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November 14, 2008

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

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

Dear Mr. Wickham:

SOMA's "Multi-Phase Extraction Pilot Test Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

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

Multi-Phase Extraction Pilot Test Report

Former Glovatorium
3820 Manila Avenue
Oakland, California

Project 2514

November 14, 2008

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

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CERTIFICATION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report for the Law Offices of Loeb & Loeb LLP, in response to observed increases in free-product on-site and to comply with requirements of Alameda County Environmental Health Services to move the site further toward closure.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist

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1. INTRODUCTION

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

The overall objective of this project has been to convince the Alameda County Health Care Agency (ACHCA), the regulatory agency with jurisdiction over this site, to permit a risk- based closure which incorporates passive bio-remediation. The results of quarterly groundwater monitoring events and chemical transport modeling have shown that site conditions are conducive to passive bio-remediation. However, the ACHCA will not close the site as long as free product is present, despite the modeling results. Initially, SOMA attempted to address the problem by bailing free-product from various wells, including wells SOMA-4 and B-8. This initially appeared to be effective and, by the end of 2007 over 1,895 gallons of free product had been removed and free product levels in wells had dropped significantly.

However, in early 2008, for the first time, during rainfall events, significant levels of free product in other groundwater monitoring wells such as SOMA-2 and B-10 were reported. In addition, the results of First Quarter 2008 groundwater monitoring event showed elevated and unprecedented levels of volatile organic chemicals (VOCs) in groundwater. SOMA evaluated the problem and determined that a significant amount of contamination including Stoddard solvents in the form of free product exists in the smear zone and that as groundwater rises through the smear zone, free product is released. In addition, the release of free product causes chlorinated solvents, also present in the smear zone, to be released, thereby causing an increase in chlorinated solvent levels in groundwater in the impacted area.

SOMA hypothesized that a multiphase extraction system would be effective in removing free product, soil vapor and chemically- impacted groundwater from the subsurface. If so, it would eliminate the production of free-product petroleum hydrocarbons. As noted above, elimination of the free-product should allow the risk based closure to proceed. As a result, SOMA proposed a 45 day MPE Pilot test.

The objective of this report is to summarize the results and effectiveness of MPE technology in removing the chemicals from subsurface. This report also recommends installation and testing of additional MPE wells and conversion of the existing source area wells into MPE wells for maximizing the efficiency of MPE. The pilot test started on September 2, 2008 and concluded on October 24, 2008. Based on the initial test, SOMA believes that MPE is a feasible approach

and effective method for addressing the free-product problem, which, if addressed, should allow the risk based closure to proceed.

1.1 Site Description

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

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

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

Six underground storage tanks (USTs) were formerly located on-site. Two were located under the sidewalk on 38th Street and four inside the building. UST capacities have been variously reported as ranging from 800 gallons to 5,000 gallons. They reportedly contained Stoddard solvent (TPH-ss), fuel oil and possibly waste oil. The tanks inside the building were interconnected through a series of pipes and valves. It is reported that in about the late 1970s a significant release of stoddard solvent occurred when a new _piping system was installed. In August 1997, the six USTs were abandoned in place by backfilling with either cement-sand slurry or pea gravel. In addition, there are three USTs owned by Earl Thompson, Sr., under the sidewalk on 38th Street (Figure 2).

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

1.2 Background

Geosolv, LLC (Geosolv) initiated the first soil and groundwater investigation in August 1997. Using the direct push method, Geosolv drilled 14 soil borings to the approximate depths of 10 to 24 feet bgs. Seven borings (B-2, B-3, B-7 through B-10 and B-13; Figure 2) were converted to temporary groundwater monitoring wells, where grab groundwater samples were collected. In September 1998, Geosolv conducted further soil and groundwater investigations by drilling 12 additional soil borings to approximate depths of 19 to 25 feet bgs. All 12 borings were converted to temporary groundwater sampling points, labeled E-15 through

E-26. After collection of grab groundwater samples from temporary “E” sampling points, these borings were abandoned and grouted. Figure 2 shows soil boring locations.

