quarterly monitoring events. The main objective of the groundwater flow and chemical transport modeling was to predict groundwater chemical concentrations down-gradient from the Site, beneath the nearest residential neighboring property, in order to assess the Site's regulatory status and restore groundwater quality conditions to an acceptable level per RBCA recommendations.

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

In the First Quarter 2003, SOMA recommended that groundwater monitoring be conducted on a semi-annual basis instead of a quarterly basis. SOMA's recommendation was approved by the ACEHS.

1.3 Site Geology and Hydrogeology

The Site is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland hills. Surface sediments in the Site's vicinity consist of Holocene alluvial deposits that are representative of an alluvial fan depositional environment. These deposits consist of brown, medium dense sand that fines

upward to sandy or silty clay. The pattern of stream channel deposition results in a three-dimensional network of coarse-grained sediments interspersed with finer grained silts and clays. The individual units tend to be discontinuous lenses aligned parallel to the axis of the former stream flow direction.

According to LFR, sediments encountered in soil borings at the Site are typical of those encountered in an alluvial fan depositional environment. The sediments 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 bgs.

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

According to the results of historical groundwater monitoring activities, groundwater occurs at 4 to 14 feet bgs. Based on the current and previous

groundwater monitoring reports, groundwater flows from the northeast to the southwest with an approximate groundwater flow gradient of 0.019 ft/ft to 0.035 ft/ft. The results of the slug tests indicated that the hydraulic conductivity of the saturated sediments ranges between 1.2×10^{-4} and 6.9×10^{-4} cm/sec, which is equivalent to 0.34 ft/day to 1.95 ft/day. Using the average groundwater flow gradient of 0.027 and aquifer porosity of 0.32, the groundwater flow velocity ranges between 10.5 and 60.1 ft/year.

2.0 FIELD ACTIVITIES

Field activities were conducted on August 3 and 4, 2004, during which 11 groundwater monitoring wells were sampled. Depths to groundwater were measured in 21 groundwater monitoring wells and temporary sampling points. Due to the presence of floating product in SOMA-4, this well was not sampled. Figure 2 shows the location of the groundwater monitoring wells and temporary sampling points. Appendix A includes SOMA's site-specific field activities during this groundwater monitoring event.

On August 3, 2004, SOMA's field crew measured the depths to groundwater in the monitoring wells and temporary groundwater sampling points from the top of the casings to the nearest 0.01 feet using an electrical sounder. The depth to groundwater and top of the casing elevation data at each monitoring well were used to calculate the groundwater elevation.

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

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

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

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

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

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

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

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

After purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater sample was transferred to 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace. The VOA vials containing the samples were immediately placed on ice and maintained at 4°C in a cooler. A chain of custody (COC) form was written and placed with the samples in the cooler. SOMA's field crew delivered the samples to Curtis & Tompkins, Ltd. Laboratory, in Berkeley, California, on August 4, 2004. Samples for methane analysis were collected in a 40-mL VOA vial, and also maintained at 4°C in a cooler. These samples were sent to Microseeps Laboratory, in Pittsburgh, Pennsylvania, on August 4, 2004.

2.1 Laboratory Analysis

Curtis & Tompkins, Ltd., a state certified laboratory, analyzed the groundwater samples for TPH-g, TPH-ss, BTEX, MtBE, and VOCs. TPH-g and TPH-ss were prepared using EPA Method 5030B and measured using EPA Method 8015B. BTEX, MtBE, and VOCs were prepared using EPA Method 5030B and analyzed

using EPA Method 8260B. Methane analysis of the groundwater samples was conducted by Microseeps Laboratory.

3.0 Results

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

3.1 Groundwater Flow Condition

Table 2 presents the calculated groundwater elevations in each well. Depths to water and the elevation at the top of the well casings were used to calculate groundwater elevations. As shown in Table 2, in the monitoring wells, groundwater elevations ranged from 62.18 feet in SOMA-5 to 75.57 feet in B-13. SOMA-5 was sampled for the first time during this monitoring event.

Table 2 also shows the historical water level elevations at different groundwater monitoring wells and sampling points. Since the previous monitoring event, groundwater elevations have decreased in sampling points B-2, B-7, B-9, B-10, and B-13. Boring B-8 was not measured in the previous monitoring event. In monitoring wells GW-2 to GW-6A, MW-11, LFR-1, LFR-3, SOMA-1 to SOMA-3, groundwater elevations all decreased. The decrease can be attributed to the drier weather encountered during this monitoring event. In drier periods of the year the watertable descends away from the ground's surface, which causes a decrease in the groundwater elevations. In contrary, the water level elevation in SOMA-5 significantly increased; this increase cannot be explained.

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

1. No accurate information about the construction details of the "B" wells which were installed by Geosolv, is available; therefore water level data from these wells are questionable.

2. GW-4 was installed adjacent to the storm drain system in order to evaluate whether the storm drain system is leaking. This well was installed in the shallow formation and may partially penetrate into the underlying water-bearing zone. Therefore, the water level elevation recorded inside GW-4 may not be representative of the underlying water- bearing zone.

3. SOMA-1, SOMA-3 and SOMA-5 have been completed in the deeper zone and due to the strong vertical gradient the water level elevation in the deeper zone is significantly lower than the shallow water-bearing zone.

4. Due to the presence of free product in SOMA-4, the recorded water level elevation in this well is not representative of the shallow water-bearing zone.

The water level elevation in SOMA-2 closely matches the water level elevation of the other groundwater monitoring well within the source area; therefore, it was used in drawing the water level elevation contour map.

Figure 3 displays a contour map of groundwater elevations. As Figure 3 shows, groundwater flows from the northeast to southwest at an average gradient of 0.014 ft/ft. The direction of the groundwater flow is consistent, however, the groundwater gradient has slightly decreased since the previous monitoring event. It should be noted that our knowledge of the groundwater flow direction does not extend beyond LFR-3, which is the most down-gradient groundwater monitoring well.

The field measurements of some physical and chemical parameters of the groundwater samples are presented in detail in the field notes in Appendix A, and are summarized in Table 3, along with their historical values. Water temperatures ranged from 16.43°C in SOMA-3 to 22.62°C in GW-4. The variation in temperature may reflect the changes in air temperature during sampling. The temperature in well GW-4 may have been misrepresentative due to the dryness of the well. Measurements of pH ranged from 6.24 in LFR-3 to 8.86 in MW-11. The EC measurements ranged from 415 µS/cm in LFR-3 to 1,260 µS/cm in LFR-1.

3.2 Groundwater Quality

Table 4 displays the results of the laboratory analyses for TPH-ss, TPH-g, MtBE and BTEX. As shown in Table 4, TPH-ss was below the laboratory reporting limit in wells MW-11, LFR-1, LFR-3, and SOMA-1. Detectable TPH-ss levels ranged from 54 µg/L in GW-2 to 4,100 µg/L in SOMA-5. However, in monitoring well GW-2, the groundwater sample exhibited a fuel pattern that does not resemble the standard Stoddard solvent pattern and also exhibited an unknown single peak or peaks. A contour map of TPH-ss concentrations in the groundwater is shown in Figure 4.

TPH-g was below the laboratory reporting limit in wells GW-2, MW-11, LFR-1 LFR-3, and SOMA-1. Detectable TPH-g concentrations ranged from 150 µg/L in GW-3 to 3,700 µg/L in SOMA-5. However, the groundwater sample from GW-3 exhibited a fuel pattern that does not resemble the standard gasoline pattern and also exhibited unknown single peak or peaks. The groundwater in SOMA-5 may have contained heavier weight hydrocarbons, which contributed to the quantification of TPH-g concentrations and also exhibit a fuel pattern that did not resemble the standard fuel pattern. A contour map of TPH-g concentrations in the groundwater is shown in Figure 5.

MtBE was only detected in SOMA-1 and SOMA-2 at levels of 170 µg/L and 280 µg/L, respectively. All BTEX analytes were not detected in any of the groundwater samples collected during this monitoring event.

Table 4 also shows the historical analytical results for total petroleum hydrocarbons, MtBE and BTEX. Several concentration trends were observed since the previous monitoring event. TPH-ss concentrations increased in wells GW-2, GW-3, GW-4, and SOMA-2. TPH-ss decreased in wells LFR-1 and SOMA-3, and remained below the laboratory reporting limit in all other wells. TPH-g concentrations increased in GW-3 and GW-4, decreased in wells LFR-1, SOMA-2, and SOMA-3 and remained below the laboratory reporting limit in all other wells. MtBE concentrations decreased in SOMA-1, increased in SOMA-2, and remained non-detectable in all the other wells. All BTEX concentrations remained non-detectable in all the wells.

Table 5 shows the historical concentrations of VOCs in the groundwater. PCE was below the laboratory reporting limit in wells GW-4, MW-11, LFR-2, LFR-3, SOMA-2, SOMA-3, and SOMA-5. The detectable concentrations of PCE ranged from 19 µg/L in monitoring well SOMA-1 to 440 µg/L in GW-3. A contour map of PCE concentrations in the groundwater is shown in Figure 6. TCE was detected in GW-2 at 10 µg/L and in LFR-1 at 16 µg/L. A contour map of TCE is not presented due to the mostly non-detectable concentrations in the groundwater. Cis-1,2-dichloroethene was detected in LFR-1, LFR-2, SOMA-1, SOMA-2 and SOMA-3 at concentrations of 5.2 µg/L, 12 µg/L, 38 µg/L, 430 µg/L and 6,900 µg/L, respectively. Figure 7 shows a contour map of cis-1,2-DCE concentrations in groundwater. Trans-1,2-dichloroethene, vinyl chloride, and 1,2-dichloropropane were all below the laboratory reporting limit in all of the samples.

Table 5 also shows the historical concentration of VOCs in the groundwater. Several concentration trends were observed since the previous monitoring event. PCE concentrations increased in GW-2, GW-3, and decreased in GW-4, LFR-1,

and SOMA-2, remained constant in SOMA-1, and remained below the laboratory detection limit in all other wells. TCE concentrations increased in GW-2, decreased in LFR-1, and remained below the laboratory reporting limits in all other wells. Cis-1,2-DCE decreased in GW-4, LFR-1, SOMA-1, and SOMA-3 increased in LFR-2, remained constant in well SOMA-2, and remained non-detectable in all other wells. 1,2-Dichloropropane decreased in SOMA-1 to below the laboratory reporting limit, and remained below the laboratory reporting limits in the other wells. Concentrations of trans-1,2-DCE and vinyl chloride remained below the detection limit in all the groundwater samples.

3.3 Bioattenuation Parameter Analysis Results

SOMA continued to collect natural attenuation parameters during this groundwater monitoring event. The objective of the bioattenuation study is to evaluate whether intrinsic bioremediation processes are active at the Site. The results of this study indicated that PCE and other dissolved organic compounds are biodegrading beneath the Site.

Like the previous monitoring events, most of the bioattenuation parameters were measured in the field. Only dissolved methane was measured in the laboratory. In addition, DO was measured in-situ by the field crew. Based on Borden (1998) and Sepehr (1999), the ex-situ measurement of natural gases such as DO may introduce oxygen into the groundwater sample and result in certain errors. Therefore, DO was measured in the field, inside the casing, before collecting a groundwater sample.

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

acceptor. Based on thermodynamic considerations, the most energetically preferred electron acceptor for redox reactions is DO, followed by nitrate, manganese, ferric iron, sulfate, and carbon dioxide, in descending order of preference. Evaluating the distribution of these electron acceptors can provide evidence of where and to what extent chlorinated and aliphatic hydrocarbon biodegradation is occurring. The by-products of the biodegradation processes are nitrite, ferrous iron, alkalinity, sulfide, methane, and carbon dioxide. For the evaluation of bioattenuation processes beneath the Site, groundwater samples were collected during the current groundwater monitoring event and analyzed for selected electron acceptors and the by-products of biodegradation activities, as described below.

Dissolved Oxygen. DO is the most favored electron acceptor used by microbes for the biodegradation of organic compounds. A concentration of DO less than 0.5 mg/L indicates anaerobic conditions. In our experience, in-situ measurements of DO yield more realistic results than ex-situ (laboratory) measurements. Significant differences in DO concentrations using in-situ and ex-situ measurements (conducted by Microseep) during the First Quarter 2001 can be attributed to cross contamination by atmospheric oxygen during ex-situ measurement (R. Borden, 1998, M. Sepehr 1999). Therefore, during recent monitoring events, DO measurements were conducted in-situ by SOMA's field crew. DO levels ranged from 4.44 mg/L in SOMA-1 to 10.40 mg/L in MW-11. Figure 8 presents the DO concentration contour map in the groundwater using in-situ measurements.

Due to the presence of floating product, DO measurements were not collected from SOMA-4. 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, the results may not be representative of the subsurface condition due to the small diameter of this well.

Table 6 presents the current and historical DO concentrations in the groundwater. DO levels have significantly increased since the previous monitoring event.

Nitrate. After DO has been depleted, nitrate may be used as an electron acceptor for anaerobic biodegradation. Nitrate concentrations less than 1.0 mg/L may indicate that reductive dechlorination is occurring. Nitrate levels were not observed in any of the wells during the Third Quarter 2004. Therefore, a contour map of nitrate concentrations could not be is not included in this report due to the non-detectable values throughout the Site.

Manganese. After DO and nitrate have been depleted, manganese may be used as an electron acceptor for anaerobic biodegradation. Therefore, increased dissolved manganese concentrations in the groundwater are indicative of reductive dechlorination. Detectable manganese concentrations ranged from 0.4 mg/L in SOMA-2 to 5.8 mg/L in LFR-1. Manganese was not detected in wells GW-2, GW-3, MW-11, SOMA-1, SOMA-3, and SOMA-5. A contour map of dissolved manganese concentrations in the groundwater is presented in Figure 9. As shown in Table 6, dissolved manganese concentrations have increased in LFR-1, LFR-3, SOMA-2, but decreased in GW-4, LFR-2, SOMA-1, and SOMA-3 since the previous monitoring event.

Sulfate. After DO, nitrate, and manganese have been depleted, sulfate may be used as an electron acceptor for anaerobic biodegradation. This process is termed sulfate reduction, and results in the production of sulfide. Sulfate concentrations less than 20 mg/L are indicative of reductive dechlorination (EPA 1998). Sulfate was not detected in GW-4, LFR-2, SOMA-2, SOMA-3, and SOMA-5. Detectable sulfate levels ranged from 8 mg/L in LFR-3 to 77 mg/L in MW-11. Figure 10 shows a contour map of sulfate concentrations in the groundwater. Sulfate levels increased in LFR-3 and SOMA-1, and decreased in GW-2, GW-3, MW-11, and LFR-1.

Ferrous Iron. Increased ferrous iron accompanies anaerobic degradation. Ferric iron can be used as an electron acceptor during anaerobic biodegradation. During this process, ferric iron is reduced to ferrous iron, which may be soluble in water. Ferrous iron concentrations can thus be used as an indicator of anaerobic biodegradation. Ferrous iron was not detected in GW-2, GW-3, MW-11, LFR-1, LFR-3, and SOMA-1. The highest ferrous iron concentrations were found in GW-4, LFR-2, and SOMA-3, each at a level of 3.3 mg/L. A contour map of ferrous iron concentrations is shown in Figure 11. Ferrous iron levels have decreased in LFR-3, SOMA-1, and SOMA-2.

Methane. The presence of methane in groundwater is indicative of strongly reduced conditions and suggests reductive dechlorination by the process of methanogenesis. Methane concentrations ranged from 0.00028 mg/L in GW-3 to 6.5 mg/L in SOMA-3. The higher concentrations of methane in the vicinity of GW-4, LFR-2, SOMA-2, SOMA-3, and SOMA-5 indicate conditions that are conducive to anaerobic biodegradation. A contour map of methane concentrations in the groundwater is shown in Figure 12. Methane concentrations have increased in GW-4 and LFR-3, and decreased in all other monitoring wells since the previous monitoring event, as shown in Table 6.

Oxygen Reduction Potential. The ORP of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solution to accept or transfer electrons. ORP may range from greater than 800 mV to less than -400 mV, with lower values expected in areas where anaerobic processes are occurring. ORP measurements obtained in this sampling event ranged from –143 mV in SOMA-5 to +185 mV in MW-11. Negative ORP values were found in wells GW-4, LFR-2, apparent source area SOMA-2, SOMA-3, and SOMA-5. These results indicate that conditions in and near the apparent source area are conducive to anaerobic biodegradation.

3.4 Other Parameters

Alkalinity: Alkalinity is a general water quality parameter. High alkalinity levels are a result of interaction between carbon dioxide (a product of several biodegradation processes) and aquifer minerals. Due to the inconclusive nature of data collected during previous groundwater monitoring events, in connection with the bioattenuation process, no alkalinity data was collected during the current and previous groundwater monitoring events.

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

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

Iron: Ferric iron may be used as an electron acceptor during anaerobic biodegradation. During this process, ferric iron is reduced to ferrous iron that may be soluble in water. Ferric iron concentrations may be obtained by subtracting ferrous iron concentrations from total iron concentrations. Total iron was not detected in GW-2, GW-3, MW-11, and SOMA-1. Detectable total iron concentrations ranged from 0.34 mg/L in both LFR-3 and SOMA-2 to 3.3 mg/L in wells GW-4, LFR-2, SOMA-3 and SOMA-5. The results of the total iron analysis are presented in Table 3.

Nitrite: Nitrate may reduce to nitrite during the process of anaerobic biodegradation. Nitrite concentrations were not detected in any of the wells

during the Third Quarter 2004. Current and historical nitrite concentrations in the groundwater are shown in Table 3.

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

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

Appendix B includes the COC forms and laboratory reports for the Second Semi-Annual 2004 groundwater monitoring event.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data obtained during the Second Semi-Annual 2004 groundwater monitoring event , our conclusions are as follows:

1. Groundwater monitoring data was collected on a quarterly basis from January 2000 through January 2003. This data has been sufficient to completely define the extent of groundwater contamination and occurrence of biodegradation at the Site. Based on SOMA's request, and concurrence from the ACEHS, groundwater monitoring events have been on a semi-annual basis.

2. Due to the presence of free product in SOMA-4, this well could not be sampled.

3. The furthest down-gradient well, LFR-3, and the furthest up-gradient well, MW-11, contained no detectable concentrations of VOCs, TPH-g, TPH-ss, MtBE and BTEX.

4. The data collected to date regarding the distribution of PCE and other VOCs in the groundwater indicate that PCE has been degraded into some of its breakdown products. PCE typically degrades into TCE, then cis-1,2-DCE and trans-1,2-DCE (at much lower concentrations than cis-1,2-DCE), then to vinyl chloride, ethane and ethene and finally carbon dioxide, water, and chloride. This sequence of degradation would be anticipated where the biological reductive dehalogenation of PCE is occurring. Some of these breakdown products and relative concentrations are present at the Site. The presence of TCE in LFR-1 during the current sampling event indicates that PCE degradation is occurring. The presence of relatively high concentrations of cis-1,2-DCE in SOMA-2 and SOMA-3 and its presence in wells LFR-1, LFR-2, and SOMA-1 is also indicative of biodegradation.

5. The results of DO, nitrate, manganese, sulfate, ferrous iron, methane, and ORP measurements indicate that conditions in the apparent source area are conducive to the reductive dechlorination processes.

4.1 Recommendations

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

system in SOMA-4, over 600 gallons of product mixed with some water has been removed from this well. SOMA will continue removing free product from this well until the product thickness disappears.

SOMA has begun implementing Phase II of the approved workplan (dated June 15, 2001). SOMA has recently completed groundwater flow and chemical transport modeling to simulate the future extent of chlorinated solvents and other chemicals beneath the Site. In light of the groundwater modeling results, which confirm that biodegradation is occurring, SOMA believes that the Site should likely be characterized as a "Low Risk" site according to the California Regional Water Quality Control Board's Interim Guidance Document dated December 8, 1995.

In August 2004, SOMA converted borings B-3 and B-8 into wells for the purpose of removing free product from these locations. The FAP system previously in SOMA-4 was moved to B-3 on August 23, 2004.

The Interim Guidance Document requires conducting a human health risk assessment to evaluate the impact of the Site's contaminants in the soil and groundwater on the current and future Site's workers and the nearby residents. Subsequently, SOMA is planning to submit a human health risk assessment report to the regulatory agency to evaluate the Site's regulatory status.

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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)
Temporary Sampling Points Installed by Geosolv, LLC						
B-2	19-Aug-97	82.20	82.09	21	5 to 21	77.2 to 61.2
B-3[1]	19-Aug-97	82.60	82.57	18	5 to 18	77.6 to 64.6
B-7	20-Aug-97	77.33	76.96	17.5	5 to 17.5	72.3 to 59.8
B-8	20-Aug-97	82.06	81.82	24	9 to 24	73.1 to 58.1
B-9	21-Aug-97	77.57	77.37	19.5	4.5 to 19.5	73.1 to 58.1
B-10	21-Aug-97	81.65	81.50	19	4 to 9	77.7 to 62.7
B-13	22-Aug-97	85.12	84.58	20	5 to 20	80.1 to 65.1
Temporary Sampling Points Installed by LFR						
GW-1	16-Jul-99	80.24	79.94	8	3 to 8	77.2 to 72.2
GW-2	16-Jul-99	79.44	79.14	20	10 to 20	69.4 to 59.4
GW-3	15-Jul-99	78.48	77.92	20	10 to 20	68.5 to 58.5
GW-4	16-Jul-99	82.55	82.37	12	7 to 12	75.6 to 70.6
GW-5	15-Jul-99	81.31	81.01	13	8 to 13	73.3 to 68.3
GW-6[2]	15-Jul-99	81.91	81.65	13.5	7.5 to 13.5	74.4 to 68.4
GW-6A[2]	16-Jul-99	81.93	81.61	15	5 to 15	76.9 to 66.9
GW-7[2]	15-Jul-99	81.30	NS	20	10 to 20	71.3 to 61.3
GW-8[2]	16-Jul-99	80.28	80.10	20	10 to 20	70.3 to 60.3
Temporary Sampling Points Installed by TOSCO						
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
Groundwater Monitoring Wells Installed by LFR						
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
Groundwater Monitoring Wells Installed by SOMA						
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:

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

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

NS = Not surveyed.

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

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

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

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

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

Date	LFR-1	LFR-2	LFR-3	LFR-4	SOMA-1	SOMA-2	SOMA-3	SOMA-4	SOMA-5
3-Aug-04	**70.13**	**70.70**	**66.42**	**NM**	**67.24**	**69.34**	**72.03**	**NM**	**62.18**
28-Jan-04	70.41	NM	67.44	69.13	68.33	70.35	73.00	FP	58.50
29-Jul-03	70.18	70.96	66.71	68.37	67.84	69.84	72.48	FP	57.18
18-Feb-03	70.63	73.08	67.61	69.44	68.77	70.74	73.77	NM	56.59
22-Oct-02	70.00	70.48	66.13	67.85	66.92	69.00	72.01	NM	59.43
17-Jul-02	70.18	70.98	67.67	68.33	67.62	72.40	69.64	NM	59.53
16-Apr-02	70.36	71.71	67.60	69.27	68.85	73.06	70.90	68.56	59.48
31-Jan-02	70.56	71.92	67.72	NM	69.36	73.98	71.46	69.79[FP 2.5']	57.38
18-Oct-01	70.04	70.53	66.09	67.74	67.89	71.86	68.32	69.77	NM
26-Jul-01	70.16	70.92	66.56	68.33					
26-Apr-01	70.23	71.90	67.62	68.87					
29-Jan-01	70.44	72.04	66.96	67.92					
2-Nov-00									
31-Oct-00				68.14					
30-Oct-00	70.22	71.62	66.99						
10-Aug-00									
9-Aug-00	70.16	69.99	66.76	68.39					
27-Apr-00									
25-Jan-00									
24-Jan-00									
21-Jan-00									
20-Jan-00									
19-Jan-00									
27-Aug-99									
18-Feb-98									
26-Oct-97									

Notes:
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)
Temporary Sampling Points Installed by Geosolv LLC												
B-7	11-Aug-00	760	39	202				<0.0005	<0.0005	6.86	17.55	1279
B-7 field	11-Aug-00					-1.00	0.05					
	31-Oct-00	760	42	200	14.00	<0.1	<2.0					
B-7 field	31-Oct-00				17.22	-1.00	-1.00			6.16	16.05	1454
	31-Jan-00	720	43	170	12.00	<0.1	<2.0					
B-7 field	31-Jan-00									6.79	13.90	1424
	26-Apr-01				>3.3	0.24				6.59	16.30	1340
	26-Jul-01				15.30	0.02				6.39	15.97	1400
B-10 field	10-Aug-00					0.02	0.06					
B-10	31-Oct-00	500	76	120	6.60	<0.1	<2.0					
	31-Oct-00				8.35	0.00	0.00			6.21	16.62	1051
	31-Jan-01	480	81	72	6.10	<0.1	<2.0					
	31-Jan-01				1.44	0.07				6.81	14.66	1117
	11-Jun-01				1.31					6.65	16.70	1090
	26-Jul-01				6.50	0.00				6.38	16.09	1160
	10-Aug-01	520	74	145	6.00	<0.05	<0.04	<0.0005	0.00	6.86	16.80	1130
Temporary Sampling Points Installed by LFR												
GW-2	01-Nov-00									6.31	18.97	1218
	30-Jan-01			63								
GW-2 field	31-Jan-01									6.82	13.75	846
	26-Apr-01				0.02					6.80	19.50	874
	26-Jul-01				0.03	0.02				6.74	20.30	803
	19-Oct-01	NM	NM	NM	NM	NM	NM	NM	NM	6.84	21.30	786
	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**
GW-3	11-Aug-00	340	25	54				<0.0005	<0.0005	7.05	21.43	860
GW-3 field	11-Aug-00					0.05	-1.00					
GW-3 field	1-Nov-00									6.52	18.83	967
	1-Feb-01			54								
GW-3 field	29-Jan-01									6.89	17.29	602
	11-Jun-01				0.00	0.70				5.68	16.20	673
	26-Jul-01				0.14	0.00				6.53	22.25	547
	19-Oct-01	NM	NM	NM	0.00	NM	NM	NM	NM	6.84	22.56	590
	31-Jan-02	NM	NM	NM	0.14	0.01	NM	NM	NM	6.70	18.40	593
	16,17-Apr-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.64	16.61	526
	17,18-Jul-02	NM	NM	NM	1.08	0.01	NM	NM	NM	6.32	17.10	545
	23-Oct-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.36	19.80	425
	19-Feb-03	NM	NM	NM	0.08	0.01	NM	NM	NM	6.77	17.80	412
	29-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	7.07	19.40	490
	29-Jan-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.65	18.20	450
	3-Aug-04	**NM**	**NM**	**NM**	**0.00**	**0.00**	**NM**	**NM**	**NM**	**6.74**	**20.20**	**436**
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**

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)
Monitoring Wells Owned by TOSCO												
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
	31-Jan-01	330	130	150	<0.05	<0.1	<2.0					
MW-11 field	31-Jan-01									6.35	13.67	1
	26-Apr-01				0.01					5.67	18.00	1210
	26-Jul-01				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**	**6.86**	**21.70**	**825**
Monitoring Wells Installed by LFR												
LFR-1	11-Aug-00	250	110					<0.0005	<0.0005	6.97	19.73	936
LFR-1 field	09-Aug-00			51		0.02	-1.00					
	30-Oct-00	240	100	25	<0.05	<0.1	<2					
LFR-1 field/sp	30-Oct-00				0.01/0.01	0.031/0.036	0.001/0.001			6.38	17.94	697
LFR-1-spl	30-Oct-00	220	100	40	<0.05	<0.1	<2					
	29-Jan-01	150	76	28	<0.05	<0.1	<2					
LFR-1 field	29-Jan-01				0.00	0.04				6.82	15.00	870
LFR-1 Dup	29-Jan-01	150	75	26	<0.05	<0.1	<2					
	26-Apr-01				0.00					5.76	16.80	980
	26-Jul-01				0.05	0.01				6.48	19.38	772
	26-Jul-01	NM	NM	NM	0.42	NM	NM	NM	NM	6.73	20.83	661
	31-Jan-02	NM	NM	NM	0.03	0.01	NM	NM	NM	6.50	16.50	879
	16,17-Apr-02	NM	NM	NM	0.75	0.02	NM	NM	NM	5.88	16.37	1120
	17,18-Jul-02	NM	NM	NM	0.22	0.01	NM	NM	NM	6.40	17.02	832
	23-Oct-02	NM	NM	NM	0.30	0.00	NM	NM	NM	6.54	20.09	803
	18-Feb-03	NM	NM	NM	0.40	0.00	NM	NM	NM	6.47	16.90	607
	30-Jul-03	NM	NM	NM	0.02	0.00	NM	NM	NM	6.92	19.20	1330
	29-Jan-04	NM	NM	NM	0.00	5.10	NM	NM	NM	6.62	18.00	830
	4-Aug-04	**NM**	**NM**	**NM**	**0.47**	**0.00**	**NM**	**NM**	**NM**	**6.39**	**19.01**	**1260**
LFR-2	11-Aug-00	590	33	174				<0.0005	0.00	7.15	19.87	1088
LFR-2 field	11-Aug-00				2.95	-1.00	0.01					
	02-Nov-00	550	40	180	6.20	<0.1	<2					
LFR-2 field	02-Nov-00				7.45	0.01	0.00			6.19	19.67	1306
	30-Jan-01	480	21	130	4.60	<0.1	<2					
LFR-2 field	30-Jan-01				1.04	0.01				6.60	12.73	945
	27-Apr-01				2.97					5.64	16.40	921
	26-Jul-01				4.60	0.01				6.31	18.66	970
	18-Oct-01	NM	NM	NM	8.20	NM	NM	NM	NM	6.78	19.56	109
	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**

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-3	10-Aug-00	310	85	162	<0.1	0.15	0.04	<0.0005	<0.0005	6.57	19.92	951
LFR-3 split	10-Aug-00	300	85	152				<0.0005	<0.0005			
LFR-3 field	10-Aug-00					0.06	-1.00					
	01-Nov-00	350	66	160	<0.05	<0.1	<2					
LFR-3 field	01-Nov-00				0.01	0.01	0.00			6.16	17.71	1164
	30-Jan-01	250	31	71	<0.05	<0.1	<2					
LFR-3 field	30-Jan-01				0.03					6.64	17.29	541
	11-Jun-01				0.01					5.43	18.00	613
	26-Jul-01				0.70	0.03				6.25	20.50	602
	18-Oct-01	NM	NM	NM	0.12	NM	NM	NM	NM	6.50	21.39	645
	31-Jan-02	NM	NM	NM	0.06	0.02	NM	NM	NM	6.30	19.10	566
	16,17-Apr-02	NM	NM	NM	1.20	0.04	NM	NM	NM	5.78	18.68	566
	17,18-Jul-02	NM	NM	NM	0.08	0.01	NM	NM	NM	6.17	18.42	585
	23-Oct-02	NM	NM	NM	1.35	0.00	NM	NM	NM	6.32	20.65	457
	19-Feb-03	NM	NM	NM	0.74	0.00	NM	NM	NM	6.34	19.30	497
	30-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	6.87	19.80	457
	29-Jan-04	NM	NM	NM	1.70	0.00	NM	NM	NM	6.60	20.00	393
	3-Aug-04	**NM**	**NM**	**NM**	**0.34**	**0.00**	**NM**	**NM**	**NM**	**6.24**	**19.96**	**415**
LFR-4	11-Aug-00	630	71	161				<0.0005	<0.0005	6.90	20.11	1240
LFR-4 FB	10-Aug-00							<0.0005	<0.0005			
LFR-4 field	11-Aug-00				0.22	0.02	0.00					
	31-Oct-00	490	28	130	1.00	<0.1	<2					
LFR-4 field	31-Oct-00				0.67	0.02	0.00			6.21	18.11	830
	01-Feb-01	460	25	120	1.30	<0.1	<2					
LFR-4 field	01-Feb-01				1.43	0.02				6.55	15.28	916
	27-Apr-01				1.44					5.79	18.30	1060
	26-Jul-01				0.95	0.00				6.26	19.23	866
	16,17-Apr-02	NM	NM	NM	5.10	0.03	NM	NM	NM	6.19	18.04	925
	17,18-Jul-02	NM	NM	NM	>3.3	0.01	NM	NM	NM	5.92	17.28	878
	23-Oct-02	NM	NM	NM	3.30	0.00	NM	NM	NM	6.69	19.90	602
	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.38	19.10	994
	29-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.94	19.00	994
	29-Jan-04	NM	NM	NM	0.71	0.00	NM	NM	NM	6.53	19.50	689
Monitoring Wells Installed by SOMA												
SOMA-1	19-Oct-01	NM	NM	NM	0.75	NM	NM	NM	NM	6.77	18.15	146
	31-Jan-02	NM	NM	NM	0.00	0.00	NM	NM	NM	6.70	17.50	1160
	16,17-Apr-02	NM	NM	NM	0.17	0.03	NM	NM	NM	6.01	17.98	1280
	17,18-Jul-02	NM	NM	NM	0.11	0.01	NM	NM	NM	6.52	16.21	1270
	23-Oct-02	NM	NM	NM	0.24	0.01	NM	NM	NM	6.60	17.77	1270
	19-Feb-03	NM	NM	NM	0.00	0.01	NM	NM	NM	6.33	17.40	1350
	30-Jul-03	NM	NM	NM	0.00	0.00	NM	NM	NM	6.90	17.80	1300
	29-Jan-04	NM	NM	NM	2.10	0.00	NM	NM	NM	6.51	17.60	959
	3-Aug-04	**NM**	**NM**	**NM**	**0.00**	**0.00**	**NM**	**NM**	**NM**	**6.42**	**17.89**	**956**
SOMA-2	19-Oct-01	NM	NM	NM	44.00	NM	NM	NM	NM	6.87	16.93	122
	31-Jan-02	NM	NM	NM	10.50	0.34	NM	NM	NM	6.90	15.20	1140
	16,17-Apr-02	NM	NM	NM	8.70	0.01	NM	NM	NM	6.30	15.25	1170
	17,18-Jul-02	NM	NM	NM	>3.3	0.00	NM	NM	NM	6.86	14.19	1170
	23-Oct-02	NM	NM	NM	3.30	0.00	NM	NM	NM	6.97	16.47	1380
	19-Feb-03	NM	NM	NM	2.93	0.01	NM	NM	NM	6.86	15.70	1420
	29-Jul-03	NM	NM	NM	1.37	0.00	NM	NM	NM	7.91	16.80	1290
	28-Jan-04	NM	NM	NM	0.00	0.00	NM	NM	NM	6.65	16.60	835
	4-Aug-04	**NM**	**NM**	**NM**	**0.34**	**0.00**	**NM**	**NM**	**NM**	**6.78**	**16.76**	**1180**

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-3	19-Oct-01	NM	NM	NM	0.40	NM	NM	NM	NM	6.91	17.09	158
	31-Jan-02	NM	NM	NM	0.78	0.38	NM	NM	NM	6.50	14.90	1320
	16,17-Apr-02	NM	NM	NM	1.03	0.00	NM	NM	NM	6.23	15.83	1260
	17,18-Jul-02	NM	NM	NM	>3.3	0.00	NM	NM	NM	6.77	15.03	1290
	23-Oct-02	NM	NM	NM	3.30	0.03	NM	NM	NM	7.02	16.44	970
	19-Feb-03	NM	NM	NM	3.30	0.00	NM	NM	NM	6.87	15.80	1350
	29-Jul-03	NM	NM	NM	3.30	0.00	NM	NM	NM	7.27	16.20	1200
	29-Jan-04	NM	NM	NM	3.30	0.00	NM	NM	NM	6.75	16.20	925
	4-Aug-04	**NM**	**NM**	**NM**	**3.30**	**0.00**	**NM**	**NM**	**NM**	**6.79**	**16.43**	**956**
SOMA-4	Oct-19-01	NM	NM	NM	0.26	NM	NM	NM	NM	6.53	16.88	145
	23-Oct-02	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	19-Feb-03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	29-Jul-03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
SOMA-5	**4-Aug-04**	**NM**	**NM**	**NM**	**3.30**	**0.00**	**NM**	**NM**	**NM**	**7.14**	**16.98**	**773**

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)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
Temporary Sampling Points Installed by Geosolv, LLC								
B-2	24-Jan-00	20 J	31 YJ	<0.05	<0.013	<0.013	0.11 C	0.22 C
B-3	24-Jan-00	4.9 J	8.8 YJ	<0.01	0.0048	<0.0025	<0.0025	0.0714
B-7	24-Jan-00	19	30 J	<0.05	<0.013	0.062	<0.013	0.207
	11-Aug-00	3.7 J	6.8 YHJ	0.02	0.0077 J	0.047 J	0.007 J	0.065 CJ
	31-Oct-00	62 J	98 YHJ	0.01 J	0.0091 J	0.061 J	<0.0005	0.237 J
	27-Jul-01	2.5	5.2 HY	0.0057	0.0070	0.051	0.0082	0.0740
	31-Jan-01	5.3	7.9	0.0100	0.0089	0.059	0.0097	0.0870
	26-Apr-01	4.5	8.9 H	0.0069	0.0110	0.071	0.077 C	0.2080
B-8	24-Jan-00	11 J	19 YJ	<0.01	<0.0025	<0.0025	<0.0025	0.17 C
B-9	24-Jan-00	1 YJ	1.8 YHJ	<0.002	<0.0005	<0.0005	0.01 C	0.0089 C
B-10	24-Jan-00	2.4 Y	4.2	0.0140 c	0.0072	0.027	0.025 C	0.032
	10-Aug-00	2.8 Y	6.1 Y	0.1600	0.0073	0.012	<0.005	0.0241
	31-Oct-00	2.2 YZ	3.5 Z	<0.002	0.0038	0.011	<0.0005	0.0182
	27-Jul-01	1.7	3.6 H	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	31-Jan-01	2.4 Z	3.6 HYZ	<0.002	0.0031	0.010	0.00076 c	0.0197
	26-Apr-01	2.4 Z	4.7 Z	0.0025	0.0041	0.013	ND	0.0290
B-13	24-Jan-00	1.7 J	3 YJ	<0.01	<0.0025	<0.0025	<0.0025	0.0200
Temporary Sampling Points Installed by LFR								
GW-2	19-Jul-99	<0.05	<0.05	0.0025	<0.0005	0.00071	<0.0005	0.00074
	20-Jan-00	0.15	0.25 Y	0.0044	<0.0005	<0.0005	0.00097 C	0.0013
	28-Apr-00	<0.05	0.095 YZ	<0.0021	<0.0005	<0.0005	<0.0005	<0.0005
	2-Nov-00	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	1-Feb-01	<0.05	ND	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	<0.05	0.086 YZ	0.0022	<0.0005	0.0240	<0.0005	<0.0005
	27-Jul-01	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	<0.05	<0.05	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	31-Jan-02	<0.05	<0.050	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b
	16,17-Apr-02	<0.05	<0.05	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22-Oct-02	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	19-Feb-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jul-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	4-Aug-04	**0.054 YZ**	**<0.050**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**

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)
GW-3	19-Jul-99	0.070 [Z]	0.100 [Z]	<0.0020	<0.0005	<0.0005	<0.0005	0.00064
	20-Jan-00	0.150	0.260 [Y]	<0.0020	<0.0005	<0.0005	<0.0005	0.00130 [C]
	27-Apr-00	0.200 [YZ]	0.380 [YZ]	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	27-Apr-00	0.300 [Z]	0.570 [YZ]	<0.0020	<0.0005	<0.0005	<0.0005	<0.00050
	11-Aug-00	<0.050	0.077 [YZ]	<0.0020	<0.0005	<0.0005	<0.0005	0.00051
	2-Nov-00	<0.050	0.050 [YZ]	0.0026	<0.0005	<0.0005	<0.0005	<0.00050
	1-Feb-01	<0.050	<0.050	<.0020	<.0005	<0.0005	<0.0005	<0.00050
	27-Apr-01	<0.050	0.062 [YZ]	0.0056	<0.0005	<0.0005	<0.0005	<0.00050
	27-Jul-01	<0.050	<0.050	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	<0.050	0.070 [YZ]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.00500 [b]
	16,17-Apr-02	<0.050	0.055 [YZ]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	0.110 [YZ]	0.140 [YZ]	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071
	19-Feb-03	0.068 [YZ]	0.100 [YZ]	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jul-03	0.120 [YZ]	0.180 [YZ]	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.051 [YZ]	0.086 [YZ]	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	**0.170 [YZ]**	**0.150 [YZ]**	**<0.017**	**<0.017**	**<0.017**	**<0.017**	**<0.017**
GW-4	21-Jul-99	6.80 [J]	10 [YHJ]	0.0022	<0.0005	<0.0005	<0.0005	0.0029 [J]
	20-Jan-00	0.97 [J]	1.60 [YJ]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Split	20-Jan-00	0.85 [J]	1.50 [YJ]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.31	0.60 [Y]	<0.0020	<0.0005	<0.0005	<0.0005	0.0027
	30-Jan-01	0.39	0.58 [HY]	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.42	0.86 [HY]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.83	1.60	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100
	31-Jan-02	0.92	1.70 [HY]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]
	16,17-Apr-02	0.40	0.67 [HY]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.97	1.7 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	0.550	0.700 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.580	0.880 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	0.390	0.580 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	0.310	0.520 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	**0.710**	**0.640 [HY]**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
GW-5	27-Aug-99	<0.05	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001
	20-Jan-00	<0.05	0.057 [Y]	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	0.05 [Y]	0.096 [Y]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
GW-6A	27-Aug-99	<0.05	0.054 [Y]	0.0089	<0.0005	<0.0005	<0.0005	<0.0005
Split	27-Aug-99	<0.05	0.057 [Y]	0.0087	<0.0005	<0.0005	<0.0005	<0.0005
	25-Jan-00	<0.05	<0.05	0.0022	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-00	<0.05	0.087 [Y]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
GW-7	15-Jul-99	NA	NA	<0.0025	0.05 [J]	<0.0005	0.000727	0.00313 [J]
Split	15-Jul-99	NA	NA	NA	NA	NA	NA	NA
	15-Jul-99	NA	NA	NA	0.0567 [J]	<0.002	<0.002	<0.002
Split	15-Jul-99	NA	NA	NA	0.0755 [J]	<0.002	<0.002	<0.002
GW-8	19-Jul-99	<0.05	<0.05	0.0078	<0.0005	0.00064	<0.0005	0.00151
	20-Jan-00	0.19	0.33 [Y]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	20-Jan-00	0.20	0.37 [Y]	<0.002	0.00058	<0.0005	<0.0005	<0.0005
	28-Apr-00	0.064 [YZ]	0.12 [YZ]	0.013	<0.0005	<0.0005	<0.0005	<0.0005

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)
Monitoring Wells Owned by TOSCO								
MW-11	25-Jan-00	< 0.050	<0.05	0.0090	<0.0005	<0.0005	<0.0005	<0.0005
	28-Apr-00	<0.050	<0.05	<0.0087	<0.0005	<0.0005	<0.0005	<0.0005
	10-Aug-00	<0.050	<0.05	0.0110	<0.0005	<0.0005	<0.0005	<0.0005
	1-Nov-00	<0.050	<0.05	0.0068	<0.0005	<0.0005	<0.0005	<0.0005
	31-Jan-01	< 0.050	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	<0.050	0.10 [HY]	0.0010	<0.0005	<0.0005	<0.0005	0.0007
	19-Oct-01	<0.050	<0.05	<0.0050	<0.0050	<0.005	<0.005	<0.010
	31-Jan-02	<0.050	0.071 [Y]	<0.0050 [b]	<0.0050 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]
	16,17-Apr-02	<0.050	<0.050	<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	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	28-Jan-04	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	**<0.050**	**<0.050**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
Monitoring Wells Installed by LFR								
LFR-1	9-Aug-00	0.53	1.2	0.0095	<0.0005	<0.0005	<0.0005	<0.0005
	30-Oct-00	0.24 [YZ]	0.37 [YZ]	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	30-Oct-00	0.24 [YZ]	0.37 [YZ]	0.0043	<0.0005	<0.0005	<0.0005	<0.0005
	29-Jan-01	0.21 [YZ]	0.31 [YZ]	0.0033	<0.0005	<0.0005	<0.0005	<0.0005
	26-Apr-01	0.092	0.18 [YZ]	0.0044	<0.0005	0.002	<0.0005	<0.0005
	27-Jul-01	0.086	0.18 [YZ]	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
	18-Oct-01	0.19	0.38	<0.031	<0.031	<0.031	<0.031	<0.062
	31-Jan-02	0.15 [YZ]	0.27 [YZ]	<0.013 [b]	<0.013 [b]	<0.013 [b]	<0.013 [b]	<0.013 [b]
	16,17-Apr-02	0.10 [YZ]	0.17 [YZ]	< 0.013	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.084 [YZ]	0.14 [YZ]	<0.013	<0.013	<0.013	<0.013	<0.013
	22,23-Oct-02	<0.050	0.078 [YZ]	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	0.076 [YZ]	0.110 [YZ]	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.050	0.068 [YZ]	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	0.060 [YZ]	0.100 [YZ]	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
	4-Aug-04	**<0.050**	**<0.050**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
LFR-2	11-Aug-00	0.59	1.10 [YH]	0.0022	0.0018	<0.0005	<0.0005	0.0013 [C]
	2-Nov-00	0.38	0.70 [YH]	0.003	0.0035	0.0011	0.0042	0.01184 [C]
	30-Jan-01	0.36	0.54 [HY]	0.0034	0.00057	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.33	0.66 [HY]	<0.002	<0.0005	0.0013	<0.0005	<0.0005
	27-Apr-01	0.36	0.72 [HY]	<0.002	0.00059	0.0019	<0.0005	0.013
	27-Jul-01	0.33	0.76 [HY]	<0.0005	0.0013	<0.0005	<0.0005	0.0006
	18-Oct-01	0.73	1.50	<0.0071	<0.0071	<0.0071	<0.0071	<0.0142
	31-Jan-02	0.76	1.40 [HY]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]	<0.005 [b]
	16,17-Apr-02	1.10	1.90 [HY]	<0.002	<0.0005	<0.0005	<0.0005	0.019 [C]
	17,18-Jul-02	0.97	1.7 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	3.10	5.000 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	18-Feb-03	1.50	2.300 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	4.10	6.000 [HY]	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	NA	NA	NA	NA	NA	NA	NA
	4-Aug-04	**2.50**	**2.2 [HY]**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**

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)
LFR-3	10-Aug-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Split	10-Aug-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	1-Nov-00	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	30-Jan-01	<0.05	<0.05	0.0036	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	<0.05	<0.05	0.0024	<0.0005	0.0054	<0.0005	<0.0005
	27-Jul-01	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.01
	31-Jan-02	<0.05	0.067 Y	<0.005 b	<0.005 b	<0.005 b	<0.005 b	<0.005 b
	16,17-Apr-02	<0.05	<0.05	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	30-Jul-03	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	<0.050	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	**<0.050**	**<0.050**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**
LFR-4	11-Aug-00	0.22 Y	0.41 Y	0.0051	0.01100	<0.0005	<0.0005	0.00162 C
	31-Oct-00	0.17 Y	0.270	0.0065	0.00084	<0.0005	<0.0005	<0.0005
	1-Feb-01	0.16 Y	0.220	0.0097	0.00330	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.22 Y	0.440	0.0058	0.02700	0.0036	<0.0005	<0.0005
	27-Jul-01	0.091 Y	0.190	0.011	0.00090	<0.0005	<0.0005	<0.0005
	31-Jan-02	NA	NA	NA	NA	NA	NA	NA
	16,17-Apr-02	0.40 Y	0.670	< 0.005	0.05300	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	0.21 Y	0.36 Y	0.0075	0.007	<0.005	<0.005	<0.005
	22,23-Oct-02	0.110 Y	0.170	0.0080	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	0.490 Y	0.740	<0.005	0.055	<0.005	<0.005	<0.005
	30-Jul-03	0.400 Y	0.590	<0.005	0.010	<0.005	<0.005	<0.005
	29-Jan-04	0.42 Y	0.700 Y	<0.005	0.011	<0.005	<0.005	<0.005
	4-Aug-04	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Monitoring Wells Installed by SOMA								
SOMA-1	19-Oct-01	0.22	0.440	0.034	<0.0050	<0.0050	<0.0050	<0.0100
	31-Jan-02	0.058	0.100 HY	0.110 b	<0.0050 b	<0.0050 b	<0.0050 b	<0.0050 b
	16,17-Apr-02	<0.050	0.052 Y	0.120	0.0008	<0.0005	<0.0005	<0.0005
	17,18-Jul-02	<0.05	<0.05	0.120	<0.005	<0.005	<0.005	<0.005
	22,23-Oct-02	<0.050	0.053	0.140	<0.005	<0.005	<0.005	<0.005
	19-Feb-03	<0.050	<0.050	0.150	<0.0071	<0.0071	<0.0071	<0.0071
	30-Jul-03	<0.050	<0.050	0.190	<0.005	<0.005	<0.005	<0.005
	29-Jan-04	<0.050	<0.050	0.190	<0.005	<0.005	<0.005	<0.005
	3-Aug-04	**<0.050**	**<0.050**	**0.170**	**<0.013**	**<0.013**	**<0.013**	**<0.013**
SOMA-2	19-Oct-01	1.4	2.8	<0.250	<0.2500	<0.250	<0.250	<0.500
	31-Jan-02	1.3	2.4 HY	<0.071 b	<0.0710 b	<0.071 b	<0.071 b	<0.071 b
	16,17-Apr-02	1.3 L	2.2 H	< 0.130	0.0067	0.046	0.012	0.044
	17,18-Jul-02	2.6	4.4 HY	<0.063	<0.063	<0.063	<0.063	<0.063
	22,23-Oct-02	0.370	0.600 HY	0.300	<0.0071	<0.0071	<0.0071	<0.0071
	19-Feb-03	0.300	0.460 HY	0.210	<0.017	<0.017	<0.017	<0.017
	29-Jul-03	0.270	0.400 HY	0.300	<0.020	<0.020	<0.020	<0.020
	28-Jan-04	0.230	0.38 HY	0.270	<0.017	<0.017	<0.017	<0.017
	4-Aug-04	**0.310**	**0.28 HY**	**0.280**	**<0.031**	**<0.031**	**<0.031**	**<0.031**

Table 4
Historical Analytical Results for Total Petroleum Hydrocarbon, BTEX and MtBE in Groundwater Samples
Former Glovatorium Site
3815 Broadway, Oakland, California

Well Name	Date Sampled	TPH-ss (mg/L)	TPH-g (mg/L)	MtBE (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)
SOMA-3	19-Oct-01	0.420	0.83	0.65	<0.02500	<0.02500	<0.0250	<0.0500
	31-Jan-02	0.230	0.41 [HY]	0.31 [b]	<0.01300 [b]	<0.01300 [b]	<0.0130 [b]	<0.0130 [b]
	16,17-Apr-02	0.610	1.00 [HY]	0.42	0.00078	0.00068	<0.0005	<0.0005
	17,18-Jul-02	0.410	0.69 [HY]	0.38	<0.017	<0.017	<0.017	<0.017
	22,23-Oct-02	3.000	4.700 [HY]	<0.170	<0.170	<0.170	<0.170	<0.170
	19-Feb-03	2.500	3.800 [HY]	<0.130	<0.130	<0.130	<0.130	<0.130
	29-Jul-03	2.100	3.100 [HY]	<0.130	<0.130	<0.130	<0.130	<0.130
	29-Jan-04	4.100	6.8 [HY]	<0.310	<0.310	<0.310	<0.310	<0.310
	4-Aug-04	**4.000**	**3.6 [HY]**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**<0.500**
SOMA-4	19-Oct-01	2.5	5	0.63	<0.13	<0.13	<0.13	<0.26
	31-Jan-02	FP	FP	FP	FP	FP	FP	FP
	16,17-Apr-02	FP	FP	FP	FP	FP	FP	FP
	17,18-Jul-02	FP	FP	FP	FP	FP	FP	FP
	22,23-Oct-02	FP	FP	FP	FP	FP	FP	FP
	18-Feb-03	FP	FP	FP	FP	FP	FP	FP
	29-Jul-03	FP	FP	FP	FP	FP	FP	FP
SOMA-5	**4-Aug-04**	**4.1**	**3.7 [HY]**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**

Notes:

[b] Analysis was carried out npast the hold date, no analytical problems were encountered

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

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

[J] Result is estimated.