In July 1999, an investigation of potential groundwater preferential flow paths was initiated by LFR. LFR drilled 10 soil borings (GW-1 through GW-8, GW-5A, and GW-6A) primarily along the 54-inch-diameter storm drain and sanitary sewer systems, to depths ranging from 8 to 20 feet bgs. During drilling, soil samples were collected from various depth intervals. In August 1999, LFR collected grab groundwater samples from seven of the nine “GW” wells. Wells GW-1 to GW-6A are shown in Figure 2.

LFR conducted the first groundwater monitoring events in January, April, October, and November 2000, and installed four groundwater monitoring wells, LFR-1 through LFR-4, in July and August 2000 (Figure 2).

In January 2001, LFR conducted a second groundwater monitoring event that suggested occurrence of strong anaerobic biodegradation activities and dechlorination of tetrachloroethene (PCE) beneath the site. On April 26 to 27, 2001, SOMA began its initial groundwater monitoring events. Results of the Second Quarter 2001 monitoring event indicated strong dechlorination of PCE occurring in the subsurface.

In SOMA’s June 2001 workplan, a recommendation was made to replace the existing small-diameter monitoring wells, B-7 and B-10, with larger-diameter wells, to better evaluate bioattenuation parameters. On October 4, 11, and 12, 2001, SOMA installed monitoring wells SOMA-1 through SOMA-5 (Figure 2). During installation, boreholes were continuously logged and soil samples collected at 5-foot depth intervals to delineate vertical extent of soil and groundwater contamination.

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

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

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

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

1.3 Previous Activities

In order to demonstrate the fate and transport of PCE and other volatile organic compounds (VOCs), SOMA conducted groundwater flow and chemical transport modeling and compared the results with that of routine groundwater monitoring data. The results of groundwater fate and transport modeling were used to conduct a human health risk assessment in order to evaluate the site cleanup levels. The analyses showed that conditions are conducive to biodegradation and that, in fact, biodegradation is occurring. In general, PCE trends appeared generally consistent with SOMA's model, indicating that passive remediation has been effective. However, one obstacle to closing the site was the presence of free product (FP). Alameda County environmental regulatory guidelines do not permit closure as long as FP is present. As a result, over the past several years SOMA has been removing FP from the site. As of March 2008, approximately 1,895 gallons had been removed. Levels of FP in the wells had been dropping fairly consistently over the past several years and, as noted above, PCE trends were decreasing consistent with SOMA's model.

FP or sheen have been reported sporadically in monitoring wells at the site since 1997. Past attempts to delineate the extent and sources of FP have been problematic due to variability and complexity of the subsurface soil and water table characteristics, access limited by buildings, and presence of potential preferential pathways for contaminant migration related to underground storm drain and sanitary sewer lines.

FP was located primarily in the vicinity of wells SOMA-4 and B-8 (Figure 2). As a result, SOMA instituted a FP removal program for those wells in 2002. As of March 2008, 1,895 gallons of FP and contaminated groundwater had been removed from SOMA-4 and B-8. As of summer 2007, FP levels had been reduced significantly and SOMA was optimistic that it would be in a position to request closure. However, during First Quarter 2008 groundwater monitoring, FP was unexpectedly observed for the first time in SOMA-2 and B-10, which are located approximately 40 feet east-southeast and northeast of SOMA-4 and B-8.

Approximately 0.71 feet of FP was detected in SOMA-2 and 2.76 feet in B-10. During Second Semi-Annual 2008 groundwater monitoring, FP was observed in well B-10 at 0.17 feet and in wells SOMA-2 and SOMA-4 at 0.60 feet each.

Results from the First Semi-Annual 2008 sampling event showed significant increases in PCE levels in wells with newly discovered FP (B-10 and SOMA-2). SOMA believes that the presence of elevated levels of FP in these wells for the first time contributed to the presence of elevated levels of dissolved solvents at this location. The FP consisted primarily of TPH-ss, which has the potential to dissolve PCE and TCE. Thus, it is suspected that the FP in the area of SOMA-2 and B-10 caused dissolution and mobilization of residual levels of PCE in the subsurface.