[L] Lighter hydrocarbons contributed to the quantitation

[Y] Sample exhibits fuel pattern which does not resemble standard.

[Z] Sample exhibits unknown single peak or peaks.

FP: Free product detected in SOMA 4.

NA = Not analyzed, LFR-4 was not analzed during the Second Quarter 2002 due to the well being inaccessible.

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.

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

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)
Temporary Sampling Points Installed by Geosolv, LLC							
B-2	24-Jan-00	<0.0013	<0.0013	0.270	0.001	< 0.0013	< 0.0013
B-3	24-Jan-00	< 0.0020	< 0.002	0.610	< 0.002	< 0.002	< 0.002
B-7	24-Jan-00	< 0.0036	< 0.0036	0.920	0.004	< 0.0036	< 0.0036
	11-Aug-00	< 0.0031	< 0.0031	0.860	0.005	< 0.0031	< 0.0031
	31-Oct-00	< 0.0042	< 0.0042	0.910	0.004	< 0.0042	< 0.0042
	27-Jul-01	0.010	0.017	0.860	0.005	<0.0031	<0.0031
	27-Apr-01	<0.0031	<0.0031	1.100	0.007	<0.0031	<0.0031
	31-Jan-01	< 0.0042	< 0.0042	0.920	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	1.200	2.400	14.000	0.090	< 0.063	< 0.063
	10-Aug-00	2.900	1.600	6.500	0.050	< 0.025	< 0.025
	31-Oct-00	2.400	1.900	7.100	0.061	< 0.025	< 0.025
	27-Jul-01	1.700	1.400	7.300	0.043	<0.025	<0.025
	27-Jul-01	0.870	0.810	6.600	0.041	<0.025	<0.025
	31-Jan-01	2.100	1.600	6.600	0.044	< 0.025	< 0.025
B-13	24-Jan-00	0.020	0.029	0.130	0.005	< 0.0005	< 0.0005
Temporary Sampling Points Installed by LFR							
GW-2	19-Jul-99	0.014	0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	20-Jan-00	0.130	0.019	0.006	< 0.0005	< 0.0005	< 0.0005
	28-Apr-00	0.120	0.016	0.003	< 0.0005	< 0.0005	< 0.0005
	2-Nov-00	0.008	0.001	0.003	< 0.0005	< 0.0005	< 0.0005
	1-Feb-01	0.008	0.001	0.003	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	0.010	0.002	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.033	0.004	0.002	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.019	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	0.0092 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	0.014	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17-18-Jul-02	0.014	<0.005	<0.005	<0.005	<0.01	<0.005
	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**
GW-3	19-Jul-99	0.220	<0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
	20-Jan-00	0.055	0.001	0.020	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	0.350	0.002	0.006	< 0.0005	< 0.0005	< 0.0005
Split	27-Apr-00	0.270	0.002	0.002	< 0.0013	< 0.0013	< 0.0013
	11-Aug-00	0.068	0.003	0.012	< 0.0005	< 0.0005	< 0.0005
	2-Nov-00	0.059	0.001	0.002	< 0.0005	< 0.0005	< 0.0005
	1-Feb-01	0.046	0.001	0.001	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	0.079	0.001	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.090	0.001	<0.0005	<0.0005	<0.0005	<0.0005
	19-Oct-01	0.180	<0.0100	<0.0100	<0.0100	<0.0200	<0.0100
	31-Jan-02	0.0960 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	0.160	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	0.086	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	0.200	<0.0071	<0.0071	<0.0071	<0.014	<0.0071
	19-Feb-03	0.240	<0.005	0.006	<0.005	<0.010	<0.005
	29-Jul-03	0.430	<0.010	<0.010	<0.010	<0.010	<0.010
	28-Jan-04	0.170	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	**0.440**	**<0.017**	**<0.017**	**<0.017**	**<0.033**	**<0.017**

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-4	19-Jul-99	< 0.0005	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
	20-Jan-00	0.001	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
Split	20-Jan-00	0.001	< 0.0005	0.004	< 0.0005	< 0.0005	0.002
	27-Apr-00	0.002	< 0.0005	0.001	< 0.0005	< 0.0005	0.001
	30-Jan-01	< 0.0005	< 0.0005	0.002	< 0.0005	< 0.0005	0.001
	27-Jul-01	< 0.0005	< 0.0005	0.003	< 0.0005	0.001	0.002
	19-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	0.0081	<0.005	0.010	<0.005	<0.010	<0.005
	3-Aug-04	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.010**	**<0.005**
GW-5	27-Aug-99	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
	20-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
GW-6A	27-Aug-99	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Split	27-Aug-99	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	25-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
GW-7	15-Jul-99	< 0.0005	< 0.0005	0.004	< 0.0005	< 0.0005	0.001
	15-Jul-99	< 0.0020	< 0.0020	0.004	< 0.0020	< 0.0020	< 0.0020
Split	15-Jul-99	< 0.0020	< 0.0020	0.004	< 0.0020	< 0.0020	< 0.0020
GW-8	19-Jul-99	0.024	0.015	0.004	0.002	0.001	< 0.0005
	20-Jan-00	0.150	0.190	0.053	0.012	0.005	< 0.0007
Split	20-Jan-00	0.150	0.180	0.052	0.011	0.005	< 0.0005
	28-Apr-00	0.120	0.110	0.029	0.005	0.002	< 0.0005
	Monitoring wells owned by TOSCO						
MW-11	25-Jan-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	28-Apr-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	1-Nov-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	31-Jan-01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Apr-01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	27-Jul-01	0.002	0.001	0.006	< 0.0005	< 0.0005	< 0.0005
	19-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	28-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.010**	**<0.005**

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)
			Monitoring wells installed by LFR				
LFR-1	9-Aug-00	2.800	0.064	0.041	< 0.0083	< 0.0083	< 0.0083
	30-Oct-00	0.820	0.034	0.010	< 0.0031	< 0.0031	< 0.0031
Split	30-Oct-00	0.870	0.035	0.014	< 0.0031	< 0.0031	< 0.0031
	29-Jan-01	0.770	0.026	0.007	<0.0025	<0.0025	<0.0025
	26-Apr-01	0.440	0.013	0.005	<0.0013	<0.0013	<0.0013
	27-Jul-01	0.380	0.031	0.010	<0.0013	<0.0013	<0.0013
	18-Oct-01	0.780	0.093	<0.0310	<0.0310	<0.0630	<0.0310
	31-Jan-02	0.37 [b]	0.035 [b]	<0.0130 [b]	<0.0130 [b]	<0.0250 [b]	<0.0130 [b]
	16,17-Apr-02	0.380	0.040	<0.0130	<0.0130	<0.0250	<0.0130
	17,18-Jul-02	0.360	0.041	<0.013	<0.013	<0.025	<0.013
	22,23-Oct-02	0.180	0.024	0.007	<0.005	<0.010	<0.005
	18-Feb-03	0.280	0.032	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	0.150	0.027	0.007	<0.005	<0.010	<0.005
	29-Jan-04	0.150	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**
LFR-2	11-Aug-00	< 0.0005	< 0.0005	0.035	< 0.0005	0.005	< 0.0005
	2-Nov-00	< 0.0005	< 0.0005	0.130	0.001	0.015	0.001
	29-Jan-01	<0.0005	<0.0005	0.006	<0.0005	0.002	<0.0005
	27-Apr-01	0.001	<0.0005	0.006	<0.0005	0.001	<0.0005
split	27-Jul-01	0.001	0.001	0.019	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.0071	<0.0071	0.160	<0.0071	<0.0140	<0.0071
	27-Apr-01	0.001	<0.0005	0.007	<0.0005	0.002	<0.0005
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	0.0069 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.012	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	0.066	<0.005	<0.010	<0.005
	18-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	0.011	<0.005	<0.010	<0.005
	4-Aug-04	**<0.005**	**<0.005**	**0.012**	**<0.005**	**<0.010**	**<0.005**
LFR-3	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Split	10-Aug-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	1-Nov-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	30-Jan-01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Apr-01	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	18-Oct-01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	31-Jan-02	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0050 [b]	<0.0100 [b]	<0.0050 [b]
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	3-Aug-04	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.010**	**<0.005**
LFR-4	11-Aug-00	< 0.0005	< 0.0005	0.001	< 0.0005	< 0.0005	< 0.0005
	31-Oct-00	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	30-Jan-01	<0.0005	<0.0005	0.001	<0.0005	< 0.0005	< 0.0005
	27-Apr-01	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	27-Jul-01	0.001	<0.0005	0.002	<0.0005	<0.0005	<0.0005
	16,17-Apr-02	<0.0050	<0.0050	<0.0050	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
	22,23-Oct-02	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	19-Feb-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	30-Jul-03	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	29-Jan-04	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005
	4-Aug-04	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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)
Monitoring wells installed by SOMA:							
SOMA-1	19-Oct-01	<0.0050	<0.0050	0.014	<0.0050	<0.0100	<0.0050
	31-Jan-02	0.0056 [b]	<0.0050 [b]	0.0070 [b]	<0.0050 [b]	<0.0100 [b]	0.0057 [b]
	16,17-Apr-02	0.006	<0.0050	0.007	<0.0050	<0.0100	<0.0050
	17,18-Jul-02	<0.005	<0.005	0.016	<0.005	<0.01	<0.005
	22,23-Oct-02	0.008	<0.005	0.041	<0.005	<0.010	0.007
	19-Feb-03	0.009	<0.0071	0.016	<0.0071	<0.014	<0.0071
	30-Jul-03	0.016	<0.005	0.042	<0.005	<0.010	0.006
	29-Jan-04	0.019	<0.005	0.044	<0.005	<0.010	0.0059
	3-Aug-04	**0.019**	**<0.013**	**0.038**	**<0.013**	**<0.025**	**<0.013**
SOMA-2	19-Oct-01	1.400	0.350	5.000	<0.250	<0.500	<0.250
	31-Jan-02	<0.071 [b]	<0.071 [b]	1.8 [b]	<0.071 [b]	<0.140 [b]	<0.071 [b]
	16,17-Apr-02	<0.130	<0.130	2.900	<0.130	<0.250	<0.130
	17,18-Jul-02	<0.063	<0.063	1.600	<0.063	<0.13	<0.063
	22,23-Oct-02	0.017	0.008	0.350	<0.0071	<0.014	<0.0071
	19-Feb-03	<0.017	<0.017	0.790	<0.017	<0.033	<0.017
	29-Jul-03	0.032	<0.020	0.580	<0.040	<0.040	<0.020
	28-Jan-04	0.036	<0.017	0.430	<0.017	<0.033	<0.017
	4-Aug-04	**<0.031**	**<0.031**	**0.430**	**<0.031**	**<0.063**	**<0.031**
SOMA-3	19-Oct-01	0.042	0.057	0.440	<0.025	<0.050	<0.025
	31-Jan-02	0.018 [b]	0.023 [b]	0.38 [b]	<0.013 [b]	<0.025 [b]	<0.013 [b]
	16,17-Apr-02	0.025	0.018	0.360	<0.017	<0.033	<0.017
	17,18-Jul-02	0.027	<0.017	0.440	<0.017	<0.033	<0.017
	22,23-Oct-02	<0.170	<0.170	5.900	<0.170	<0.330	<0.170
	19-Feb-03	<0.130	<0.130	4.100	<0.130	<0.250	<0.130
	29-Jul-03	0.150	0.220	4.700	<0.130	<0.250	<0.130
	29-Jan-04	<0.310	<0.310	7.700	<0.310	<0.630	<0.310
	4-Aug-04	**<0.500**	**<0.500**	**6.900**	**<0.500**	**<1.0**	**<0.500**
SOMA-4	19-Oct-01	<0.13	<0.13	2.600	<0.13	<0.25	<0.13
	31-Jan-02	FP	FP	FP	FP	FP	FP
	16,17-Apr-02	FP	FP	FP	FP	FP	FP
	17,18-Jul-02	FP	FP	FP	FP	FP	FP
	22,23-Oct-02	FP	FP	FP	FP	FP	FP
	18-Feb-03	FP	FP	FP	FP	FP	FP
	29-Jul-03	FP	FP	FP	FP	FP	FP
SOMA-5	**4-Aug-04**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.010**	**<0.005**

Notes:
<: Not detected above the laboratory reporting limits.
[b] analysis was carried out past hold date, no analytical problems were encountered
FP: Not Analyzed due to Free Product
NA: Not Analyzed. 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-7	11-Aug-00						11.0000	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	2.4000		-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	13.0000		
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	7.6000	-28	
B-7 Field	26-Jul-01	1.98	7.3	0.0	8.0	11.60	7.0000	-40	
B-8 field	31-Jan-01	0.45						58	
B-10	10-Aug-00			< 0.05	< 0.05	5.70	10.0000	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	6.7000		0.81
B-10-field	31-Oct-00	0.44		0.0	0.0	7.60		-22	
	31-Jan-01	6.40	1.3	< 0.10	<2.0	7.70	24		1.3
B-10-field	31-Jan-01	0.46						64	
B-10 Field	11-Jun-01	0.90	0.0	0.0	0.0	1.25	3.9000	-8	NM
B-10 Field	26-Jun-01	1.87	1.3	0.0	3.0	6.20	5.6000	-22	
GW-2-field	1-Nov-00	2.32						77	
GW-2	1-Feb-01	3.80					0.0410		
GW-2-field	1-Feb-01	0.58						159	
	26-Apr-01	4.00	1.0	7.1	36.0	0.02	0.0002	152	NM
	26-Jul-01	1.93	0.0	3.9	60.0	0.00	0.0160	233	
GW-2 field	Not En. Sample						0.0009		
	31-Jan-02	2.80	0.0	0.8	45.0	0.36	0.0069	179	NM
	16,17-Apr-02	1.76	0.0	4.7	70.0	0.09	0.0003	198	
	17,18-Jul-02	1.39	0.6	0.0	69.0	0.00	0.0021	161	
	22,23-Oct-02	3.86	0.6	11.5	40.0	0.07	0.0007	166	
	19-Feb-03	7.24	0.1	10.3	49.0	0.03	0.0012	169	
	29-Jul-03	4.21	0.2	0.0	44.0	0.00	0.0007	47	
	28-Jan-04	6.02	0.0	3.3	56.0	0.00	0.00046	143	
	4-Aug-04	**8.27**	**0.0**	**0.0**	**27.0**	**0.00**	**0.00035**	**115**	
GW-3	11-Aug-00						< 0.0005	395	
GW-3-field	11-Aug-00	0.72		1.0	46.0				
GW-3-field	1-Nov-00	7.76						81	
	29-Jan-01	8.80					0.0120		
GW-3-field	1-Feb-01	8.99						235	
	27-Apr-01	2.90	0.0	0.7	30.0	0.00	0.0150	212	NM
	26-Jul-01	2.48	0.0	2.4	52.0	0.12	0.0083	214	
GW-3 field	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	0.00	0.0081	163	
	16,17-Apr-02	7.55	0.0	4.2	59.0	0.00	0.0006	133	
	17,18-Jul-02	3.50	0.0	0.0	47.0	0.22	0.0100	155	
	22,23-Oct-02	2.19	0.0	1.6	33.0	0.00	0.0007	178	
	19-Feb-03	5.28	0.4	4.0	43.0	0.02	0.0007	123	
	29-Jul-03	6.12	0.0	0.0	31.0	0.00	0.0005	96	
	28-Jan-04	4.21	0.0	0.8	61.0	0.00	0.00042	141	
	3-Aug-04	**10.20**	**0.0**	**0.0**	**41.0**	**0.00**	**0.00028**	**84**	
GW-4-field	30-Jan-01	0.83						67	
GW-4-field	26-Jul-01	2.59	0.2	10.5	25.0	1.29	0.0028	-3	
GW-4-field	18-Oct-01	1.00	0.1	0.0	0.0	4.80	4.8000	-84	NM
GW-4	31-Jan-02	0.90	0.8	0.0	0.0	8.00	3.5000	-91	
	16,17-Apr-02	0.41	0.1	5.2	0.0	5.70	4.7000	-2	
	17,18-Jul-02	2.38	3.0	0.0	0.0	>3.3	4.6000	-68	
	22,23-Oct-02	NM	NM	NM	NM	NM	0.3000	NM	
	19-Feb-03	7.76	0.4	5.4	0.0	3.30	2.3000	-57	
	30-Jul-03	5.38	6.1	0.0	0.0	3.30	1.3000	-141	
	28-Jan-04	2.17	5.9	0.0	0.0	3.30	0.2200	-73	
	3-Aug-04	**10.35**	**0.9**	**0.0**	**0.0**	**3.30**	**3.2000**	**-113**	

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)
MW-11	10-Aug-00			2.8	63.0	< 0.1	< 0.0005	476	
MW-11-field	10-Aug-00	2.52		4.1	67.0				
	1-Nov-00	4.10	< 0.010	15.0	90.0	< 0.1	0.0000		130
MW-11-field	1-Nov-00	4.01		3.3	73.0	0.00		87	
MW-11-field	1-Nov-00	3.97		27.3	74.0	0.00		319	
	31-Jan-01	6.30	< 0.010	15.0	94.0	< 1.0	0.0001		1.1
MW-11 Field	26-Apr-01	7.40	0.0	6.8	52.0	0.00	0.0014	229	NM
MW-11 Field	26-Jul-01	1.85	0.0	5.2	77.0	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	0.00	0.0077	218	
	16,17-Apr-02	3.18	0.0	2.8	88.0	0.00	0.0092	242	
	17,18-Jul-02	2.82	0.0	4.1	79.0	0.00	0.0088	357	
	22,23-Oct-02	4.47	0.0	3.7	69.0	0.00	0.0025	118	
	18-Feb-03	5.65	0.6	2.3	73.0	0.00	0.0022	304	
	30-Jul-03	3.80	0.1	0.0	54.0	0.00	0.0010	224	
	28-Jan-04	7.32	0.0	0.0	80.0	0.00	0.0200	130	
	3-Aug-04	**10.40**	**0.0**	**0.0**	**77.0**	**0.00**	**0.0028**	**185**	
LFR-1	9-Aug-00							462	
	11-Aug-00						0.0096		
LFR-1-field	9-Aug-00	3.63		5.5	30.0				1.5
	30-Oct-00	2.70	0.0	39.0	42.0	< 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	51.0	<1.0	0.0001		0.43
LFR-1-field	29-Jan-01	3.78	0.0		36.0	0.00		383	
LFR-1 Dup	29-Jan-01	4.60	<0.01	<0.10	50.0	<1.0	0.0000		0.32
	26-Apr-01	3.20	0.0	12.9	16.0	0.00	0.0003	224	NM
	26-Jul-01	1.07	0.0	8.0	25.0	0.01	0.0084	238	
LFR-1 field	18-Oct-01	1.03	0.0	6.9	24.0	0.18	0.0054	119	NM
	31-Jan-02	1.80	0.3	5.5	31.0	0.00	0.0062	163	
	16,17-Apr-02	1.68	0.3	1.5	38.0	0.39	0.0030	240	
	17,18-Jul-02	0.00	0.0	6.1	3.0	0.07	0.0047	209	
	22,23-Oct-02	0.00	0.4	0.0	23.0	0.15	0.0008	265	
	18-Feb-03	7.76	0.0	4.3	30.0	0.00	0.0008	260	
	30-Jul-03	0.58	0.3	0.0	10.0	0.00	0.0004	190	
	29-Jan-04	3.12	0.5	0.0	57.0	0.00	0.0011	19	
	4-Aug-04	**6.26**	**5.8**	**0.0**	**17.0**	**0.00**	**0.0010**	**62**	
LFR-2	11-Aug-00						6.6000	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	8.5000		
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	4.6000		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	14.0000	9	NM
	26-Jul-01	0.55	0.2	0.0	0.0	4.50	10.0000	-20	
LFR-2 field	18-Oct-01	0.43	0.0	0.0	0.0	6.50	11.0000	-75	NM
	31-Jan-02	1.00	0.0	2.6	19.0	1.81	11.0000	-14	
	16,17-Apr-02	0.00	0.0	1.7	0.0	7.20	16.0000	-6	
	17,18-Jul-02	0.00	13.9	0.0	0.0	7.20	9.6000	-64	
	22,23-Oct-02	0.00	10.7	0.5	0.0	3.30	4.7000	-82	
	18-Feb-03	0.42	9.0	0.0	0.0	3.30	9.6000	-53	
	30-Jul-03	0.00	3.0	0.0	0.0	3.30	8.7000	-85	
	4-Aug-04	**4.78**	**1.6**	**0.0**	**0.0**	**3.30**	**6.2000**	**-93**	

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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)
LFR-3	10-Aug-00			2.4	64.0	< 0.1	0.0005	464	
LFR-3 split	10-Aug-00							< 0.0005	
LFR-3-field	10-Aug-00	1.30		2.4	64.0				850
	1-Nov-00	4.70	0.0	8.8	74.0	< 1.0	0.0003		
LFR-3-field	1-Nov-00	0.58		1.8	57.0	0.00		75	
	31-Jan-01	4.10	<0.01	1.2	58.0	< 1.0	0.0004		
LFR-3-field	30-Jan-01	1.75		0.0	44.0	0.00		195	
LFR-3 Field	11-Jun-01	1.00	0.0	0.8	28.0	0.00	0.0086	201	NM
LFR-3 Field	26-Jul-01	1.29	0.4	0.0	51.0	0.60	0.0035	228	
LFR-3 Field	18-Oct-01	0.54	0.0	0.8	30.0	0.11	0.0093	139	NM
	31-Jan-02	0.80	0.4	2.6	32.0	0.00	0.0072	212	
	16,17-Apr-02	0.19	0.4	0.0	55.0	0.79	0.0096	228	
	17,18-Jul-02	0.00	0.2	1.7	42.0	0.00	0.0068	166	
	22,23-Oct-02	0.11	0.5	0.0	36.0	0.00	0.0035	186	
	19-Feb-03	1.10	0.5	0.0	19.0	0.54	0.0069	217	
	30-Jul-03	0.17	0.1	0.0	21.0	0.00	0.0069	167	
	29-Jan-04	1.39	0.0	0.0	0.0	3.30	0.0011	64	
	3-Aug-04	**5.14**	**3.9**	**0.0**	**8.0**	**0.00**	**0.0054**	**175**	
LFR-4	11-Aug-00						0.0620	402	
LFR-4-field	11-Aug-00	1.13		0.7	1.0	0.14			1.1
	31-Oct-00	1.90	2.2	< 0.10	2.9	1.10	3.2000		
LFR-4-field	31-Oct-00	0.64		1.0		0.61		-80	
	1-Feb-01	3.20	2.8	1.5	2.8	1.80	2.2000		1.5
LFR-4-field	1-Feb-01	0.55	4.5	8.0	0.0	1.50		59	
LFR-4 Field	27-Apr-01	5.60	0.0	1.7	0.0	1.37	7.0000	14	NM
LFR-4 Field	26-Jul-01	1.65	0.0	0.0	0.0	0.84	1.2000	18	
	16,17-Apr-02	0.00	1.0	2.6	6.0	4.80	12.0000	-4	
	17,18-Jul-02	0.79	6.8	0.0	0.0	>3.3	2.8000	3	
	22,23-Oct-02	0.00	4.0	0.0	0.0	2.55	1.3000	-63	
	19-Feb-03	0.50	6.8	0.0	18.0	3.30	4.4000	-41	
	30-Jul-03	0.28	5.1	0.0	0.0	3.30	3.9000	-49	
	29-Jan-04	1.64	5.0	0.0	0.0	0.52	4.0000	1	
	4-Aug-04	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	
SOMA-1	18-Oct-01	4.19	0.3	0.2	33.0	0.52	0.1200	151	NM
	31-Jan-02	0.40	0.0	0.0	18.0	0.00	0.5800	141	NM
	16,17-Apr-02	0.00	0.0	0.6	31.0	0.10	0.8200	213	
	17,18-Jul-02	0.00	0.0	1.8	28.0	0.05	0.4400	149	
	22,23-Oct-02	0.00	0.7	0.0	4.0	0.00	0.6800	131	
	18-Feb-03	5.12	0.4	0.0	1.0	0.00	0.4100	258	
	30-Jul-03	0.00	0.4	0.0	1.0	0.00	0.9900	74	
	29-Jan-04	0.29	0.5	0.0	13.0	0.47	0.8500	133	
	3-Aug-04	**4.44**	**0.0**	**0.0**	**25.0**	**0.00**	**0.5000**	**152**	
SOMA-2	18-Oct-01	0.57	0.0	0.4	0.0	40.00	6.6000	-89	NM
	31-Jan-02	0.70	3.8	0.8	0.0	9.00	13.0000	103	NM
	16,17-Apr-02	0.00	0.5	0.1	0.0	7.40	14.0000	-69	
	17,18-Jul-02	0.00	5.7	0.0	0.0	>3.3	9.4000	-87	
	22,23-Oct-02	0.35	1.7	2.8	15.0	3.30	2.2000	-98	
	19-Feb-03	3.17	1.9	1.7	0.0	2.89	2.4000	-72	
	30-Jul-03	2.71	1.0	0.0	0.0	0.83	1.0000	-53	
	28-Jan-04	4.52	0.2	0.0	0.0	1.46	1.7000	-8	
	4-Aug-04	**7.06**	**0.4**	**0.0**	**0.0**	**0.31**	**1.4000**	**-33**	

Table 6
Historical In-Situ and Ex-Situ Analyses Results for Bioattenuation Parameters in Groundwater Samples
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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)
SOMA-3	18-Oct-01	1.32	0.0	0.0	33.0	0.22	1.0000	2	NM
	31-Jan-02	1.00	22.0	2.0	54.0	0.62	0.4600	-71	NM
	16,17-Apr-02	2.60	0.0	0.6	42.0	0.77	0.4100	29	
	17,18-Jul-02	0.97	10.9	0.0	23.0	>3.3	0.9400	-51	
	22,23-Oct-02	0.30	2.7	0.1	7.0	3.26	4.2000	-98	
	19-Feb-03	0.18	0.0	0.0	0.0	3.30	9.0000	-88	
	30-Jul-03	0.00	2.0	0.0	0.0	3.30	8.7000	-106	
	29-Jan-04	2.30	3.5	0.0	0.0	3.30	8.4000	-85	
	4-Aug-04	**5.35**	**0.0**	**0.0**	**0.0**	**3.30**	**6.5000**	**-105**	
SOMA-4	18-Oct-01	0.83	4.0	22.0	17.0	0.22	1.2000	88	NM
SOMA-5	**4-Aug-04**	**5.65**	**0.0**	**0.0**	**0.0**	**0.23**	**1.7000**	**-143**	

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.
(1) Sample concentration was too dilute to be reproducibly measured using the Hach spectrophotometer.
(2) Field measurement was not recorded.
NM: Not Measured. Well LFR-4 was inaccessible during the Third Quarter 2004 monitoring event.