1.4 Site Geology and Hydrogeology

The property is located on the alluvial plain between the San Francisco Bay shoreline and the Oakland hills. Surface sediments in the site vicinity consist of Holocene alluvial deposits representative of an alluvial fan depositional environment. These deposits consist of brown, medium-dense sand thatfines upward to sandy or silty clay. The pattern of stream channel deposition results in a three-dimensional network of coarse-grained sediments interspersed with finer-grained silts and clays. The individual units tend to be discontinuous lenses aligned parallel to the axis of the former stream flow direction.

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

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

Groundwater monitoring reveals groundwater depths ranging from 4 to 14 feet bgs at gradients ranging from 0.019 ft/ft to 0.035 ft/ft. Groundwater flow has been predominantly northeast to southwest across the site. Slug test results indicate that hydraulic conductivity of the saturated sediments ranges between 1.2×10^{-4} and 6.9×10^{-4} cm/sec. Using the average groundwater flow gradient of 0.027 and aquifer porosity of 0.32, the groundwater flow velocity ranges between 10.5 and 60.1 ft/year.

1.5 Suspected Chemical Source Areas

Based on the results of past site investigation and groundwater monitoring data, the soil and groundwater beneath the site have been impacted by the petroleum hydrocarbons and chlorinated solvents.

The source of Stoddard solvents was formed by release of these chemicals from the former USTs and their associated piping system and washing machine operation. As noted above, a significant release was reported to have occurred in the late 1970s when the new underground piping system connecting the USTs to the washing machines was found to have been incorrectly installed. Figure 2 shows the approximate location of the release area. Based on the monitoring data, Stoddard solvents and petroleum hydrocarbons are most predominantly present in SOMA-4 and B-8, located in the area next to USTs, and the former washing machine area.

The chlorinated solvents are generally reported in SOMA-2, SOMA-3, and B-10 located to the west of the former USTs where the former dry cleaning machine used to operate.

1.6 Soil Impact

The primary contaminants of concern (COC) at the site include petroleum hydrocarbons and chlorinated solvents. Petroleum hydrocarbons includes Stoddard solvents (TPH-ss), total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene and total xylenes, collectively termed as (BTEX) and methyl tertiary butyl ether (MtBE). Chlorinated solvents include perchloroethylene (PCE), trichloroethylene (TCE), and cis 1,2-dichloroethylene (cis 1,2-DCE), trans 1,2-dichloroethylene (trans 1,2-DCE), vinyl chloride, and 1,2-dichlorrpropane (1,2-DCP).

Soil impact is observed in the shallow unsaturated zone above the capillary fringe, the smear zone at and below the capillary fringe, and in some deeper sediments below the water table. Results of historical analyses of soil samples collected since August 1997 are listed in Tables 1 and 1a (SOMA, 2004). Sample point locations are illustrated in Figure 2. The data indicate that soil impact is found in the unsaturated and saturated soil profiles.

2. SCOPE OF WORK

Based on existing data, it appears that PCE, TCE and petroleum hydrocarbons are present in the smear zone in the subsurface source area in the vicinity of a former dry cleaning machine and near the location of the former accidental release. The results of quarterly groundwater monitoring events have demonstrated that biodegradation of the PCE and TCE is occurring. However, the regulatory agency is not willing to close the site as long as free product is present. Therefore, MPE pilot testing was conducted to evaluate the feasibility of this technology to eliminate the free product in order to permit the risk based closure to proceed.

Specifically, the MPE event evaluates the following: (a) presence of remaining FP pockets in the subsurface; (b) effectiveness of MPE in removing FP and other contaminants from the subsurface; and (c) the zone of influence (ZOI) of each test well in order to determine the number of extraction wells necessary to effectively remove the remaining chemicals from soil and groundwater in the area where FP has been detected. This report evaluates the following:

- whether MPE is an effective way of addressing the free-product problem;
- removal rate of contaminants and required time to achieve site closure;
- vacuum zone of influence (ZOI) of MPE and the need, if any, to install additional extraction wells.