FIGURES

N

approximate scale in feet

0 250 500

Figure 1: Site vicinity map.

SOMA
ENVIRONMENTAL ENGINEERING, INC.

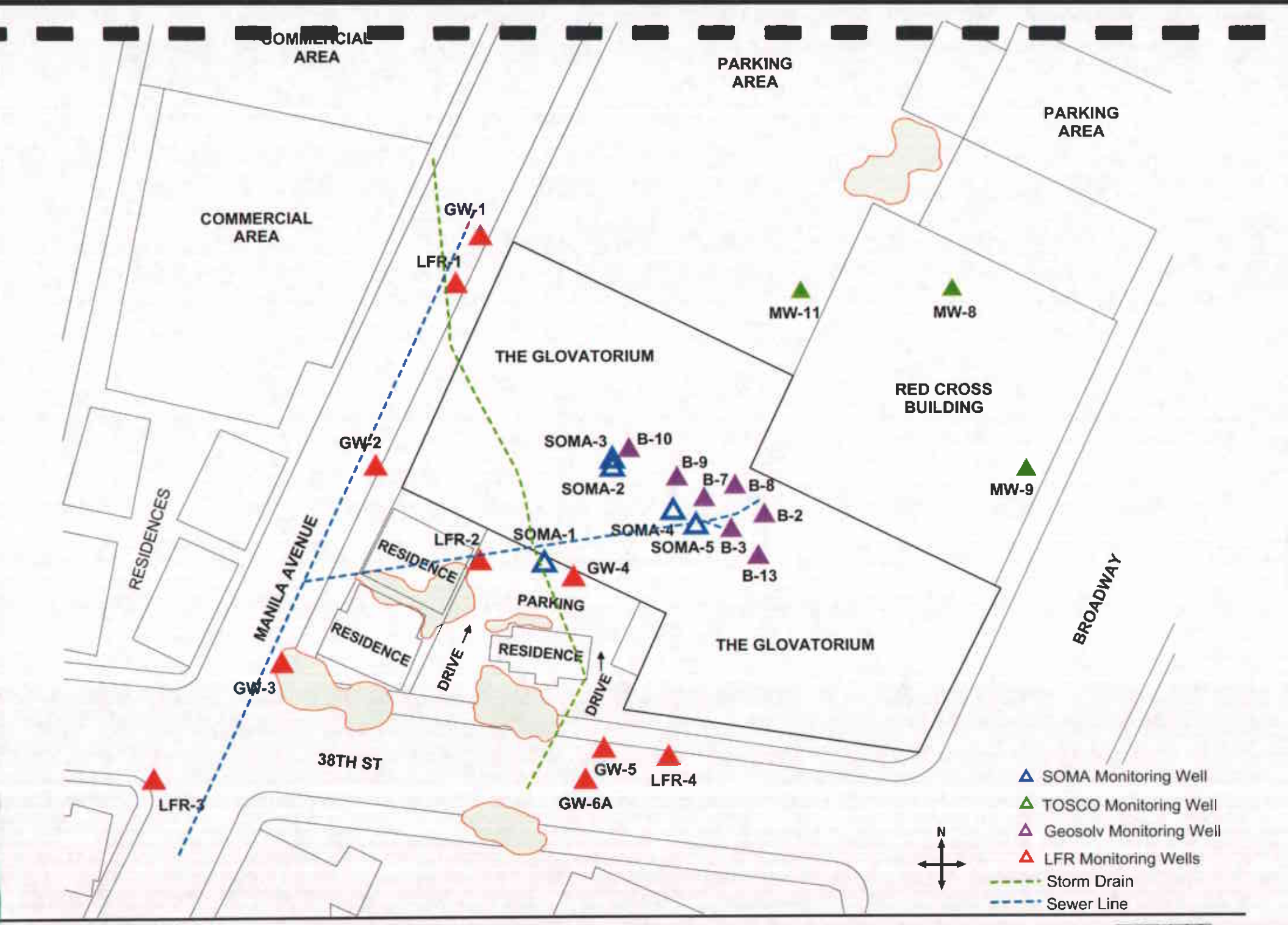


Figure 2: Map showing the approximate locations of groundwater monitoring wells.

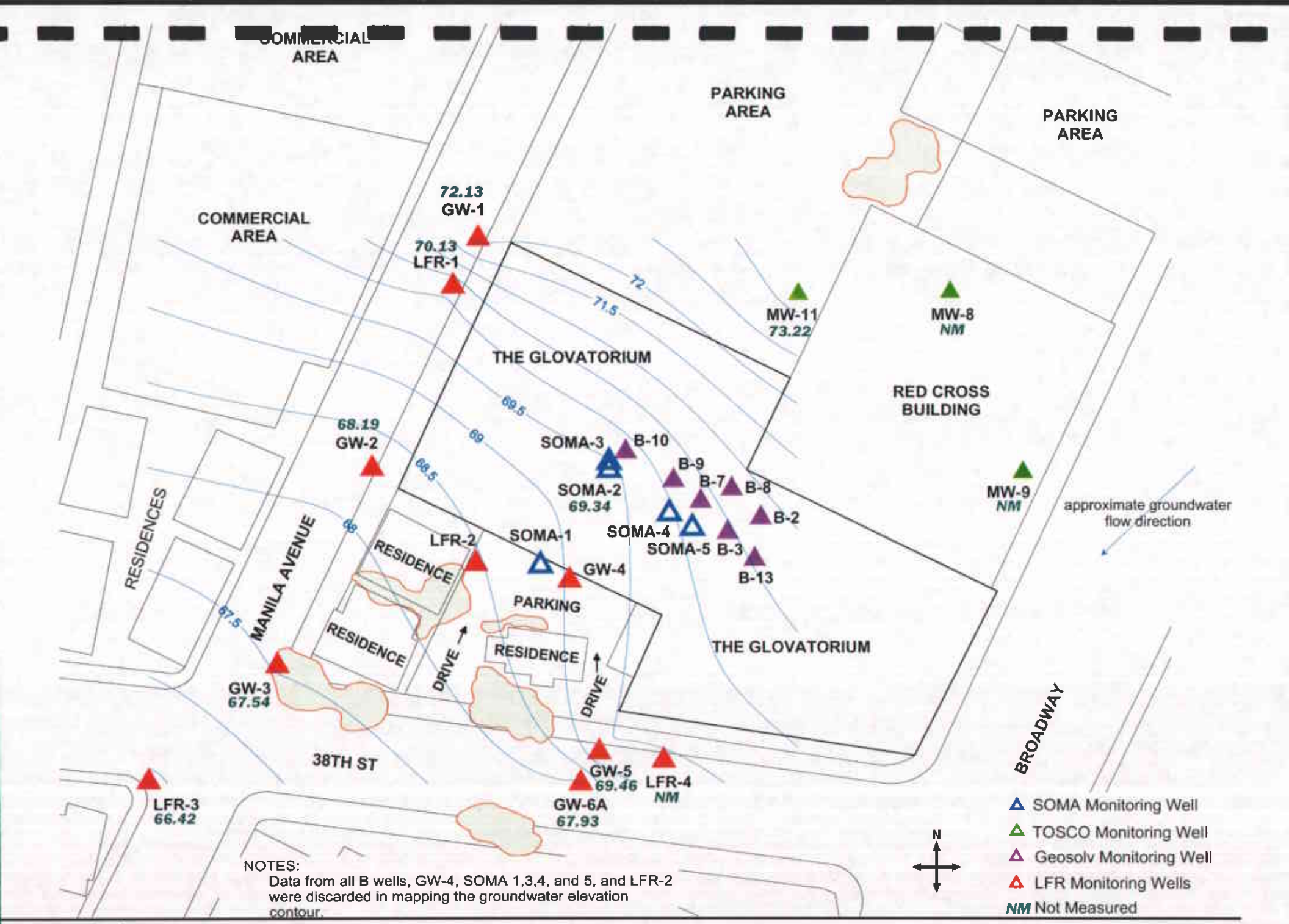


Figure 3: Groundwater elevation contour map in feet. August 2004.

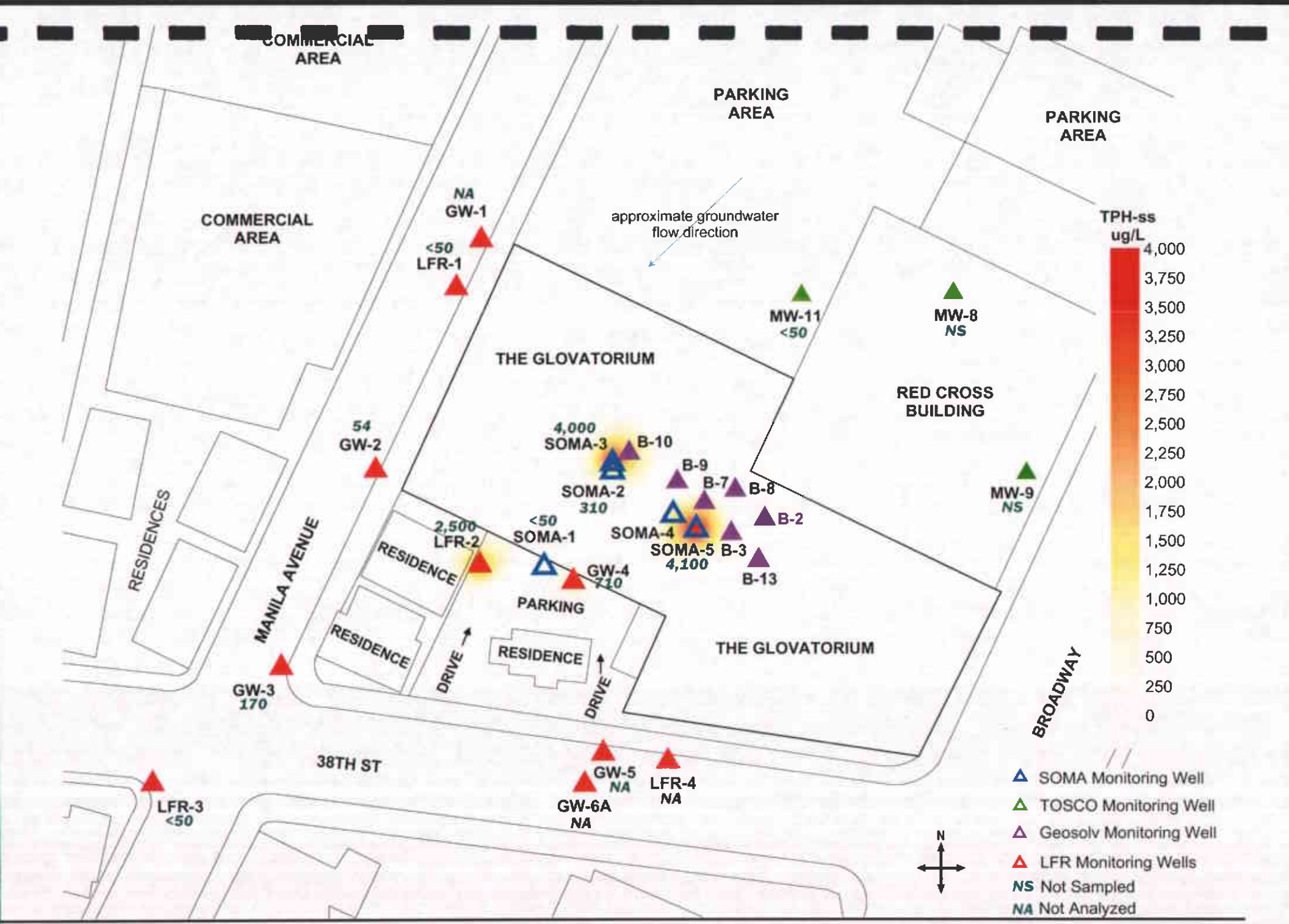


Figure 4: Contour map of TPH-ss concentrations in groundwater. August 2004.

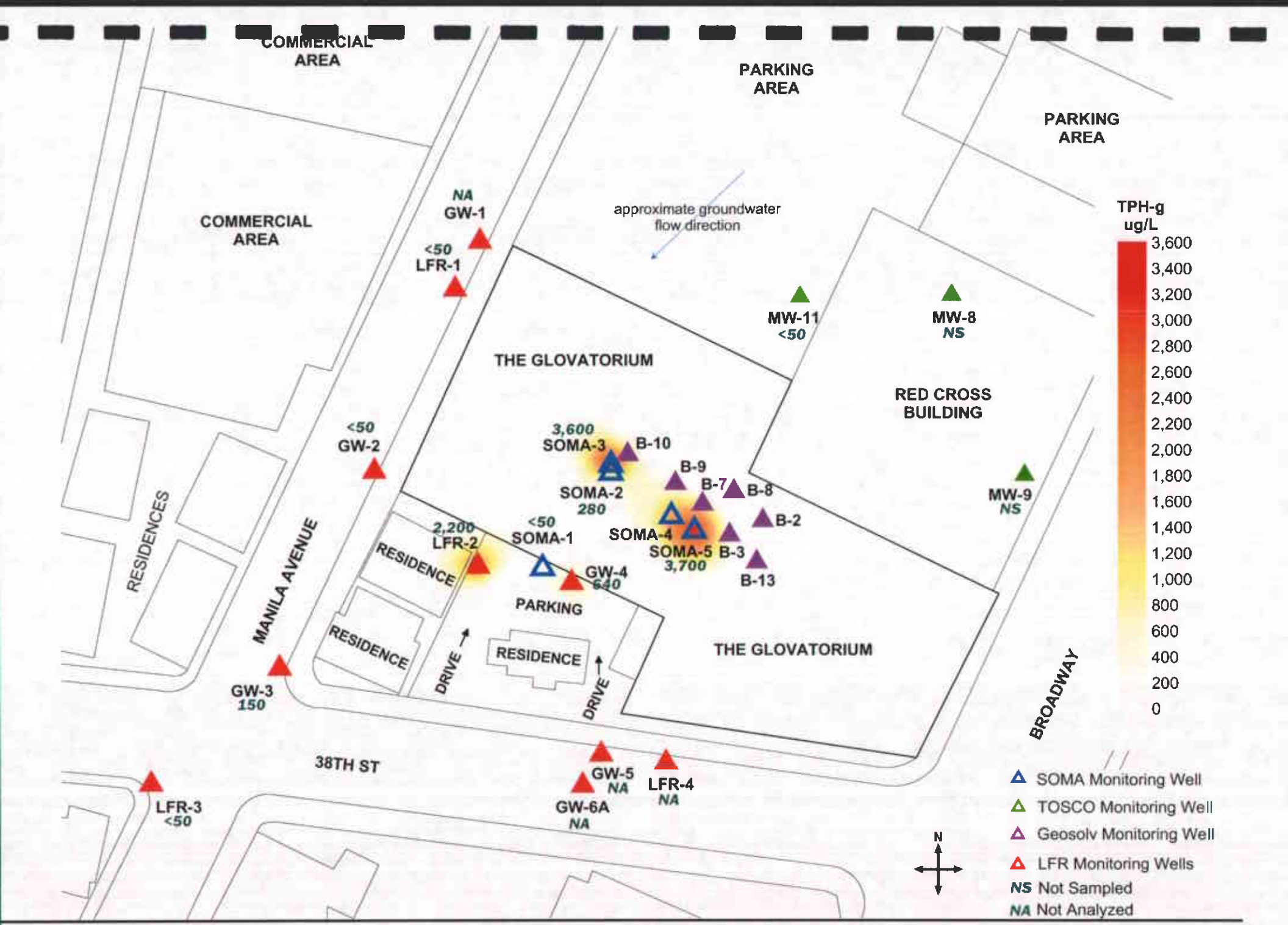


Figure 5: Contour map of TPH-g concentrations in groundwater. August 2004.

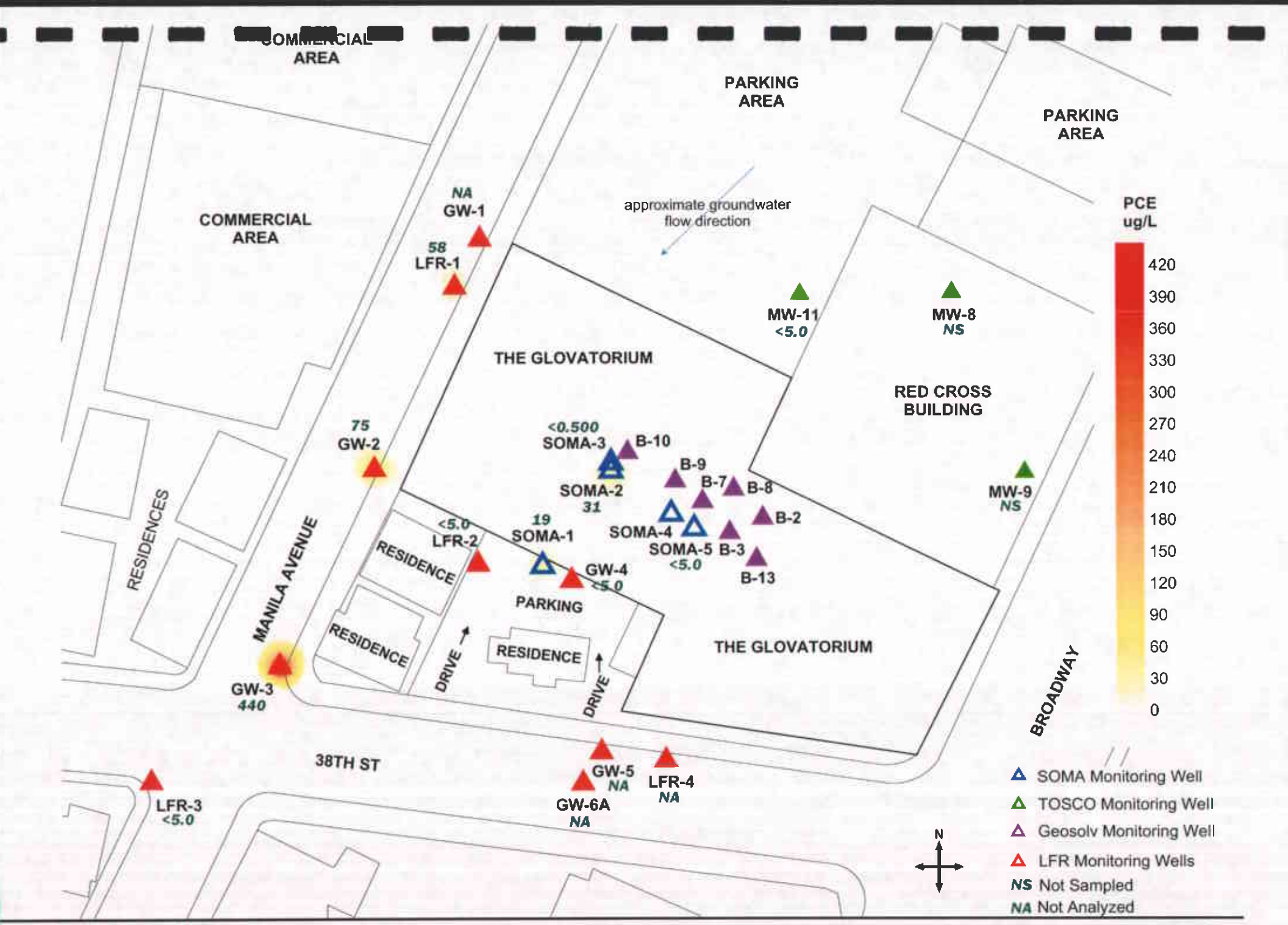


Figure 6: Contour map of PCE concentrations in groundwater. August 2004.

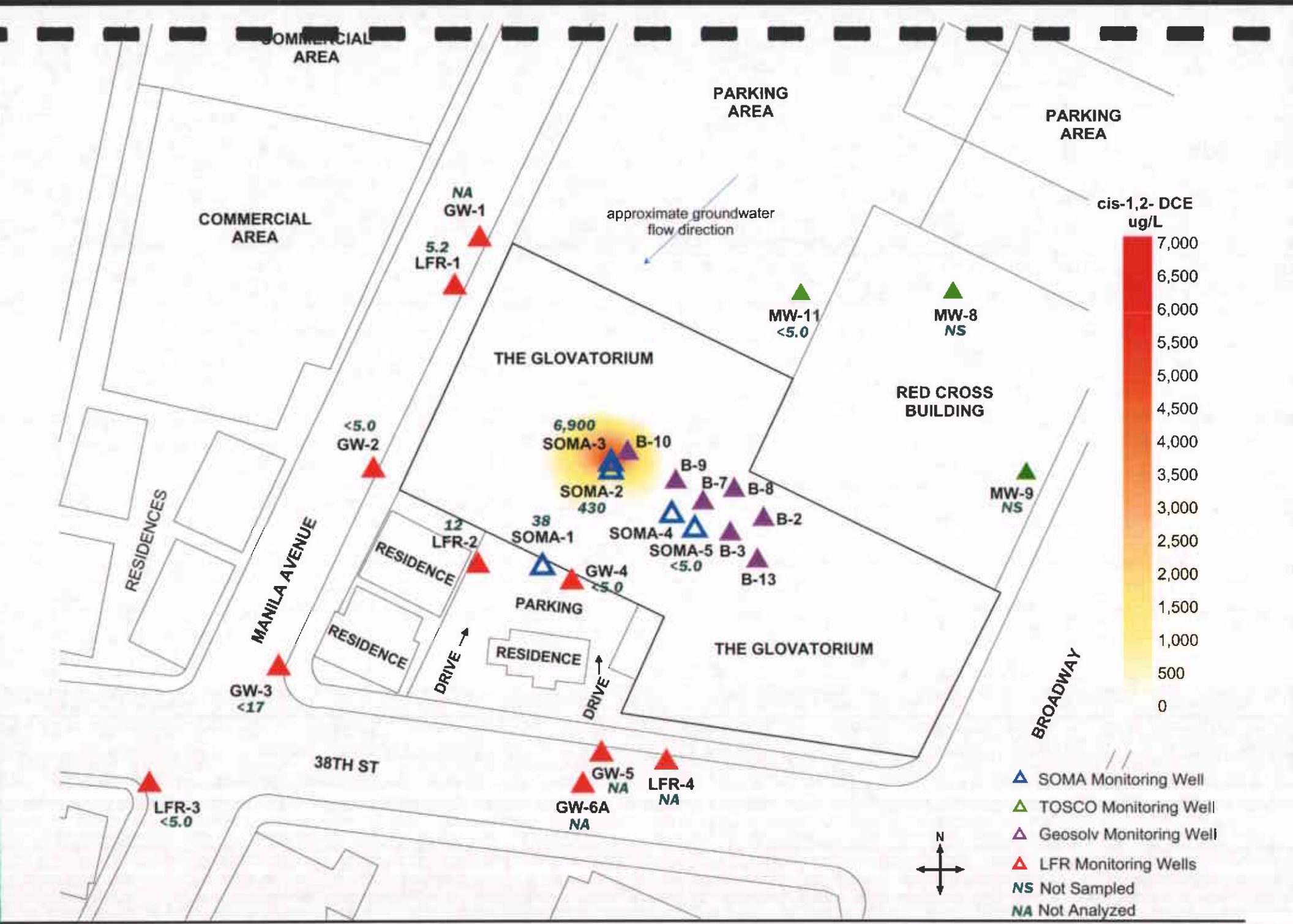


Figure 7: Contour map of cis-1,2- dichloroethane concentrations in groundwater. August 2004.

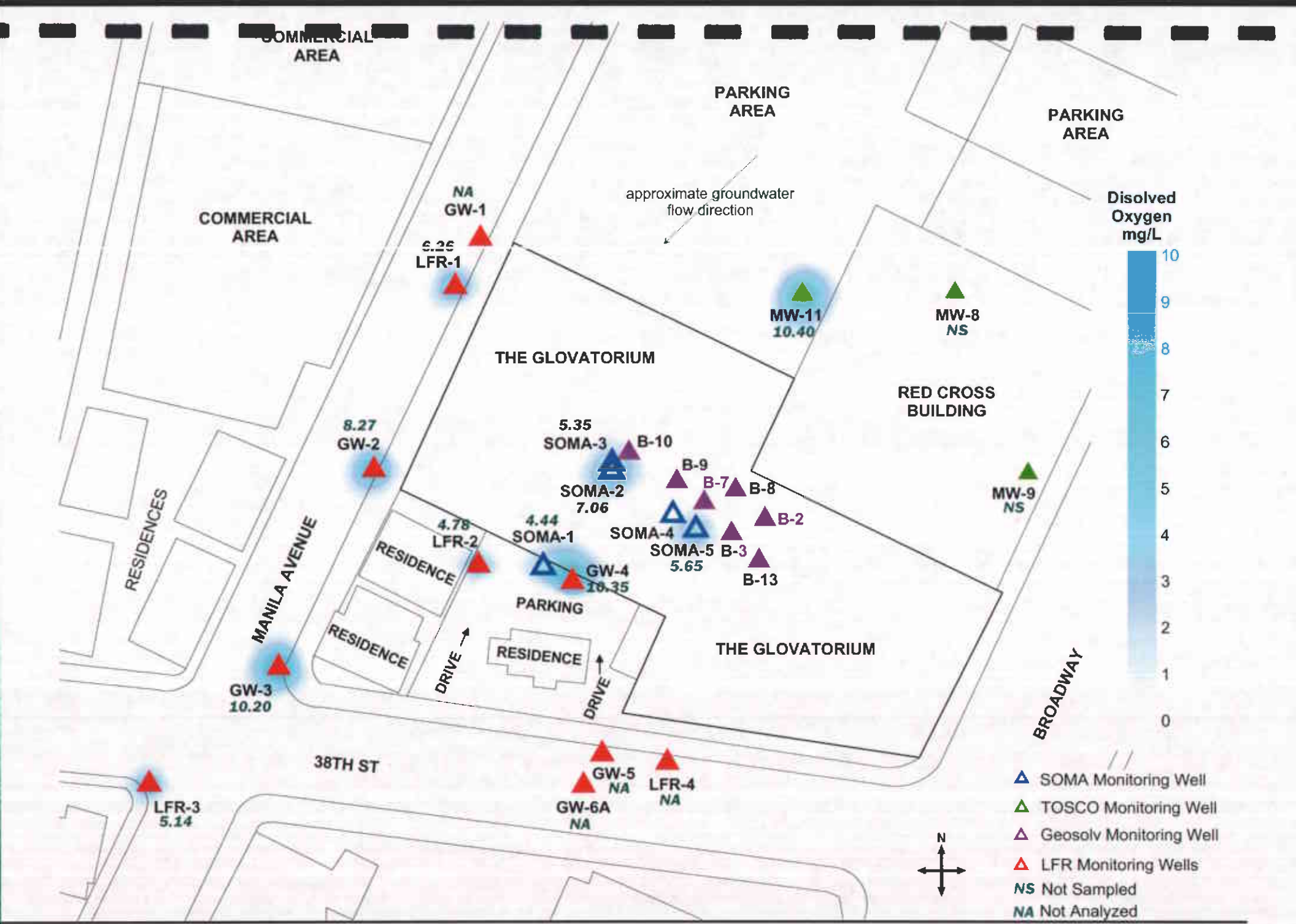


Figure 8: Contour map of dissolved oxygen concentrations in groundwater. August 2004.

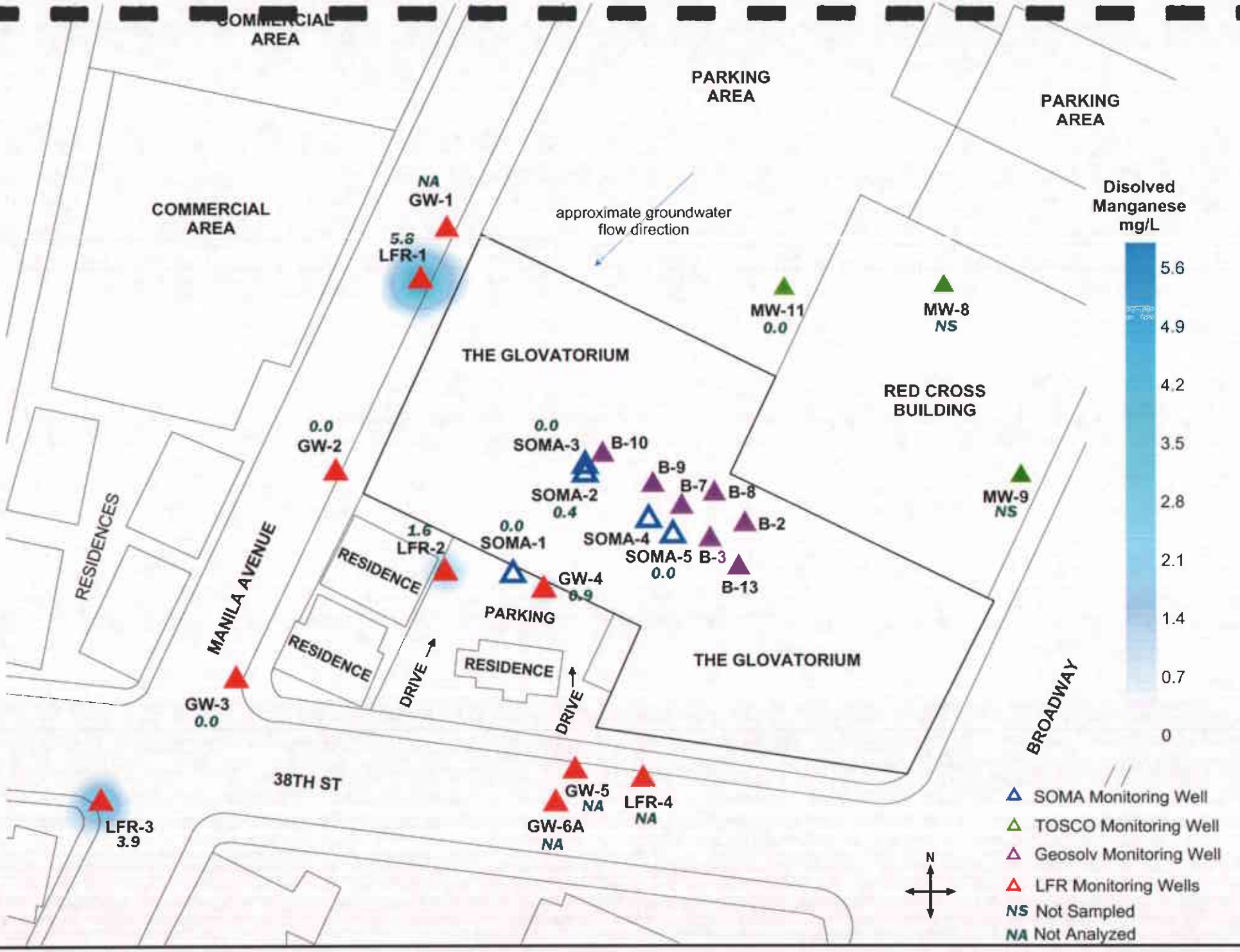


Figure 9: Contour map of dissolved manganese concentrations in groundwater. August 2004.

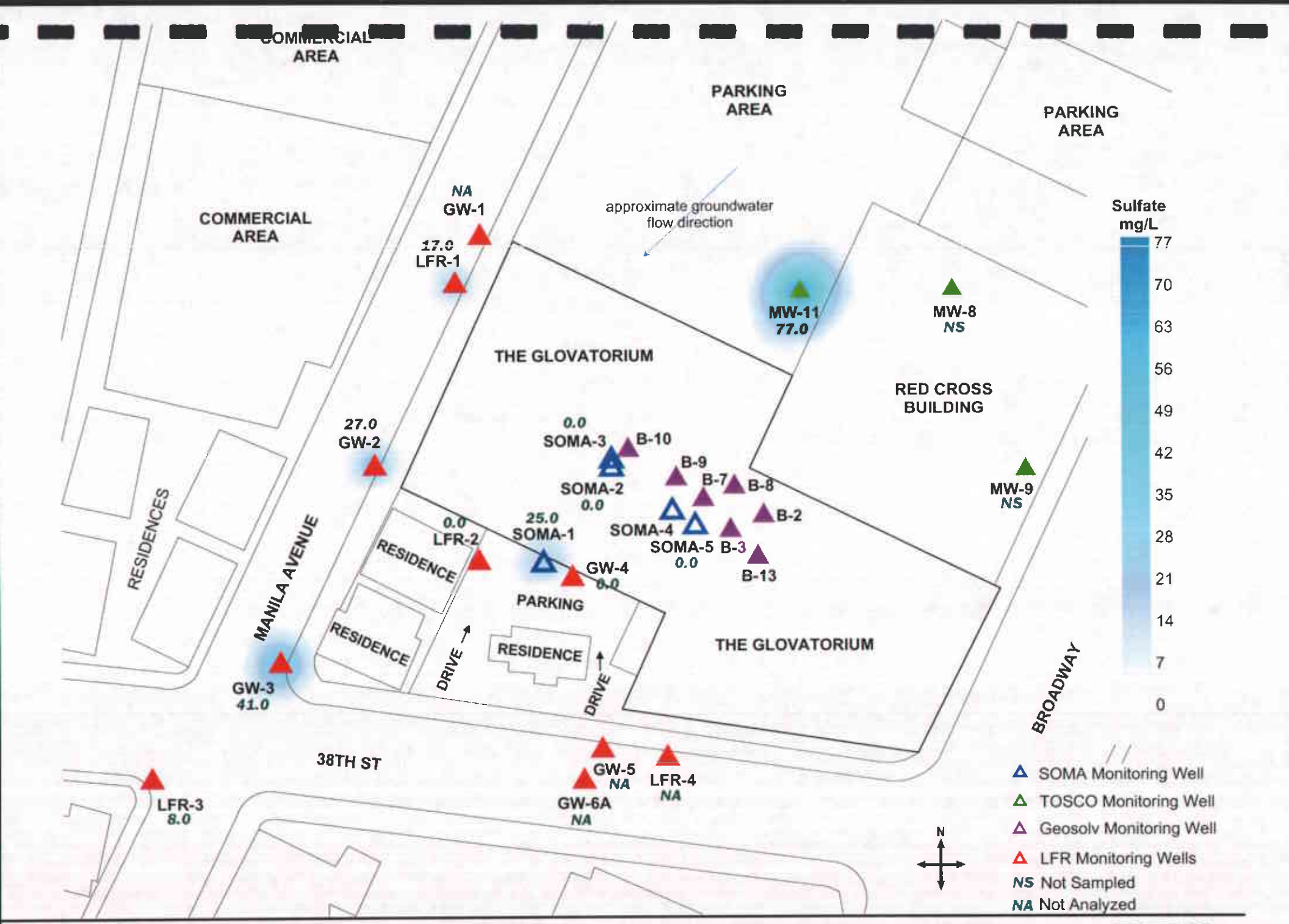


Figure 10: Contour map of sulfate concentrations in groundwater. August 2004.

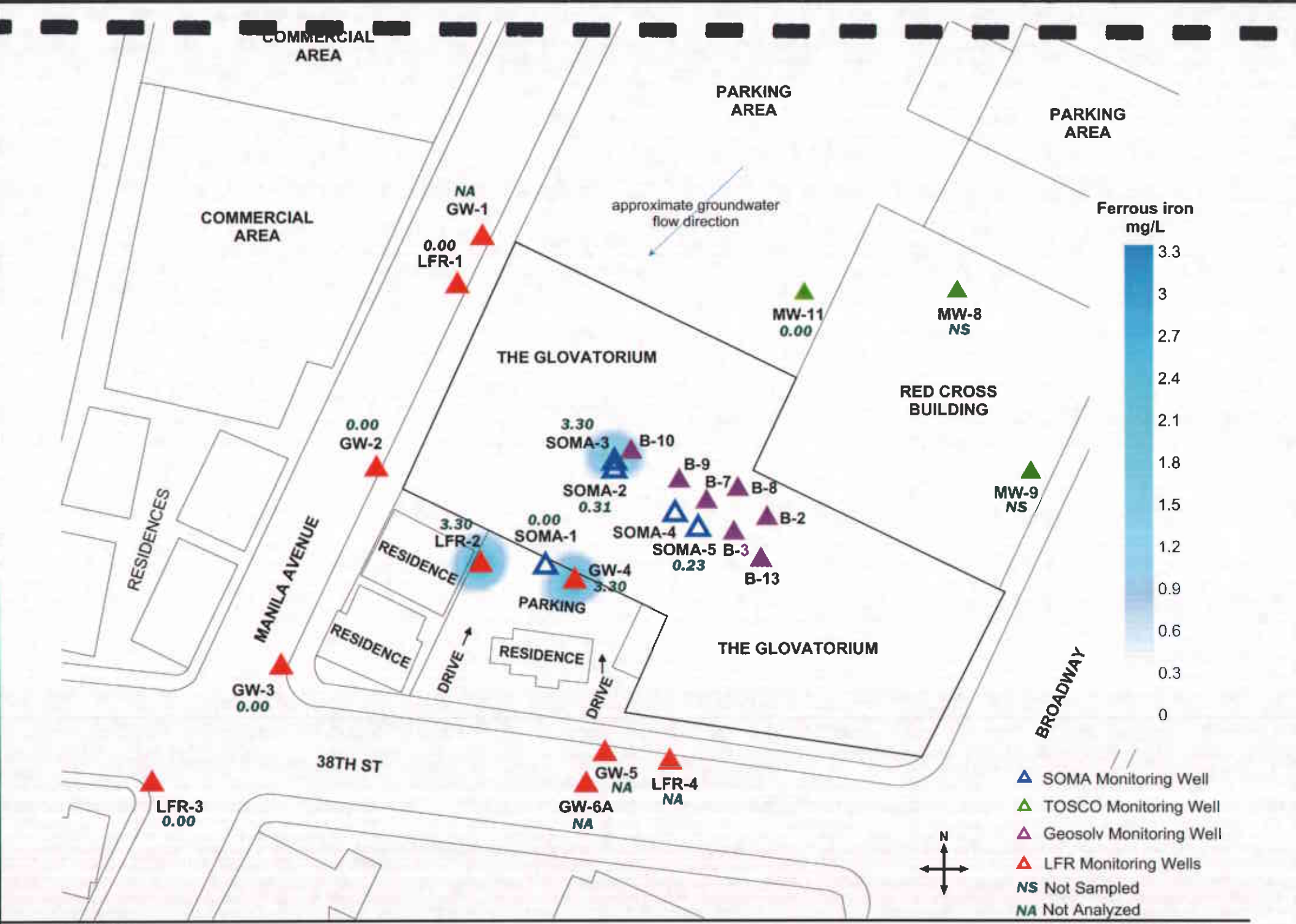


Figure 11: Contour map of ferrouos iron concentrations in groundwater. August 2004.

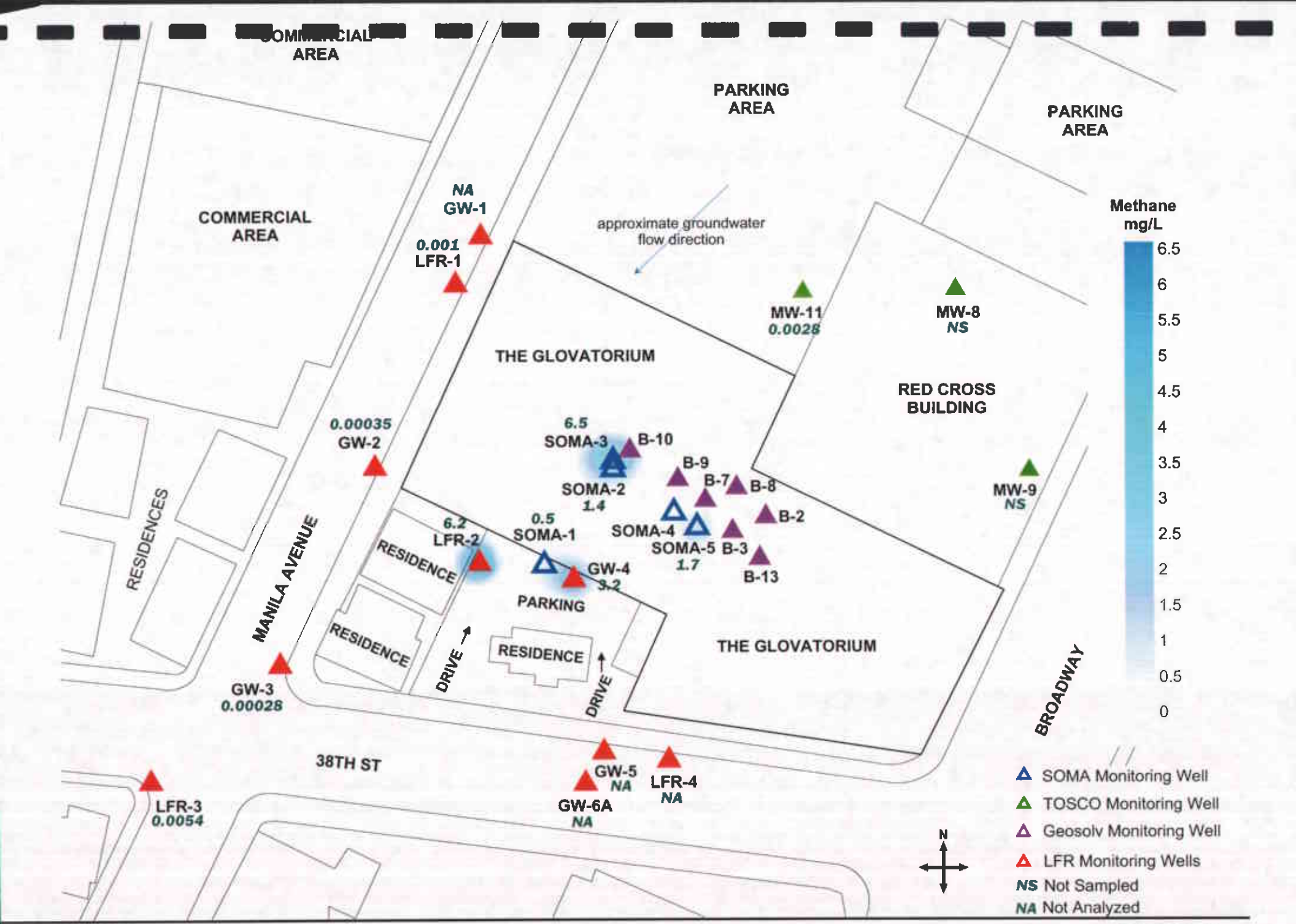


Figure 12: Contour map of methane concentrations in groundwater. August 2004.

APPENDIX A

Field Notes, Field Measured Physical and Chemical Parameter Values

ENVIRONMENTAL ENGINEERING, INC

Well Name:	GW-2	**Project #:**	2511
Casing Diameter:	3/4 inch	**Address:**	3815 Broadway
Depth of Well:	20 feet		Oakland, California
Top of Casing Elevation:	79.14 feet	**Date:**	08/04/04
Depth to Groundwater:	10.95 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	68.19 feet		Rouzbeh Alavi
Water Column Height:	9.05 feet		
Purged Volume:	0.2 gallons		

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)
9:56 AM	started						
9:57 AM	0.1	6.87	19.91	10.91	999	22.5	113
9:57 AM	0.2	6.85	19.92	8.27	561	18.7	115
10 AM	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
10 AM	0	0	0	0	27	0

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	GW-3	**Project #:**	2511
Casing Diameter:	3/4 inch	**Address:**	3815 Broadway
Depth of Well:	20 feet		Oakland, California
Top of Casing Elevation:	77.92 feet	**Date:**	08/03/04
Depth to Groundwater:	10.38 feet	**Sampler:**	Tony Perini / Elena Manzo
Groundwater Elevation:	67.54 feet		
Water Column Height:	9.62 feet		
Purged Volume:	0.30 gallons		

Purging Method:	**Bailer** ☐		**Pump** ■		
Sampling Method:	**Bailer** ■		**Pump** ☐		
Color:	**No** ☑		**Yes** ☐	**Describe:**	
Sheen:	**No** ☑		**Yes** ☐	**Describe:**	
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time PM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
4:19	starts purging well						
4:20	0.10	7.20	20.38	10.46	537	179	70
4:21	0.30	6.74	20.20	10.20	436	33.7	84
4:25	samples						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
4:25 PM	0	0	0	0	41.0	0

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	GW-4	**Project #:**	2511
Casing Diameter:	3/4 inch	**Address:**	3815 Broadway
Depth of Well:	12 feet		Oakland, California
Top of Casing Elevation:	82.37 feet	**Date:**	08/03/04-(
Depth to Groundwater:	9.83 feet	**Sampler:**	Tony Adam
Groundwater Elevation:	72.54 feet		Elena Manzo
Water Column Height:	2.17 feet		
Purged Volume:	0.10 gallons		

Purging Method:	**Bailer** ☐		**Pump** ■		
Sampling Method:	**Bailer** ■		**Pump** ☐		
Color:	**No** ☑		**Yes** ☐	**Describe:**	
Sheen:	**No** ☑		**Yes** ☐	**Describe:**	
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time PM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
3:08	0.10	6.96	22.62	10.35	509	277	-113
	dried						
3:12	samples						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
3:12 PM.	3.30	3.30	0	0	0	0.9

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	MW-11	**Project #:**	2511
Casing Diameter:	2 inch	**Address:**	3815 Broadway
Depth of Well:	19.00 feet		Oakland, California
Top of Casing Elevation:	84.13 feet	**Date:**	08/03/04-
Depth to Groundwater:	10.91 feet	**Sampler:**	Tony Perini, Elena Manzo
Groundwater Elevation:	73.22 feet		
Water Column Height:	8.09 feet		
Purged Volume:	3.5 gallons		

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)
1:45pm		started	purging				
1:47pm	1.5	8.86	21.70	10.40	8.25	38.2	185
1:49pm	3.5	DRIED					
1:52pm	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1:52pm	0	0	0	0	77	0

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	LFR-1	**Project #:**	2511
Casing Diameter:	2 inch	**Address:**	3815 Broadway
Depth of Well:	19 feet		Oakland, California
Top of Casing Elevation:	79.97 feet	**Date:**	08/04/04
Depth to Groundwater:	9.84 feet	**Sampler:**	Tony Perini Rouzbeh Alami
Groundwater Elevation:	70.13 feet		
Water Column Height:	9.16 feet		
Purged Volume:	8.0 gallons		

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)
9:01 AM	Started purging well						
9:02 AM	1.0	6.79	19.48	9.25	1270	666	46
9:04 AM	2.5	6.66	19.86	5.99	568	652	47
9:06 AM	7.0	6.39	19.01	6.26	1260	99.9	62
9:07 AM	8.0	DRIED					
9:10 AM	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
9:10 AM	0	0.47	0	0	17	5.8

Notes:

SOMA
ENVIRONMENTAL ENGINEERING, INC

Well Name:	LFR-2	**Project #:**	2511
Casing Diameter:	2 inch	**Address:**	3815 Broadway
Depth of Well:	19 feet		Oakland, California
Top of Casing Elevation:	81.89 feet	**Date:**	08/04/04
Depth to Groundwater:	11.19 feet	**Sampler:**	Tony Perini, Rouzbeh Alavi
Groundwater Elevation:	70.70 feet		
Water Column Height:	7.81 feet		
Purged Volume:	4.0 gallons		