This MPE pilot test report describes the following:

- MPE pilot test status
- Estimation of chemical mass removal rate
- Estimation of total chemical mass removed during the test
- Estimation of ZOI for MPE using existing wells
- Recommendations for expediting cleanup time

To accomplish the proposed work, the following tasks were conducted.

Task 1: Permit Acquisition, Health and Safety Plan Preparation;

Task 2: MPE Pilot Testing ;

Task 3: Report Preparation

3. MULTI-PHASE EXTRACTION

3.1 Smear Zone

As discussed above, the findings of free-product has delayed the ability to obtain a risk based closure. Despite bailing activities which removed, and apparently eliminated free product, free product re-appeared in 2008. SOMA reviewed historical drilling logs for various wells at the site. Several logs reported strong petroleum hydrocarbon (PHC) odor. The same logs generally reported the presence of significant soil contamination near the groundwater interface. SOMA plotted this information in Figure 3. The area where strong PHC odor and free product were reported coincides with the accidental Stoddard solvent release area located next to the former USTs, its associated piping system and washing machines. The presence of chlorinated solvents at elevated concentrations in wells SOMA-2, SOMA-3, and B-10 similarly coincides with the location of a formerly used dry cleaning machine. Figure 3 also shows the area where moderate or minor odor was reported during installation of groundwater monitoring wells and boring logs from 1996 through 1999. Currently, no FP or elevated levels of chemicals have been reported within the areas of moderate PHC odor. It appears, therefore, that the FP is associated with a smear zone, located at a depth of about 10-12 feet bgs.

The smear zone is identified as light gray, gray to blue-green gray staining of soils above, at, and below the capillary fringe, accompanied by moderate to strong hydrocarbon odor. A smear zone is developed as mobile light fuel hydrocarbons (light non-aqueous phase liquids [LNAPL]) are released to the water table, spread laterally as a non-wetting phase in soils below the water table, and are distributed vertically through the upper aquifer during seasonal water table fluctuations. As smearing continues, the LNAPL become trapped as discontinuous ganglia within soil pores of the upper aquifer. Thus, the smear zone is an area of intimate contact between LNAPL and groundwater, representing a long-term source for dissolved-phase hydrocarbons in the groundwater. When groundwater rises through the smear zone, product is released and appears as free product in wells within the area of the smear zone.

3.2 Description of Multi-Phase Extraction

The purpose of MPE pilot testing is to determine the feasibility of dewatering the smear zone and removing LNAPL through vacuum-enhanced volatilization. Smear zone dewatering is critical to MPE success. Air/water yields necessary to completely expose the smear zone for successful mass removal of VOCs from the subsurface must be determined. In addition, the ZOI is determined using vacuum measurements collected at observation wells.

MPE, also known as dual-phase extraction (DPE), is an in situ technology that uses pumps to remove various combinations of contaminated groundwater,

separate-phase petroleum product, and hydrocarbon vapor from the subsurface. MPE systems can be effective in removing separate-phase product (FP) from the subsurface, thereby reducing concentrations of PHCs in both the saturated (smear zone) and unsaturated zones of the subsurface. MPE systems are typically designed to maximize extraction rates; however, the technology also stimulates biodegradation of petroleum constituents in the unsaturated zone by increasing the supply of oxygen, in a manner similar to bioventing. MPE is often used because it enhances groundwater and/or product recovery rates, especially in layered, fine-grained soils. The application of MPE also maximizes effectiveness of soil vapor extraction by lowering the water table and therefore increasing air-phase permeabilities in the vadose zone. The vacuum applied to the subsurface with MPE systems creates vapor-phase pressure gradients toward the vacuum well. The higher the applied vacuum, the larger the hydraulic gradients that can be achieved in both vapor and liquid phases, and thus the greater the vapor and liquid recovery rates.

3.3 Pre-Pilot Testing Activities

A temporary permit to operate the MPE unit was acquired from the Bay Area Air Quality Management District on August 18, 2008 (Application no. 18538), and the Permit to Operate (plant number 19199) was received on September 09, 2008. A special discharge permit was acquired from the East Bay Municipal Utility District on September 15, 2008 (50638151). Permit copies are included in Appendix B.