Purging Method: Bailer ☐ Pump ■

Sampling Method: Bailer ■ Pump ☐

Color: No ☑ Yes ☐ Describe: ______

Sheen: No ☑ Yes ☐ Describe: ______

Odor: No ☑ Yes ☐ Describe: ______

Field Measurements:

Time AM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
8:22	started purging well						
8:24	1.0	7.03	17.63	5.72	720	12.4	-83
8:26	4.0	6.76	17.39	4.78	795	20	-93
8:30	sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
8:30 A	3.30	3.30	0	0	0	1.6

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	LFR-3	**Project #:**	2511
Casing Diameter:	2 inch	**Address:**	3815 Broadway
Depth of Well:	22.00 feet		Oakland, California
Top of Casing Elevation:	77.96 feet	**Date:**	03/03/04
Depth to Groundwater:	11.54 feet	**Sampler:**	Tony Perini, Elena Mauzo
Groundwater Elevation:	66.42 feet		
Water Column Height:	10.46 feet		
Purged Volume:	7 gallons		

Purging Method:	Bailer ☐		Pump ■		
Sampling Method:	Bailer ■		Pump ☐		
Color:	No ☐	Yes ☑	Describe:	cloudy	
Sheen:	No ☑	Yes ☐	Describe:		
Odor:	No ☑	Yes ☐	Describe:		

Field Measurements:

Time PM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
12:59	start to purging well						
1:01	2	6.17	21.12	5.92	393	57.4	184
1:03	5	6.23	20.27	5.32	401	50.6	178
1:04	7	6.24	19.96	5.14	415	57.0	175
1:07 pm	samples						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1:07 pm	0	0.34	0	0	8	3.9

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	SOMA-1	**Project #:**	2511
Casing Diameter:	4 inch	**Address:**	3815 Broadway
Depth of Well:	40.00 feet		Oakland, California
Top of Casing Elevation:	81.64 feet	**Date:**	08/03/04
Depth to Groundwater:	14.40 feet	**Sampler:**	Tony Perini
Groundwater Elevation:	67.24 feet		Elena Manzo
Water Column Height:	25.60 feet		
Purged Volume:	18 gallons		

Purging Method:	**Bailer** ☐		**Pump** ■		
Sampling Method:	**Bailer** ■		**Pump** ☐		
Color:	**No** ☑		**Yes** ☐	**Describe:**	
Sheen:	**No** ☑		**Yes** ☐	**Describe:**	
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time pm	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
2:25	Started purging well						
2:27	4.0	6.56	17.68	6.61	965	98.3	177
2:30	8.0	6.45	17.65	4.92	967	94.1	171
2:34	13	6.41	17.75	4.37	961	91.8	161
2:38	18	6.42	17.89	4.44	956	169	152
2:40	Sampled						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
2:40pm	0	0	0	0	25	0

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	SOMA-2	**Project #:**	2511
Casing Diameter:	3/4 inch	**Address:**	3815 Broadway
Depth of Well:	20 feet		Oakland, California
Top of Casing Elevation:	81.39 feet	**Date:**	08/04/04
Depth to Groundwater:	12.05 feet	**Sampler:**	Tony Perini Rouzbeh Alami
Groundwater Elevation:	69.34 feet		
Water Column Height:	7.95 feet		
Purged Volume:	0.4 gallons		

Purging Method:	**Bailer** ☐		**Pump** ■		
Sampling Method:	**Bailer** ■		**Pump** ☐		
Color:	**No** ☐		**Yes** ☑	**Describe:**	Blackish
Sheen:	**No** ☐		**Yes** ☑	**Describe:**	slight sheen
Odor:	**No** ☑		**Yes** ☐	**Describe:**	

Field Measurements:

Time 4m7	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
11:13	started		purging well				
11:14	0.1	7.07	16.86	11.47	1260	197	-5
11:16	0.3	6.84	16.67	7.75	1200	187	-29
11:17	0.4	6.78	16.76	7.06	1180	299	-33
11:20	sampled						

Time 4m7	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
11:20	0.31	0.34	0	0	0	0.4

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name:	Somb-3	**Project #:**	2511
Casing Diameter:	2 inch	**Address:**	3815 Broadway
Depth of Well:	30 feet		Oakland, California
Top of Casing Elevation:	81.42 feet	**Date:**	08/04/04
Depth to Groundwater:	9.39 feet	**Sampler:**	Tony Perry, Rouzbeh Alami
Groundwater Elevation:	72.03 feet		
Water Column Height:	20.61 feet		
Purged Volume:	15 gallons		

Purging Method:	**Bailer** ☐	**Pump** ■			
Sampling Method:	**Bailer** ■	**Pump** ☐			
Color:	**No** ☐	**Yes** ☑	**Describe:**	cloudy	
Sheen:	**No** ☑	**Yes** ☐	**Describe:**		
Odor:	**No** ☑	**Yes** ☐	**Describe:**		

Field Measurements:

Time AM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
11:47	starts purging well						
11:49	4.0	6.83	16.33	5.39	939	81.5	-91
11:53	12	6.79	16.39	5.25	950	59	-104
11:57	15	6.79	16.43	5.35	956	52.3	-105
12PM	samples						

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

Notes:

ENVIRONMENTAL ENGINEERING, INC

Well Name: SOMA-5
Casing Diameter: 3/4 inch
Depth of Well: 26 feet
Top of Casing Elevation: 81.50 feet
Depth to Groundwater: 19.32 ~~.82~~ feet
Groundwater Elevation: ~~78.68~~ 62.18 feet
Water Column Height: 23.48 feet
Purged Volume: 0.5 gallons

Project #: 2511
Address: 3815 Broadway
Oakland, California
Date: 08/04/04
Sampler: Tony Adam
Rowabeh Alami

Purging Method: Bailer ☐ Pump ■
Sampling Method: Bailer ■ Pump ☐

Color: No ☐ Yes ☑ Describe: grayish
Sheen: No ☑ Yes ☐ Describe:
Odor: No ☑ Yes ☐ Describe:

Field Measurements:

Time PM	Volume (gallons)	pH	Temp (°C)	D.O. (mg/L)	E.C. (µs/cm)	Turbidity (NTU)	ORP (mV)
12:51	start purging well						
12:52	0.2	7.34	16.77	6.90	1750	108	155
12:53	0.4	7.28	16.91	6.28	1050	338	-144
12:54	0.5	7.14	16.98	5.65	773	315	-143
1 PM	samples						

Time	Ferrous Iron (mg/L)	Total Iron (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)	Dissolved Manganese (mg/L)
1 PM	0.23	3.30	0	0	0	0

Notes:

APPENDIX B

Chain of Custody Forms

and

Laboratory Reports

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

SOMA Environmental Engineering Inc.
2680 Bishop Dr.
Suite 203
San Ramon, CA 94583

Date: 25-AUG-04
Lab Job Number: 173830
Project ID: 2511
Location: 3815 Broadway, Oakland

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

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	173830
Client:	SOMA Environmental Engineering Inc.
Project:	3815 Broadway, Oakland
Request Date:	08/04/04
Samples Received:	08/04/04

This hardcopy data package contains sample and batch QC results for eleven water samples, requested for the above referenced project on 08/04/04. The samples were received cold and intact.

Volatile Organics by GC (EPA 8015B and EPA 8021B):
High surrogate recoveries were observed for bromofluorobenzene (FID) in a number of samples, due to interference from coeluting hydrocarbon peaks. No other analytical problems were encountered.

Volatile Analytes by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

C&T LOGIN # 173830

Project No: 2511

Project Name: 3815 Broadway, Oakland, CA

Turnaround Time: Standard

Sampler: Tony Perini / Elena Manzo / Rouzbeh Alavi

Report To: Tony Perini

Company: SOMA Environmental

Telephone: 925-244-6600

Fax: 925-244-6601

Analyses

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	TPHg (including Stoddard Solvent) 8015	BTEX + MtBE 8021 GC	8260 (Full List)
-1	GW-2	8/4/04 10A		✓		5-40ml VOAs	✓			✓	✓	✓	✓
-2	GW-3	8/3/04 425P		↓		↓	↓			↓	↓	↓	↓
-3	GW-4	8/3/04 312P		↓		↓	↓			↓	↓	↓	↓
-4	MW-11	8/3/04 152P		↓		↓	↓			↓	↓	↓	↓
-5	LFR-1	8/4/04 910A		↓		↓	↓			↓	↓	↓	↓
-6	LFR-2	8/4/04 830A		↓		↓	↓			↓	↓	↓	↓
-7	LFR-3 *	8/3/04 107P		↓		↓	↓			↓	↓	↓	↓
-8	SOMA-1	8/3/04 240P		↓		↓	↓			↓	↓	↓	↓
-9	SOMA-2	8/4/04 1120A		↓		↓	↓			↓	↓	↓	↓
-10	SOMA-3	8/4/04 12P		↓		↓	↓			↓	↓	↓	↓
-11	SOMA-5	8/4/04 1P		↓		↓	↓			↓	↓	↓	↓

Notes:
* One voa labelled LFR-1 (id by time) JMW 8-4-04

cold/intact 8/28/04 UB

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Tony Perini / Tony Perini	8/4/04 2:15P	Lavannalutri	8-4-04 2:15pm

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Received:	08/04/04
Units:	ug/L		

Field ID:	GW-2	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-001	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	54 Y Z	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	74-142
Bromofluorobenzene (FID)	108	80-139

Field ID:	GW-3	Batch#:	93537
Type:	SAMPLE	Sampled:	08/03/04
Lab ID:	173830-002	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	150 Y Z	50
Stoddard Solvent C7-C12	170 Y Z	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	74-142
Bromofluorobenzene (FID)	112	80-139

Field ID:	GW-4	Batch#:	93537
Type:	SAMPLE	Sampled:	08/03/04
Lab ID:	173830-003	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	640 H Y	50
Stoddard Solvent C7-C12	710	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	74-142
Bromofluorobenzene (FID)	176 *	80-139

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Received:	08/04/04
Units:	ug/L		

Field ID:	MW-11	Batch#:	93506
Type:	SAMPLE	Sampled:	08/03/04
Lab ID:	173830-004	Analyzed:	08/05/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	74-142
Bromofluorobenzene (FID)	107	80-139

Field ID:	LFR-1	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-005	Analyzed:	08/06/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	74-142
Bromofluorobenzene (FID)	111	80-139

Field ID:	LFR-2	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-006	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,200 H Y	50
Stoddard Solvent C7-C12	2,500	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	74-142
Bromofluorobenzene (FID)	265 *	>LR b 80-139

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Received:	08/04/04
Units:	ug/L		

Field ID:	LFR-3	Batch#:	93506
Type:	SAMPLE	Sampled:	08/03/04
Lab ID:	173830-007	Analyzed:	08/05/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	74-142
Bromofluorobenzene (FID)	105	80-139

Field ID:	SOMA-1	Batch#:	93506
Type:	SAMPLE	Sampled:	08/03/04
Lab ID:	173830-008	Analyzed:	08/05/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	74-142
Bromofluorobenzene (FID)	102	80-139

Field ID:	SOMA-2	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-009	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	280 H Y	50
Stoddard Solvent C7-C12	310	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	74-142
Bromofluorobenzene (FID)	137	80-139

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Received:	08/04/04
Units:	ug/L		

Field ID:	SOMA-3	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-010	Analyzed:	08/06/04
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	3,600 H Y	100
Stoddard Solvent C7-C12	4,000	100

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	74-142
Bromofluorobenzene (FID)	175 *	80-139

Field ID:	SOMA-5	Batch#:	93537
Type:	SAMPLE	Sampled:	08/04/04
Lab ID:	173830-011	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	3,700 H Y	50
Stoddard Solvent C7-C12	4,100	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	87	74-142
Bromofluorobenzene (FID)	228 *	>LR b 80-139

Type:	BLANK	Batch#:	93506
Lab ID:	QC260248	Analyzed:	08/05/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	74-142
Bromofluorobenzene (FID)	99	80-139

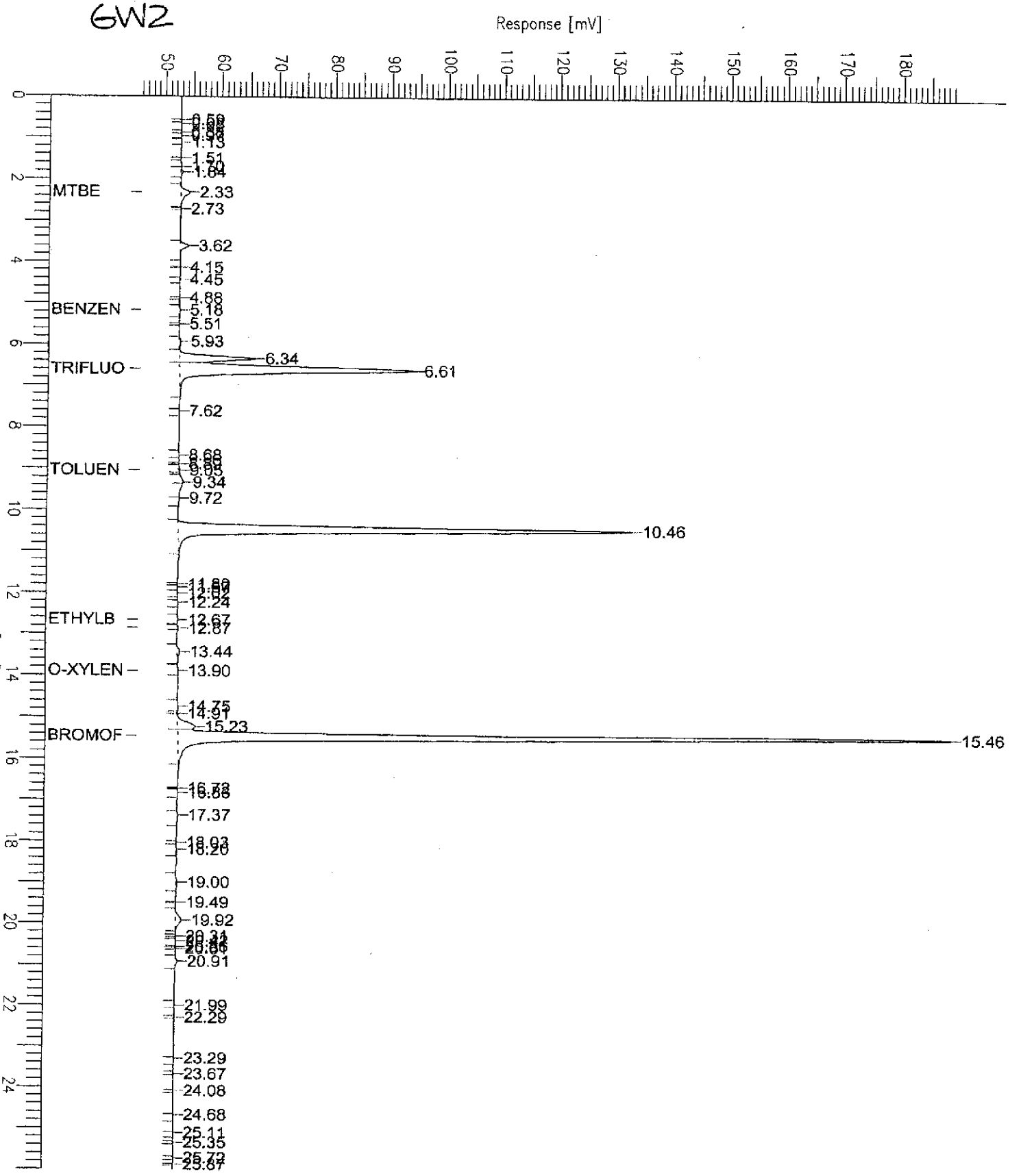
*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Chromatogram

Sample Name : 173830-001,93506,+stodd
FileName : G:\GC04\DATA\218K009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 46 mV

Sample #: b1.0 Page 1 of 1
Date : 8/5/04 04:18 PM
Time of Injection: 8/5/04 03:52 PM
Low Point : 45.83 mV High Point : 189.23 mV
Plot Scale: 143.4 mV

GW2

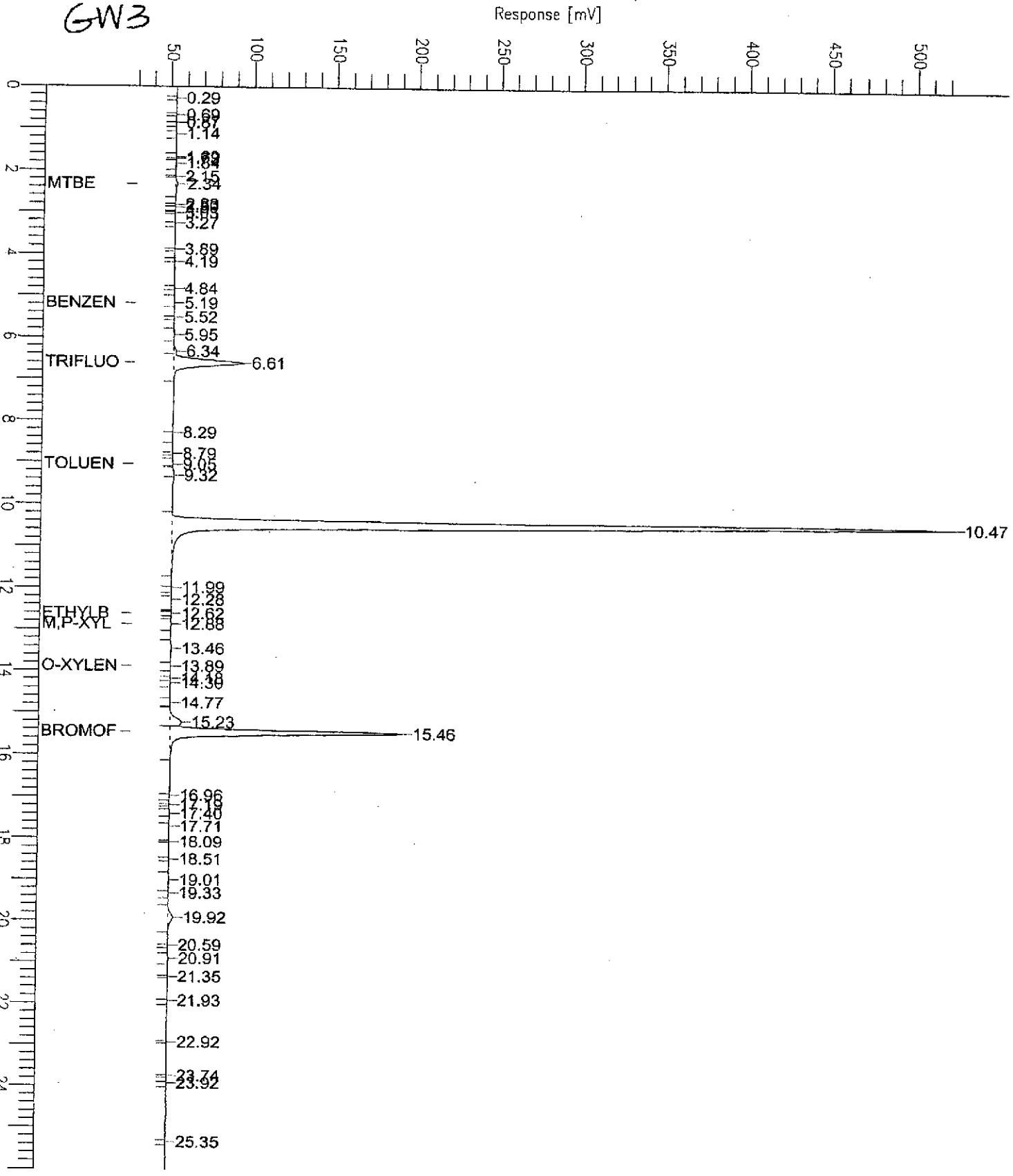


Chromatogram

Sample Name : 173830-002,93506,+stodd
FileName : G:\GC04\DATA\218K010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 29 mV

Sample #: b1.0 Page 1 of 1
Date : 8/5/04 04:54 PM
Time of Injection: 8/5/04 04:28 PM
Low Point : 29.08 mV High Point : 524.49 mV
Plot Scale: 495.4 mV

GW3

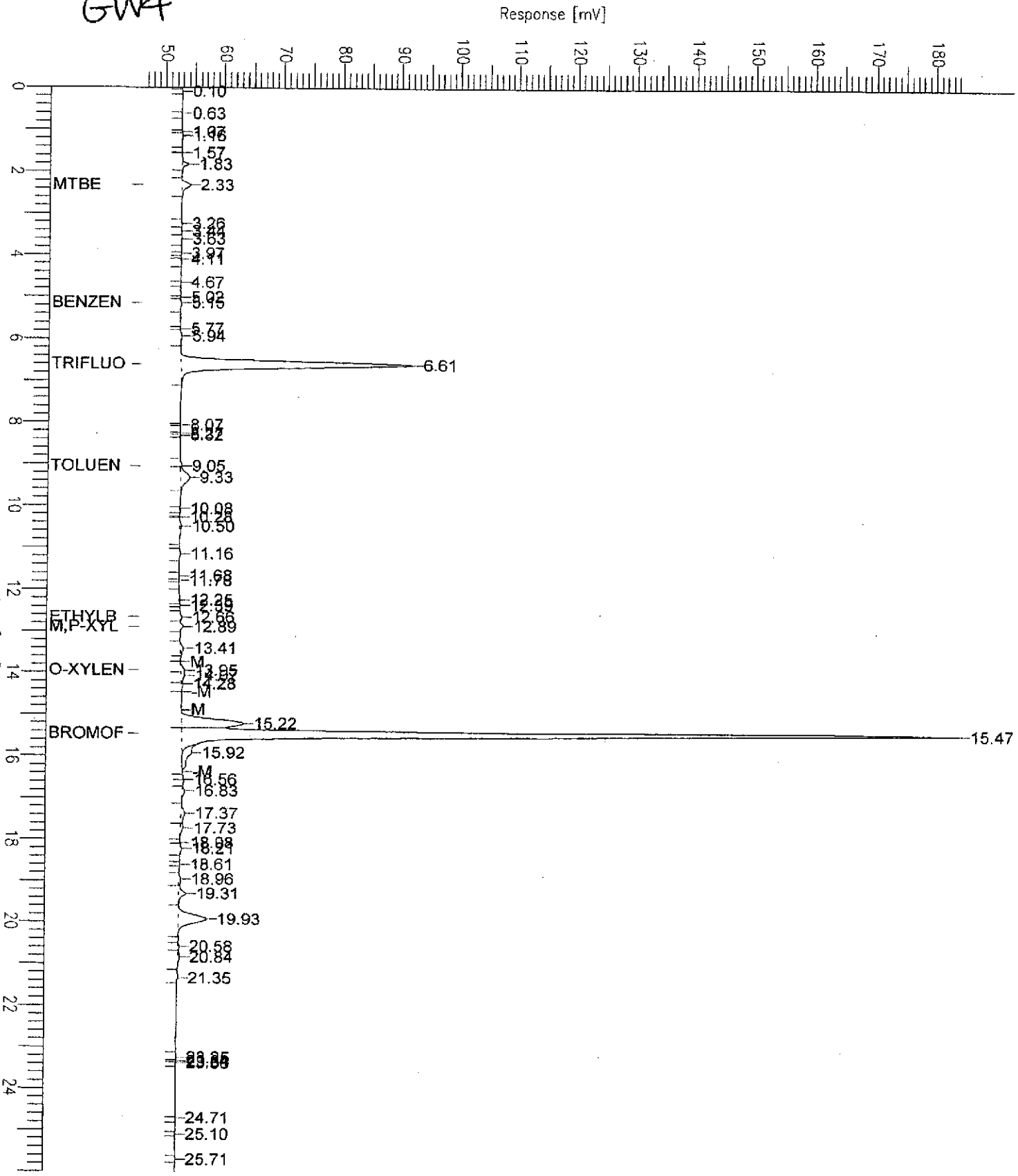


Chromatogram

Sample Name : 173830-003,93506,+stodd
FileName : G:\GC04\DATA\218K011.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 46 mV

Sample #: b1.0 Page 1 of 1
Date : 8/9/04 10:03 AM
Time of Injection: 8/5/04 05:04 PM
Low Point : 46.07 mV High Point : 184.58 mV
Plot Scale: 138.5 mV