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

3.4 MPE Pilot Test Procedures

3.4.1 Field Work and Procedures

SOMA began the MPE pilot test on September 2, 2008. Existing monitoring wells and borings were utilized as extraction wells and observation wells. SOMA-2, SOMA-4, B-8, and B-10 were utilized as extraction wells (well locations in Figure 2) and observation wells when not being utilized for extraction. Induced vacuum

and groundwater levels were monitored, measured and recorded from observation wells (SOMA-5, B-2, B-3, B-7, and B-9).

The MPE event was performed using a standalone treatment system (Figure 4) equipped with a 428-standard cubic feet per minute (scfm), liquid ring vacuum pump rated at 25-horsepower, external heat exchanger, air/water separator vessel, discharge hoses, downhole stingers, and a 1,000-lb. carbon tank from Siemens (specification sheets included in Appendix D) for vapor abatement, with a carbon drum for polishing (for both the vapor- and water-phase discharges). The carbon treatment system operates under the valid BAAQMD discharge permit for plant number 19199.

During this process, free product, soil vapor and groundwater were extracted from the subsurface. Extracted groundwater was treated on-site with granular activated carbon (GAC) and discharged to the local sanitary sewer (manhole location shown in Figure 2). Effluent samples were collected prior to the submittal of the discharge permit application with all concentrations below laboratory-detection limits or below regulatory limits.

Physical and chemical parameters including applied vacuum, soil vapor extraction flow rates, effluent temperature, volume of groundwater extracted, VOC concentrations, and induced vacuum, were monitored, measured and recorded. Induced vacuum in the observation wells was measured using magnehellic vacuum gauges fitted to airtight well caps. VOC concentrations in the extracted soil vapor stream were continuously monitored using a photoionization detector (PID) calibrated to hexane. MPE operational data is presented in Table 2. Extraction well data is presented in Tables 3 through 5. Field data sheets are presented in Appendix C. Extracted soil vapor sample were collected from influent and effluent gas streams during MPE pilot testing. Table 6 lists sample identifiers and analysis results.

3.4.2 Smear Zone Dewatering

Steady-state dewatering of the smear zone at wells SOMA-2, SOMA-4, B-8, and B-10 was achieved and maintained during the MPE event by vacuum. Dewatering was achieved by opening the dilution control valve at the extraction well to allow atmospheric air into the well casing, accelerating the removal of water from the well casing by vacuum. As the stinger was advanced into the well casing, water was removed by vacuum. As water was removed, vacuum was reestablished in the well casing and the stinger was advanced farther into the well casing. When the stinger reached the base of the well casing, and water ceased to be removed by vacuum, the stinger was elevated off the bottom of the well to maintain steady-state groundwater flow into the well and to maximize mass removal rate out of the well, and then the dilution control valve was closed. At SOMA-2, SOMA-4, B-8 and B-10, steady-state dewatering was achieved when the dilution control valve was closed with the first hour of pilot testing at

each well (Table 2). The estimated groundwater extraction rate for the MPE event at SOMA-2 based on gallons extracted and elapsed time (Table 2) was 0.088 gallons per minute (gpm). The estimated groundwater extraction rate for the MPE event at SOMA-4, SOMA-2, B-8 and B-10 was 0.300, 0.088, 0.142 and 0.041gpm respectively.

3.4.3 Soil Vapor Sampling and Analysis

Influent soil vapor samples were collected through a sampling port located on the discharge side of the vacuum pump. Discharge vapor samples were collected through a sampling port located on the discharge side of the GAC vessels. Air samples were submitted under chain-of-custody documentation to Torrent Laboratory, Inc. and analyzed for TPH-g and TPH-ss using USEPA Analytical Method TO-3; and for other VOC compounds using USEPA Analytical Method TO-15. Soil vapor analytical results are presented in Table 7. Certified laboratory analytical reports and chain of custody documentation are included in Appendix E.