GW4

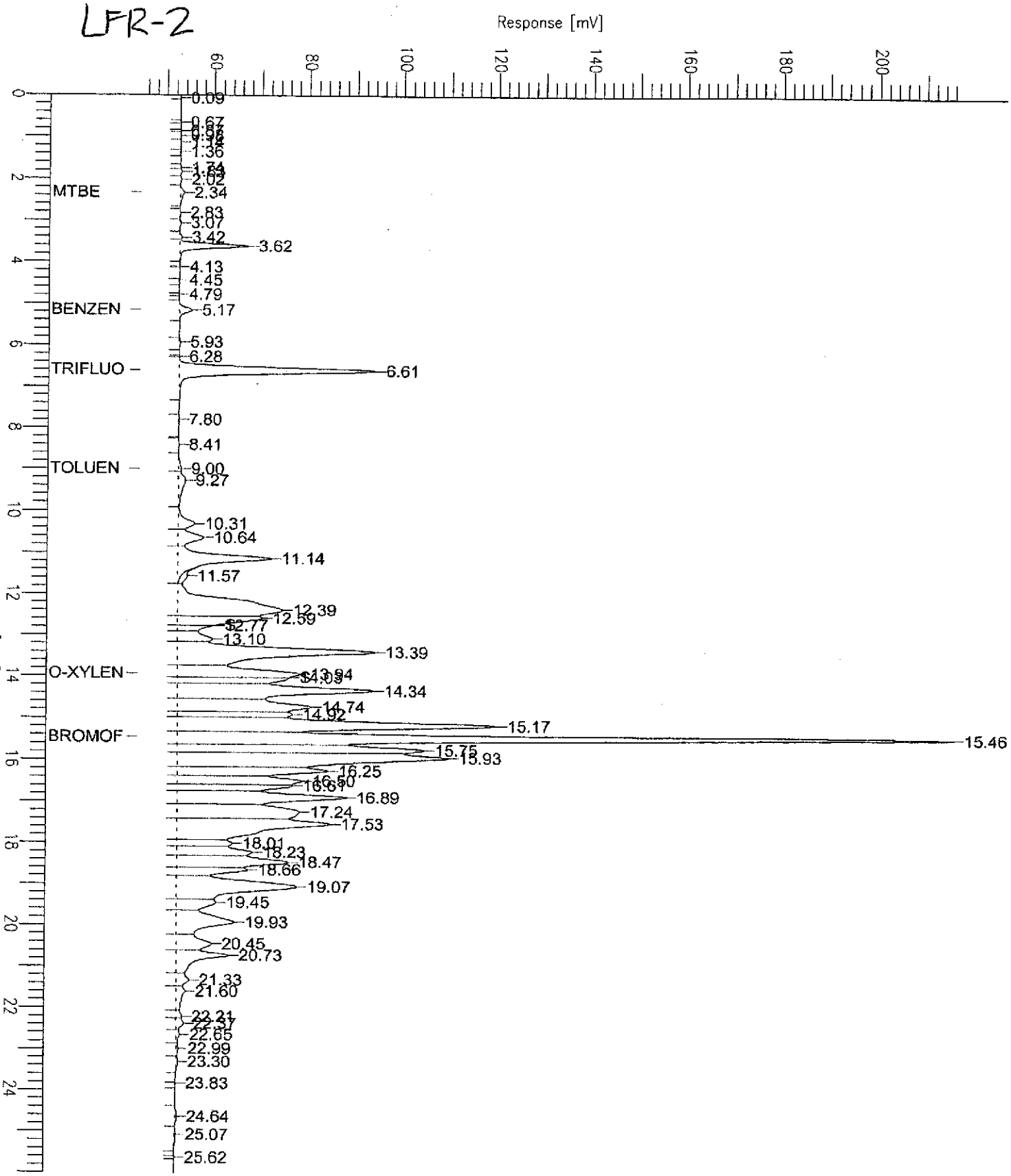


Chromatogram

Sample Name : 173830-006,93506,+stod
FileName : G:\GC04\DATA\218K022.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 44 mV

Sample #: b1.0 Page 1 of 1
Date : 8/6/04 01:03 PM
Time of Injection: 8/5/04 11:38 PM
Low Point : 44.47 mV High Point : 216.41 mV
Plot Scale: 171.9 mV

LFR-2

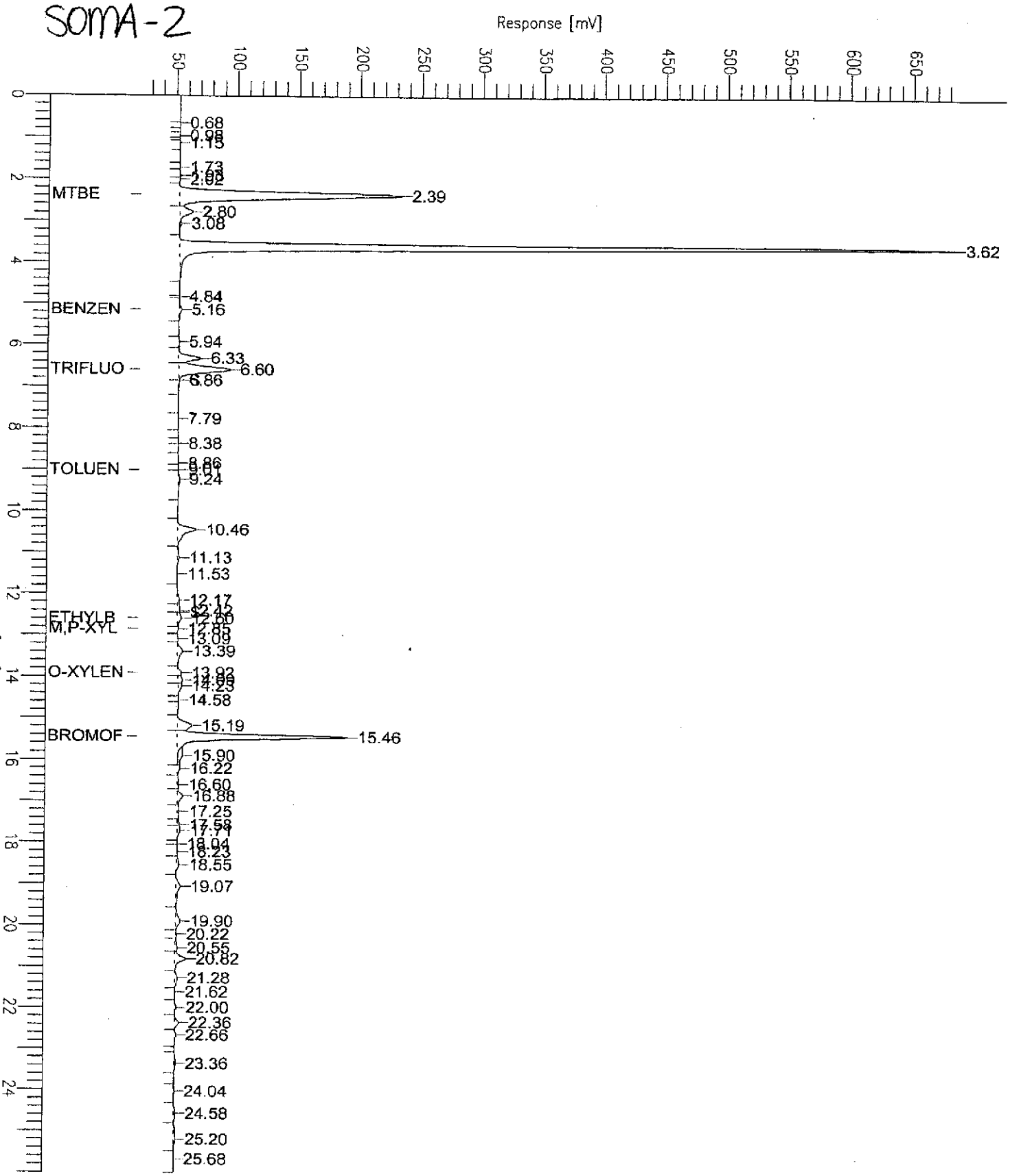


Chromatogram

Sample Name : 173830-009,93506,+stod
FileName : G:\GC04\DATA\218K021.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 21 mV

Sample #: b1.0 Page 1 of 1
Date : 8/6/04 01:03 PM
Time of Injection: 8/5/04 11:02 PM
Low Point : 21.04 mV High Point : 684.98 mV
Plot Scale: 663.9 mV

SOMA-2

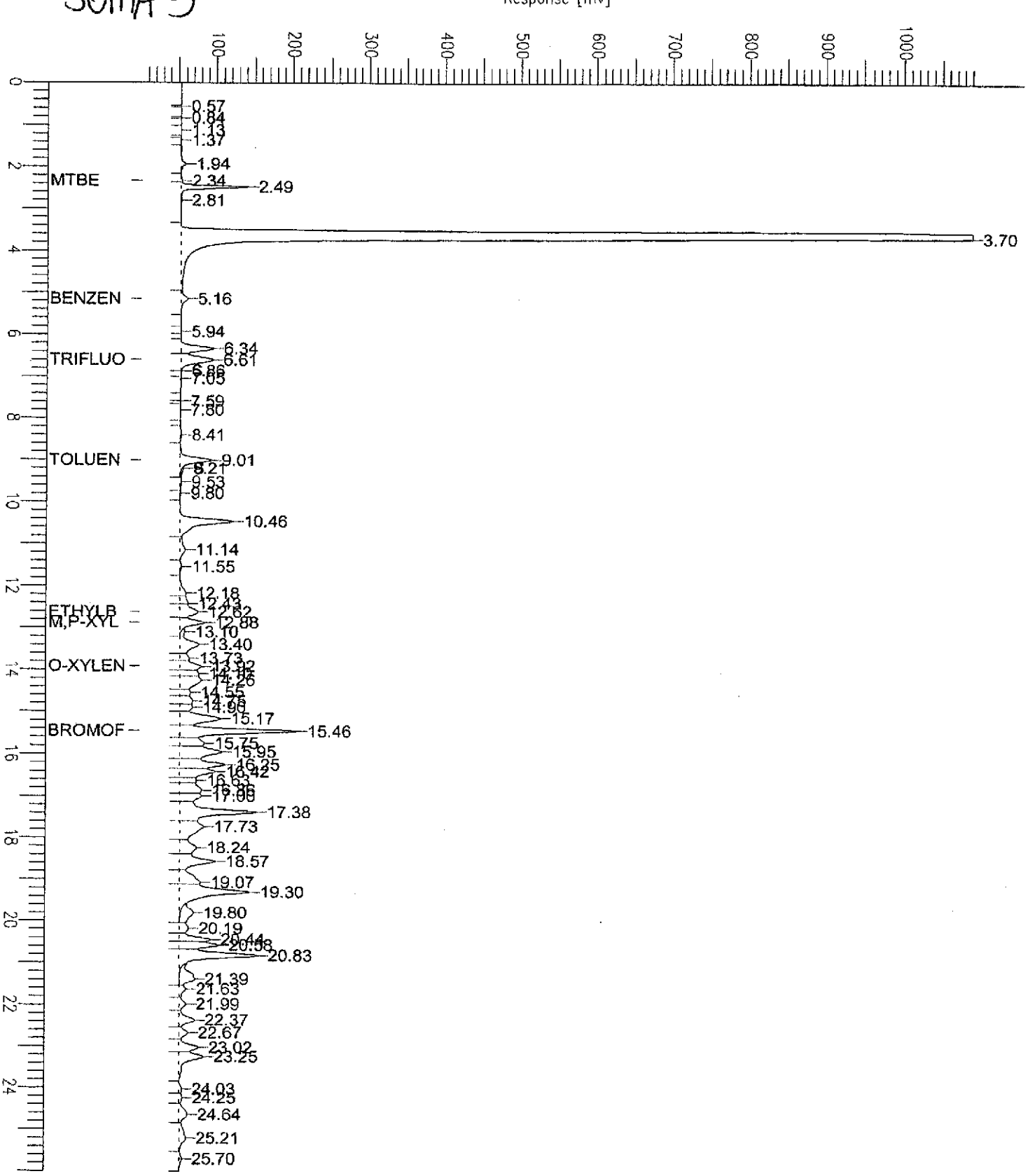


Chromatogram

Sample Name : 173830-010,93506,+stod
FileName : G:\GC04\DATA\218K023.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: b1.0 Page 1 of 1
Date : 8/6/04 01:03 PM
Time of Injection: 8/6/04 12:14 AM
Low Point : 0.77 mV High Point : 1090.16 mV
Plot Scale: 1089.4 mV

SOMA-3

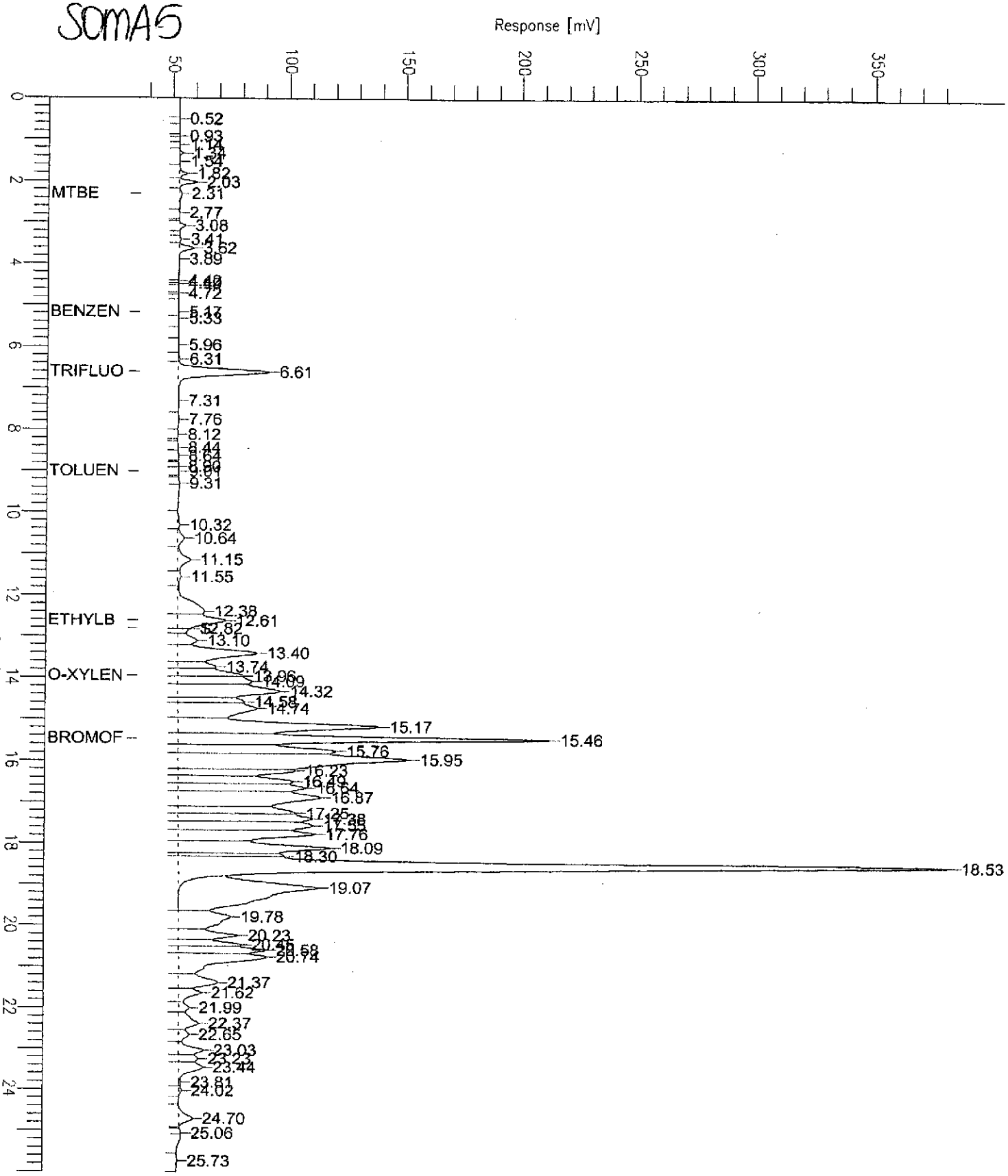


Chromatogram

Sample Name : 173830-011,93506,+stod
FileName : G:\GC04\DATA\218K024.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 36 mV

Sample #: b1.0 Page 1 of 1
Date : 8/6/04 01:03 PM
Time of Injection: 8/6/04 12:49 AM
Low Point : 36.09 mV High Point : 383.65 mV
Plot Scale: 347.6 mV

SOMA5

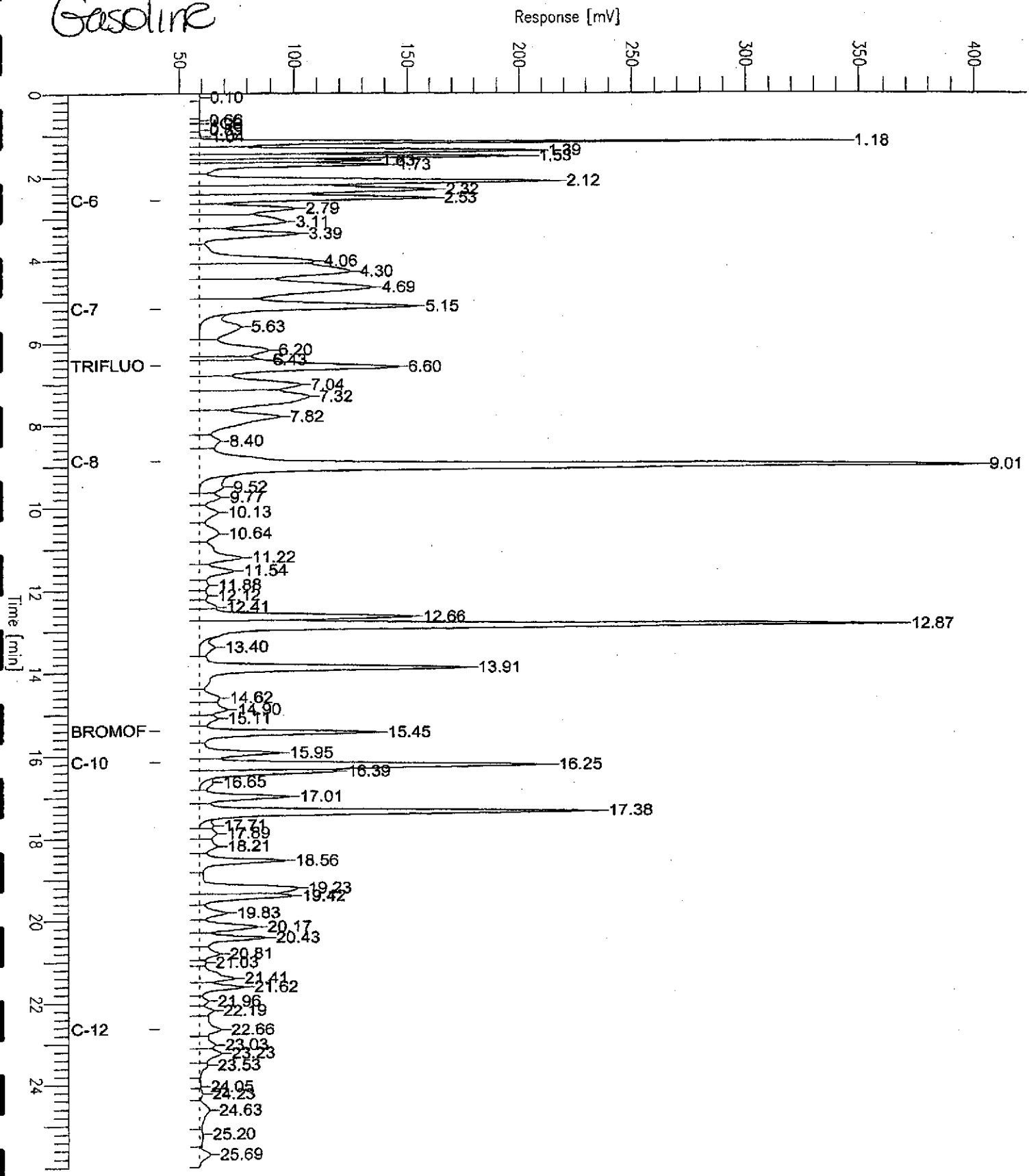


GC04 TVH 'J' Data File FID

Sample Name : ccv/lcs,qc260250,93506,04ws1388,5/5000
FileName : G:\GC04\DATA\218J002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 42 mV

Sample #: Page 1 of 1
Date : 8/6/04 01:03 PM
Time of Injection: 8/5/04 11:41 AM
Low Point : 41.98 mV High Point : 401.69 mV
Plot Scale: 359.7 mV

Gasoline

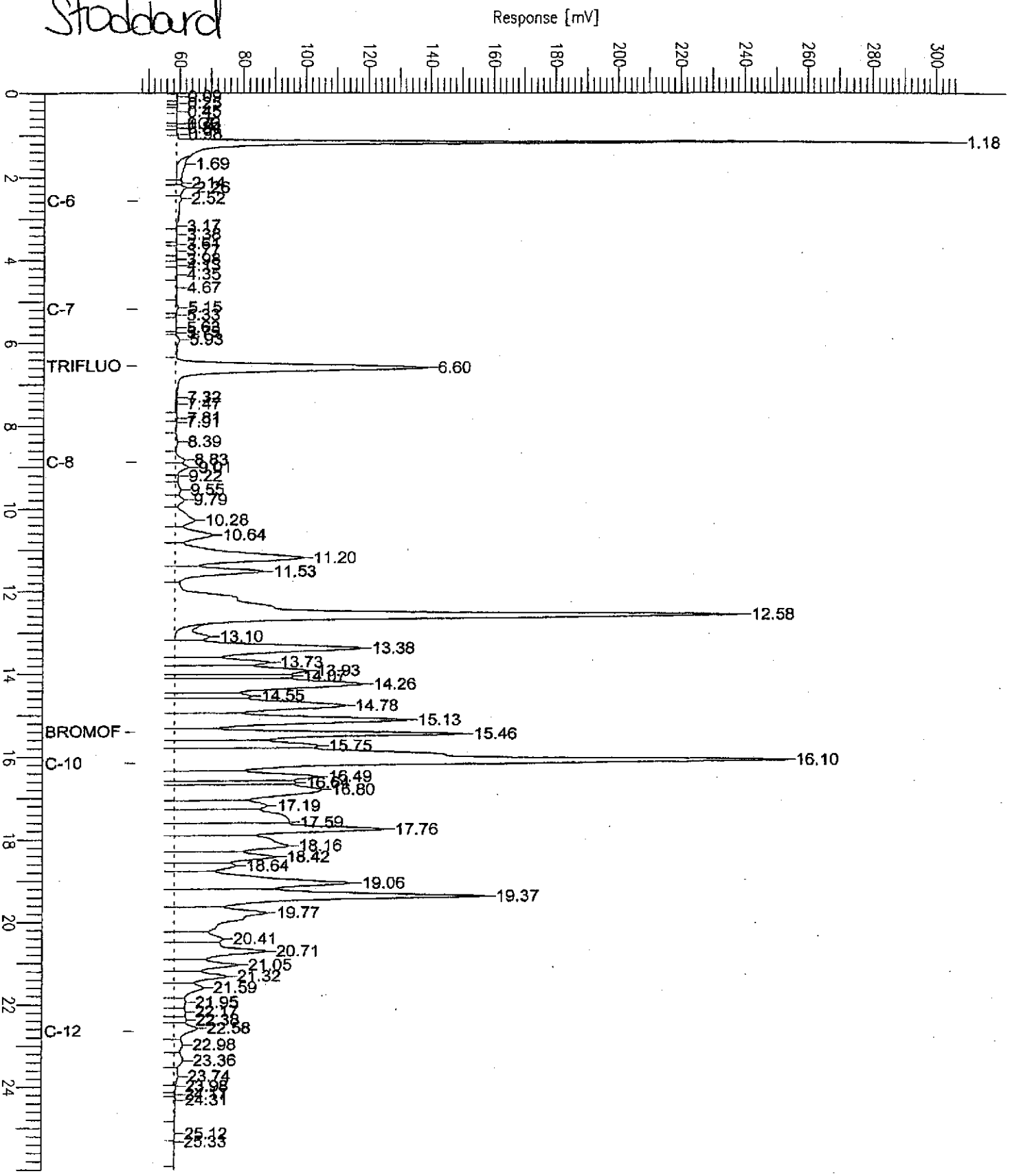


GC04 TVH 'J' Data File FID

Sample Name : ccv,stodd,93506,04ws0824,5/5000
FileName : G:\GC04\DATA\218J003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 47 mV

Sample #: Page 1 of 1
Date : 8/5/04 12:43 PM
Time of Injection: 8/5/04 12:16 PM
Low Point : 46.66 mV High Point : 306.47 mV
Plot Scale: 259.8 mV

Stoddard



Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Matrix:	Water	Received:	08/04/04
Units:	ug/L		

Type:	BLANK	Batch#:	93537
Lab ID:	QC260357	Analyzed:	08/06/04
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	74-142
Bromofluorobenzene (FID)	108	80-139

*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	173830	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:	QC260250	Batch#:	93506
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,250	113	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	74-142
Bromofluorobenzene (FID)	107	80-139

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	173830	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:	QC260359	Batch#:	93537
Matrix:	Water	Analyzed:	08/06/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,864	93	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	74-142
Bromofluorobenzene (FID)	112	80-139

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	93537
MSS Lab ID:	173846-003	Sampled:	08/03/04
Matrix:	Water	Received:	08/05/04
Units:	ug/L	Analyzed:	08/07/04
Diln Fac:	1.000		

Type: MS Lab ID: QC260431

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<13.00	2,000	1,719	86	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	74-142
Bromofluorobenzene (FID)	119	80-139

Type: MSD Lab ID: QC260432

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,724	86	80-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	74-142
Bromofluorobenzene (FID)	106	80-139

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-2	Units:	ug/L
Lab ID:	173830-001	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04