3.4.4 Pilot Test Summaries

3.4.4.1 Extraction Well SOMA-4

The MPE event at SOMA-4 began at 11:00 on September 2, 2008 and was terminated at 11:00 on September 10, 2008. Extraction time at SOMA-4 was 11,520 minutes, or 192 hours, or 8 days. Induced vacuum and groundwater levels were measured at observation wells B-3, B-7, B-9, B-10, SOMA-2, and SOMA-5.

Applied vacuum ranged from 24.5 to 25 inches of mercury, and vapor extraction flow rate was maintained at 16 scfm (Table 2). VOC concentrations in the extracted soil vapor stream ranged from 326 parts per million vapor (ppmv) as TPH-ss to 1,302 ppmv (Tables 2 and 3). Approximately 1,010 gallons of groundwater (Table 2) were extracted at a rate of 0.09 gpm. Induced vacuum was detected from observation wells SOMA-2 (0.5 to 0.86 inches of water), SOMA-5 (0.05 to 0.17 inches of water), and in B-10 (0.05 to 0.07 inches of water) (Table 2). In addition, a total of 35 gallons of free product was collected from oil/water separator.

One influent and one effluent soil vapor sample was collected during extraction from SOMA-4 (Table 8). A vapor sample collected at the oxidizer stack was used to aid in demonstrating compliance with BAAQMD temporary discharge permit. Removal efficiencies are listed in Table 8.

3.4.4.2 Extraction Well SOMA-2

The MPE event at SOMA-2 began at 13:00 on September 10, 2008 and was terminated at 9:00 on September 16, 2008. Extraction time was 8,310 minutes, or 138.5 hours, or 5.8 days. During the MPE event, induced vacuum and groundwater levels were measured at observation B-3, B-7, B-9, B-10, SOMA-4, and SOMA-5.

Applied vacuum ranged from 25 to 26 inches of mercury, and vapor extraction flow rate was maintained at 21 scfm (Table 2). VOC concentrations in the extracted soil vapor stream ranged from 508 ppmv as TPH-ss to 777 ppmv (Tables 2 and 4). Approximately 302 gallons of groundwater (Table 2) were extracted at a rate of 0.04 gpm. Induced vacuum was detected from observation wells SOMA-4 (0.5 to 0.7 inches of water), SOMA-5 (0.1 to 0.02 inches of water), and in B-10 (0.5 to 0.8 inches of water) (Table 2). During this period 20 gallons of free product was removed from the oil/water separator.

One influent and one effluent soil vapor sample was collected from SOMA-2 during extraction (Table 8). A vapor sample collected at the oxidizer stack was used to aid in demonstrating compliance with BAAQMD temporary discharge permit. Removal efficiencies are listed in Table 8.

3.4.4.3 Extraction Well B-8

The MPE event at B-8 began at 10:30 on September 16, 2008 and was terminated at 09:30 on September 24, 2008. Extraction time at B-8 was 9,510 minutes, or 158.5 hours, or 6.6 days. Induced vacuum and groundwater levels were measured at observation wells B-2, B-7, B-9, B-10, and SOMA-4.

Applied vacuum ranged from 22 to 26 inches of mercury, and vapor extraction flow rate was maintained at 21 scfm (Table 2). VOC concentrations in the extracted soil vapor stream ranged from 415 ppmv as TPH-ss to 1,589 ppmv (Tables 2 and 5). Approximately 1,128 gallons of groundwater (Table 2) were extracted at a rate of 0.12 gpm. Induced vacuum was detected from observation wells SOMA-4 (0.18 to 0.22 inches of water), B-9 (0.09 to 0.3 inches of water), and in B-10 (0.02 to 0.05 inches of water) (Table 2). No free product was observed during this process.

One influent and one effluent soil vapor sample was taken from B-8 during extraction (Table 8). A vapor sample collected at the oxidizer stack was used to aid in demonstrating compliance with BAAQMD temporary discharge permit. Removal efficiencies are listed in Table 8.