Analyte	Result	RL	Dil Fac	Batch#	Analyzed
Freon 12	ND	10	1.000	93502	08/05/04
Chloromethane	ND	10	1.000	93502	08/05/04
Vinyl Chloride	ND	10	1.000	93502	08/05/04
Bromomethane	ND	10	1.000	93502	08/05/04
Chloroethane	ND	10	1.000	93502	08/05/04
Trichlorofluoromethane	ND	5.0	1.000	93502	08/05/04
Acetone	ND	20	1.000	93502	08/05/04
Freon 113	ND	5.0	1.000	93502	08/05/04
1,1-Dichloroethene	ND	5.0	1.000	93502	08/05/04
Methylene Chloride	ND	20	1.000	93502	08/05/04
Carbon Disulfide	ND	5.0	1.000	93502	08/05/04
MTBE	ND	5.0	1.000	93502	08/05/04
trans-1,2-Dichloroethene	ND	5.0	1.000	93502	08/05/04
Vinyl Acetate	ND	50	1.000	93502	08/05/04
1,1-Dichloroethane	ND	5.0	1.000	93502	08/05/04
2-Butanone	ND	10	1.000	93502	08/05/04
cis-1,2-Dichloroethene	ND	5.0	1.000	93502	08/05/04
2,2-Dichloropropane	ND	5.0	1.000	93502	08/05/04
Chloroform	ND	5.0	1.000	93502	08/05/04
Bromochloromethane	ND	10	1.000	93502	08/05/04
1,1,1-Trichloroethane	ND	5.0	1.000	93502	08/05/04
1,1-Dichloropropene	ND	5.0	1.000	93502	08/05/04
Carbon Tetrachloride	ND	5.0	1.000	93502	08/05/04
1,2-Dichloroethane	ND	5.0	1.000	93502	08/05/04
Benzene	ND	5.0	1.000	93502	08/05/04
Trichloroethene	10	5.0	1.000	93502	08/05/04
1,2-Dichloropropane	ND	5.0	1.000	93502	08/05/04
Bromodichloromethane	ND	5.0	1.000	93502	08/05/04
Dibromomethane	ND	5.0	1.000	93502	08/05/04
4-Methyl-2-Pentanone	ND	10	1.000	93502	08/05/04
cis-1,3-Dichloropropene	ND	5.0	1.000	93502	08/05/04
Toluene	ND	5.0	1.000	93502	08/05/04
trans-1,3-Dichloropropene	ND	5.0	1.000	93502	08/05/04
1,1,2-Trichloroethane	ND	5.0	1.000	93502	08/05/04
2-Hexanone	ND	10	1.000	93502	08/05/04
1,3-Dichloropropane	ND	5.0	1.000	93502	08/05/04
Tetrachloroethene	75	7.1	1.429	93534	08/06/04
Dibromochloromethane	ND	5.0	1.000	93502	08/05/04
1,2-Dibromoethane	ND	5.0	1.000	93502	08/05/04

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-2	Units:	ug/L
Lab ID:	173830-001	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04

Analyte	Result	RL	Dil Fac	Batch#	Analyzed
Chlorobenzene	ND	5.0	1.000	93502	08/05/04
1,1,1,2-Tetrachloroethane	ND	5.0	1.000	93502	08/05/04
Ethylbenzene	ND	5.0	1.000	93502	08/05/04
m,p-Xylenes	ND	5.0	1.000	93502	08/05/04
o-Xylene	ND	5.0	1.000	93502	08/05/04
Styrene	ND	5.0	1.000	93502	08/05/04
Bromoform	ND	5.0	1.000	93502	08/05/04
Isopropylbenzene	ND	5.0	1.000	93502	08/05/04
1,1,2,2-Tetrachloroethane	ND	5.0	1.000	93502	08/05/04
1,2,3-Trichloropropane	ND	5.0	1.000	93502	08/05/04
Propylbenzene	ND	5.0	1.000	93502	08/05/04
Bromobenzene	ND	5.0	1.000	93502	08/05/04
1,3,5-Trimethylbenzene	ND	5.0	1.000	93502	08/05/04
2-Chlorotoluene	ND	5.0	1.000	93502	08/05/04
4-Chlorotoluene	ND	5.0	1.000	93502	08/05/04
tert-Butylbenzene	ND	5.0	1.000	93502	08/05/04
1,2,4-Trimethylbenzene	ND	5.0	1.000	93502	08/05/04
sec-Butylbenzene	ND	5.0	1.000	93502	08/05/04
para-Isopropyl Toluene	ND	5.0	1.000	93502	08/05/04
1,3-Dichlorobenzene	ND	5.0	1.000	93502	08/05/04
1,4-Dichlorobenzene	ND	5.0	1.000	93502	08/05/04
n-Butylbenzene	ND	5.0	1.000	93502	08/05/04
1,2-Dichlorobenzene	ND	5.0	1.000	93502	08/05/04
1,2-Dibromo-3-Chloropropane	ND	5.0	1.000	93502	08/05/04
1,2,4-Trichlorobenzene	ND	5.0	1.000	93502	08/05/04
Hexachlorobutadiene	ND	5.0	1.000	93502	08/05/04
Naphthalene	ND	5.0	1.000	93502	08/05/04
1,2,3-Trichlorobenzene	ND	5.0	1.000	93502	08/05/04

Surrogate	%REC	Limits	Dil Fac	Batch#	Analyzed
Dibromofluoromethane	96	80-120	1.000	93502	08/05/04
1,2-Dichloroethane-d4	86	80-124	1.000	93502	08/05/04
Toluene-d8	96	80-120	1.000	93502	08/05/04
Bromofluorobenzene	89	80-120	1.000	93502	08/05/04

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-3	Units:	ug/L
Lab ID:	173830-002	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04

Analyte	Result	RL	Dil'n Fac	Batch#	Analyzed
Freon 12	ND	33	3.333	93502	08/05/04
Chloromethane	ND	33	3.333	93502	08/05/04
Vinyl Chloride	ND	33	3.333	93502	08/05/04
Bromomethane	ND	33	3.333	93502	08/05/04
Chloroethane	ND	33	3.333	93502	08/05/04
Trichlorofluoromethane	ND	17	3.333	93502	08/05/04
Acetone	ND	67	3.333	93502	08/05/04
Freon 113	ND	17	3.333	93502	08/05/04
1,1-Dichloroethene	ND	17	3.333	93502	08/05/04
Methylene Chloride	ND	67	3.333	93502	08/05/04
Carbon Disulfide	ND	17	3.333	93502	08/05/04
MTBE	ND	17	3.333	93502	08/05/04
trans-1,2-Dichloroethene	ND	17	3.333	93502	08/05/04
Vinyl Acetate	ND	170	3.333	93502	08/05/04
1,1-Dichloroethane	ND	17	3.333	93502	08/05/04
2-Butanone	ND	33	3.333	93502	08/05/04
cis-1,2-Dichloroethene	ND	17	3.333	93502	08/05/04
2,2-Dichloropropane	ND	17	3.333	93502	08/05/04
Chloroform	ND	17	3.333	93502	08/05/04
Bromochloromethane	ND	33	3.333	93502	08/05/04
1,1,1-Trichloroethane	ND	17	3.333	93502	08/05/04
1,1-Dichloropropene	ND	17	3.333	93502	08/05/04
Carbon Tetrachloride	ND	17	3.333	93502	08/05/04
1,2-Dichloroethane	ND	17	3.333	93502	08/05/04
Benzene	ND	17	3.333	93502	08/05/04
Trichloroethene	ND	17	3.333	93502	08/05/04
1,2-Dichloropropane	ND	17	3.333	93502	08/05/04
Bromodichloromethane	ND	17	3.333	93502	08/05/04
Dibromomethane	ND	17	3.333	93502	08/05/04
4-Methyl-2-Pentanone	ND	33	3.333	93502	08/05/04
cis-1,3-Dichloropropene	ND	17	3.333	93502	08/05/04
Toluene	ND	17	3.333	93502	08/05/04
trans-1,3-Dichloropropene	ND	17	3.333	93502	08/05/04
1,1,2-Trichloroethane	ND	17	3.333	93502	08/05/04
2-Hexanone	ND	33	3.333	93502	08/05/04
1,3-Dichloropropane	ND	17	3.333	93502	08/05/04
Tetrachloroethene	440	31	6.250	93534	08/06/04
Dibromochloromethane	ND	17	3.333	93502	08/05/04
1,2-Dibromoethane	ND	17	3.333	93502	08/05/04

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-3	Units:	ug/L
Lab ID:	173830-002	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04

Analyte	Result	RL	Dil Fac	Batch#	Analyzed
Chlorobenzene	ND	17	3.333	93502	08/05/04
1,1,1,2-Tetrachloroethane	ND	17	3.333	93502	08/05/04
Ethylbenzene	ND	17	3.333	93502	08/05/04
m,p-Xylenes	ND	17	3.333	93502	08/05/04
o-Xylene	ND	17	3.333	93502	08/05/04
Styrene	ND	17	3.333	93502	08/05/04
Bromoform	ND	17	3.333	93502	08/05/04
Isopropylbenzene	ND	17	3.333	93502	08/05/04
1,1,2,2-Tetrachloroethane	ND	17	3.333	93502	08/05/04
1,2,3-Trichloropropane	ND	17	3.333	93502	08/05/04
Propylbenzene	ND	17	3.333	93502	08/05/04
Bromobenzene	ND	17	3.333	93502	08/05/04
1,3,5-Trimethylbenzene	ND	17	3.333	93502	08/05/04
2-Chlorotoluene	ND	17	3.333	93502	08/05/04
4-Chlorotoluene	ND	17	3.333	93502	08/05/04
tert-Butylbenzene	ND	17	3.333	93502	08/05/04
1,2,4-Trimethylbenzene	ND	17	3.333	93502	08/05/04
sec-Butylbenzene	ND	17	3.333	93502	08/05/04
para-Isopropyl Toluene	ND	17	3.333	93502	08/05/04
1,3-Dichlorobenzene	ND	17	3.333	93502	08/05/04
1,4-Dichlorobenzene	ND	17	3.333	93502	08/05/04
n-Butylbenzene	ND	17	3.333	93502	08/05/04
1,2-Dichlorobenzene	ND	17	3.333	93502	08/05/04
1,2-Dibromo-3-Chloropropane	ND	17	3.333	93502	08/05/04
1,2,4-Trichlorobenzene	ND	17	3.333	93502	08/05/04
Hexachlorobutadiene	ND	17	3.333	93502	08/05/04
Naphthalene	ND	17	3.333	93502	08/05/04
1,2,3-Trichlorobenzene	ND	17	3.333	93502	08/05/04

Surrogate	%REC	Limits	Dil Fac	Batch#	Analyzed
Dibromofluoromethane	95	80-120	3.333	93502	08/05/04
1,2-Dichloroethane-d4	82	80-124	3.333	93502	08/05/04
Toluene-d8	92	80-120	3.333	93502	08/05/04
Bromofluorobenzene	86	80-120	3.333	93502	08/05/04

ND= Not Detected
RL= Reporting Limit

9.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-4	Batch#:	93502
Lab ID:	173830-003	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	GW-4	Batch#:	93502
Lab ID:	173830-003	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	93502
Lab ID:	173830-004	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	93502
Lab ID:	173830-004	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-1	Batch#:	93534
Lab ID:	173830-005	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	5.2	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	16	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	58	5.0

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-1	Batch#:	93534
Lab ID:	173830-005	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	103	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-2	Batch#:	93502
Lab ID:	173830-006	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	12	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-2	Batch#:	93502
Lab ID:	173830-006	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	83	80-124
Toluene-d8	90	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

13.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-3	Batch#:	93534
Lab ID:	173830-007	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	LFR-3	Batch#:	93534
Lab ID:	173830-007	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	102	80-124
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-1	Batch#:	93502
Lab ID:	173830-008	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	2.500		

Analyte	Result	RL
Freon 12	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	13
Acetone	ND	50
Freon 113	ND	13
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	50
Carbon Disulfide	ND	13
MTBE	170	13
trans-1,2-Dichloroethene	ND	13
Vinyl Acetate	ND	130
1,1-Dichloroethane	ND	13
2-Butanone	ND	25
cis-1,2-Dichloroethene	38	13
2,2-Dichloropropane	ND	13
Chloroform	ND	13
Bromochloromethane	ND	25
1,1,1-Trichloroethane	ND	13
1,1-Dichloropropene	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Benzene	ND	13
Trichloroethene	ND	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
Dibromomethane	ND	13
4-Methyl-2-Pentanone	ND	25
cis-1,3-Dichloropropene	ND	13
Toluene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
2-Hexanone	ND	25
1,3-Dichloropropane	ND	13
Tetrachloroethene	19	13

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-1	Batch#:	93502
Lab ID:	173830-008	Sampled:	08/03/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	2.500		

Analyte	Result	RL
Dibromochloromethane	ND	13
1,2-Dibromoethane	ND	13
Chlorobenzene	ND	13
1,1,1,2-Tetrachloroethane	ND	13
Ethylbenzene	ND	13
m,p-Xylenes	ND	13
o-Xylene	ND	13
Styrene	ND	13
Bromoform	ND	13
Isopropylbenzene	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,2,3-Trichloropropane	ND	13
Propylbenzene	ND	13
Bromobenzene	ND	13
1,3,5-Trimethylbenzene	ND	13
2-Chlorotoluene	ND	13
4-Chlorotoluene	ND	13
tert-Butylbenzene	ND	13
1,2,4-Trimethylbenzene	ND	13
sec-Butylbenzene	ND	13
para-Isopropyl Toluene	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
n-Butylbenzene	ND	13
1,2-Dichlorobenzene	ND	13
1,2-Dibromo-3-Chloropropane	ND	13
1,2,4-Trichlorobenzene	ND	13
Hexachlorobutadiene	ND	13
Naphthalene	ND	13
1,2,3-Trichlorobenzene	ND	13

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	87	80-124
Toluene-d8	94	80-120
Bromofluorobenzene	87	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-2	Batch#:	93502
Lab ID:	173830-009	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	6.250		

Analyte	Result	RL
Freon 12	ND	63
Chloromethane	ND	63
Vinyl Chloride	ND	63
Bromomethane	ND	63
Chloroethane	ND	63
Trichlorofluoromethane	ND	31
Acetone	ND	130
Freon 113	ND	31
1,1-Dichloroethene	ND	31
Methylene Chloride	ND	130
Carbon Disulfide	ND	31
MTBE	280	31
trans-1,2-Dichloroethene	ND	31
Vinyl Acetate	ND	310
1,1-Dichloroethane	ND	31
2-Butanone	ND	63
cis-1,2-Dichloroethene	430	31
2,2-Dichloropropane	ND	31
Chloroform	ND	31
Bromochloromethane	ND	63
1,1,1-Trichloroethane	ND	31
1,1-Dichloropropene	ND	31
Carbon Tetrachloride	ND	31
1,2-Dichloroethane	ND	31
Benzene	ND	31
Trichloroethene	ND	31
1,2-Dichloropropane	ND	31
Bromodichloromethane	ND	31
Dibromomethane	ND	31
4-Methyl-2-Pentanone	ND	63
cis-1,3-Dichloropropene	ND	31
Toluene	ND	31
trans-1,3-Dichloropropene	ND	31
1,1,2-Trichloroethane	ND	31
2-Hexanone	ND	63
1,3-Dichloropropane	ND	31
Tetrachloroethene	ND	31

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-2	Batch#:	93502
Lab ID:	173830-009	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	6.250		

Analyte	Result	RL
Dibromochloromethane	ND	31
1,2-Dibromoethane	ND	31
Chlorobenzene	ND	31
1,1,1,2-Tetrachloroethane	ND	31
Ethylbenzene	ND	31
m,p-Xylenes	ND	31
o-Xylene	ND	31
Styrene	ND	31
Bromoform	ND	31
Isopropylbenzene	ND	31
1,1,2,2-Tetrachloroethane	ND	31
1,2,3-Trichloropropane	ND	31
Propylbenzene	ND	31
Bromobenzene	ND	31
1,3,5-Trimethylbenzene	ND	31
2-Chlorotoluene	ND	31
4-Chlorotoluene	ND	31
tert-Butylbenzene	ND	31
1,2,4-Trimethylbenzene	ND	31
sec-Butylbenzene	ND	31
para-Isopropyl Toluene	ND	31
1,3-Dichlorobenzene	ND	31
1,4-Dichlorobenzene	ND	31
n-Butylbenzene	ND	31
1,2-Dichlorobenzene	ND	31
1,2-Dibromo-3-Chloropropane	ND	31
1,2,4-Trichlorobenzene	ND	31
Hexachlorobutadiene	ND	31
Naphthalene	ND	31
1,2,3-Trichlorobenzene	ND	31

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-120
1,2-Dichloroethane-d4	86	80-124
Toluene-d8	88	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-3	Batch#:	93502
Lab ID:	173830-010	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	100.0		

Analyte	Result	RL
Freon 12	ND	1,000
Chloromethane	ND	1,000
Vinyl Chloride	ND	1,000
Bromomethane	ND	1,000
Chloroethane	ND	1,000
Trichlorofluoromethane	ND	500
Acetone	ND	2,000
Freon 113	ND	500
1,1-Dichloroethene	ND	500
Methylene Chloride	ND	2,000
Carbon Disulfide	ND	500
MTBE	ND	500
trans-1,2-Dichloroethene	ND	500
Vinyl Acetate	ND	5,000
1,1-Dichloroethane	ND	500
2-Butanone	ND	1,000
cis-1,2-Dichloroethene	6,900	500
2,2-Dichloropropane	ND	500
Chloroform	ND	500
Bromochloromethane	ND	1,000
1,1,1-Trichloroethane	ND	500
1,1-Dichloropropene	ND	500
Carbon Tetrachloride	ND	500
1,2-Dichloroethane	ND	500
Benzene	ND	500
Trichloroethene	ND	500
1,2-Dichloropropane	ND	500
Bromodichloromethane	ND	500
Dibromomethane	ND	500
4-Methyl-2-Pentanone	ND	1,000
cis-1,3-Dichloropropene	ND	500
Toluene	ND	500
trans-1,3-Dichloropropene	ND	500
1,1,2-Trichloroethane	ND	500
2-Hexanone	ND	1,000
1,3-Dichloropropane	ND	500
Tetrachloroethene	ND	500

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-3	Batch#:	93502
Lab ID:	173830-010	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	100.0		

Analyte	Result	RL
Dibromochloromethane	ND	500
1,2-Dibromoethane	ND	500
Chlorobenzene	ND	500
1,1,1,2-Tetrachloroethane	ND	500
Ethylbenzene	ND	500
m,p-Xylenes	ND	500
o-Xylene	ND	500
Styrene	ND	500
Bromoform	ND	500
Isopropylbenzene	ND	500
1,1,2,2-Tetrachloroethane	ND	500
1,2,3-Trichloropropane	ND	500
Propylbenzene	ND	500
Bromobenzene	ND	500
1,3,5-Trimethylbenzene	ND	500
2-Chlorotoluene	ND	500
4-Chlorotoluene	ND	500
tert-Butylbenzene	ND	500
1,2,4-Trimethylbenzene	ND	500
sec-Butylbenzene	ND	500
para-Isopropyl Toluene	ND	500
1,3-Dichlorobenzene	ND	500
1,4-Dichlorobenzene	ND	500
n-Butylbenzene	ND	500
1,2-Dichlorobenzene	ND	500
1,2-Dibromo-3-Chloropropane	ND	500
1,2,4-Trichlorobenzene	ND	500
Hexachlorobutadiene	ND	500
Naphthalene	ND	500
1,2,3-Trichlorobenzene	ND	500

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	86	80-124
Toluene-d8	98	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-5	Batch#:	93534
Lab ID:	173830-011	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	SOMA-5	Batch#:	93534
Lab ID:	173830-011	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	5.1	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	8.0	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260233	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260233	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	91	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260234	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260234	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	87	80-124
Toluene-d8	96	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260351	Batch#:	93534
Matrix:	Water	Analyzed:	08/06/04
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260351	Batch#:	93534
Matrix:	Water	Analyzed:	08/06/04
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	99	80-124
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260352	Batch#:	93534
Matrix:	Water	Analyzed:	08/06/04
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260352	Batch#:	93534
Matrix:	Water	Analyzed:	08/06/04
Units:	ug/L		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	101	80-124
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	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:	QC260232	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	44.15	88	76-120
Benzene	50.00	48.49	97	80-120
Trichloroethene	50.00	44.37	89	80-120
Toluene	50.00	49.63	99	80-120
Chlorobenzene	50.00	52.92	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	85	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	95	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	93534
Units:	ug/L	Analyzed:	08/06/04
Diln Fac:	1.000		

Type: BS Lab ID: QC260349

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.55	94	76-120
Benzene	25.00	24.64	99	80-120
Trichloroethene	25.00	24.20	97	80-120
Toluene	25.00	24.47	98	80-120
Chlorobenzene	25.00	24.54	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	101	80-124
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC260350

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	22.04	88	76-120	7	20
Benzene	25.00	23.49	94	80-120	5	20
Trichloroethene	25.00	22.68	91	80-120	6	20
Toluene	25.00	24.07	96	80-120	2	20
Chlorobenzene	25.00	23.76	95	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173830	Location:	3815 Broadway, Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2511	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	93502
MSS Lab ID:	173834-007	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Type: MS Lab ID: QC260235

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.08000	50.00	43.10	86	77-120
Benzene	<0.09700	50.00	49.97	100	80-120
Trichloroethene	1.162	50.00	48.19	94	74-121
Toluene	<0.1100	50.00	54.04	108	80-120
Chlorobenzene	<0.1400	50.00	52.79	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	87	80-124
Toluene-d8	98	80-120
Bromofluorobenzene	83	80-120

Type: MSD Lab ID: QC260236

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	43.06	86	77-120	0	20
Benzene	50.00	45.21	90	80-120	10	20
Trichloroethene	50.00	43.67	85	74-121	10	20
Toluene	50.00	48.49	97	80-120	11	20
Chlorobenzene	50.00	50.31	101	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

MICROSEEPS

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Laboratory Results

Total pages in data package: 13

Lab Sample #	Client Sample ID
P0408068-01	GW-2
P0408068-02	GW-3
P0408068-03	GW-4
P0408068-04	MW-11
P0408068-05	LFR-1
P0408068-06	LFR-2
P0408068-07	LFR-3
P0408068-08	SOMA-1
P0408068-09	SOMA-2
P0408068-10	SOMA-3
P0408068-11	SOMA-5

Microseeps test results meet all the requirements of the NELAC standards.

Approved By: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results

As a valued client we would appreciate your comments on our service.
Please call customer servce at (412)826-5245 or email bhans@microseeps.com

Case Narrative:

P0408068

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245 | **Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238** | Fax No. : (412) 826-3433

Company : SOMA ENVIRONMENTAL ENGINEERING
Co. Address : 2680 Bishop Drive, Suite 203 San Ramon, CA 94583
Proj. Manager: TONY PERINI
Proj. Location: 3815 Broadway Oakland, CA Oakland Groundwater
Proj. Number: 2511
Phone # : 925-244-6600 **Fax # :** 925-244-6601

Sampler's signature :

Results to : TONY PERINI

Invoice to : TONY PERINI

Cooler ID	Cooler Temp.

Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	Parameters Requested: methane	Remarks
01	GW-2	8/4/04	10A		✓		✓	water samples
02	GW-3	8/3/04	425P					
03	GW-4	8/3/04	312P					
04	MW-11	8/3/04	152P					
05	LFR-1	8/4/04	910A					
06	LFR-2	8/4/04	830A					
07	LFR-3	8/4/04	107P					
08	SOMA-1	8/3/04	240P					
09	SOMA-2	8/4/04	1120A					
10	SOMA-3	8/4/04	12P					
11	SOMA-5	8/4/04	1P		↓		↓	

Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
TONY PERINI	SOMA ENV	8/4/04	330P	[signature]	Microseeps	8/5/04	1100
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :
Relinquished by :	Company :	Date :	Time :	Received by :	Company :	Date :	Time :

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-01

Sample Description	Matrix	Sampled Date/Time	Received
GW-2	Water	04 Aug. 04 10:00	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	0.35	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-02

Sample Description	Matrix	Sampled Date/Time	Received
GW-3	Water	03 Aug. 04 16:25	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	0.28	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-03

Sample Description	Matrix	Sampled Date/Time	Received
GW-4	Water	03 Aug. 04 15:12	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	3200	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-04

Sample Description	Matrix	Sampled Date/Time	Received
MW-11	Water	03 Aug. 04 13:52	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	2.8	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-05

Sample Description	Matrix	Sampled Date/Time	Received
LFR-1	Water	04 Aug. 04 9:10	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	1.0	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-06

Sample Description	Matrix	Sampled Date/Time	Received
LFR-2	Water	04 Aug. 04 8:30	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	6200	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-07

Sample Description	Matrix	Sampled Date/Time	Received
LFR-3	Water	04 Aug. 04 13:07	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	5.4	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-08

Sample Description	Matrix	Sampled Date/Time	Received
SOMA-1	Water	03 Aug. 04 14:40	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	500	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-09

Sample Description	Matrix	Sampled Date/Time	Received
SOMA-2	Water	04 Aug. 04 11:20	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	1400	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-10

Sample Description	Matrix	Sampled Date/Time	Received
SOMA-3	Water	04 Aug. 04 12:00	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	6500	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis

Lab Proj #: P0408068
Report Date: 08/16/04
Client Proj Name: Oakland CA 2511
Client Proj #: Oakland CA 2511

Client Name: Soma Environmental Engineering
Contact: Tony Perini
Address: 2680 Bishop Drive
Suite 203
San Ramon, CA 94583

Lab Sample #: P0408068-11

Sample Description	Matrix	Sampled Date/Time	Received
SOMA-5	Water	04 Aug. 04 13:00	05 Aug. 04

Analyte(s)	Result	PQL	Units	Method #	Analyst	Analysis Date
RiskAnalysis						
Methane	1700	0.015	ug/L	AM20GAX	as	8/13/2004

N - NELAC certified analysis