3.4.4.4 Extraction Well B-10 and Combined Wells

The MPE event at B-10 began at 11:30 on September 24, 2008 and was terminated at 13:00 on October 24, 2008. From 8:30 on October 13, 2008 to 12:00 on October 16, 2008 (except for 1 hour where only B-10 was extracted from), MPE was carried out at SOMA-4 as well as B-10, and from 14:00 on October 16, 2008 till the completion of the Pilot Test, extraction was conducted at all four extraction wells. Total extraction time at B-8 and the combined wells was 35,412 minutes, or 590.2 hours, or 24.59 days. Induced vacuum and groundwater levels were measured at observation wells B-7, B-8, B-9, SOMA-2, and SOMA-4 (or SOMA-5 when SOMA-4 was used for extraction).

Applied vacuum ranged from 23.5 to 28 inches of mercury, and vapor extraction flow rate ranged from 17 to 46 scfm (Table 2). VOC concentrations in the extracted soil vapor stream ranged from 194 ppmv as TPH-ss to 1,393 ppmv (Tables 2 and 6). Approximately 1,464 gallons of groundwater (Table 2) were extracted at a rate of 0.04 gpm. Induced vacuum was detected from observation wells SOMA-5 (0.01 to 0.1 inches of water), SOMA-4 (0.05 to 1.5 inches of water), SOMA-2 (0.2 to 1.4 inches of water), B-8 (0.01 to 0.17), and in B-9 (0 to 0.66 inches of water)(Table 2). No vacuum was observed in observation well B-7. A total of 5 gallons of free product was collected from the oil/water separator.

One influent and one effluent soil vapor sample was taken during extraction from B-10, B-8, SOMA-2, and SOMA-4 (Table 8). A vapor sample collected at the oxidizer stack was used to aid in demonstrating compliance with BAAQMD temporary discharge permit. Removal efficiencies are listed in Table 8.

4. ANALYSIS AND DISCUSSION

4.1 Mass Removed

Estimated VOC mass removal rates and VOC mass removed for the pilot test are presented in Tables 3, 4, 5, and 6 for SOMA-4, SOMA-2, B-8, and B-10 (and combined wells), respectively.

VOC mass removed was estimated using flow rates during the pilot test, total volume of air extracted during the pilot test, and VOC concentrations in ppmv as TPH-ss measured by the PID during the pilot test. The estimated total mass of VOCs removed from the soil vapor extracted from wells for SOMA-2, SOMA-4, B-8, and B-10 (and combined wells) was 543 lbs, with 72 lbs from SOMA-4, 53 lbs from SOMA-2, 102 lbs from B-8, and 316 lbs from B-10 (and combined wells).

VOC mass removal rate in lbs/day is estimated by dividing the estimated VOC mass removed during the pilot test by elapsed time for the pilot test. For pilot

tests conducted on SOMA-2, SOMA-4, B-8, and B-10 (and combined wells) the estimated total VOC mass removal rate was approximately 11 lbs/day.

Table 8 presents compounds contained in soil vapor based on laboratory analytical results. A majority of the vapor stream consists of TPH-ss. The total mass of TPH-ss removed by the pilot test is estimated using the soil vapor analytical results for the pilot test and the median flow rate for the extraction wells. The estimated total mass of TPH-ss removed from extracted soil vapor by the pilot tests conducted on wells SOMA-2, SOMA-4, B-8, and B-10 (and combined wells) was 761 lbs. Laboratory analytical results also show that a small percentage of the vapor stream consisted of chlorinated solvents. The estimated total mass of chlorinated solvents removed from extracted soil vapor by the pilot tests conducted on wells SOMA-2, SOMA-4, B-8, and B-10 (and combined wells) was 26 lbs.

There is a discrepancy in mass of VOCs between PID measurements as TPH-ss taken in the field and laboratory analyses of the extracted vapor stream. Although the vapor stream contains various compounds, the vapor stream mass as VOCs will be assumed as TPH-ss since a majority of the vapor stream consists of TPH-ss according to laboratory analytical results. However, the concentrations based on laboratory analysis are representative only of that moment in the pilot test at which the extracted vapor stream was sampled. Since the laboratory analytical results are not representative of the entire length of the pilot test, unlike the PID measurements that are collected continuously over the length of the pilot test where fluctuations in concentrations can be observed and taken into account, the total mass of VOCs (as TPH-ss) removed as measured by PID is used to estimate mass removals.

Groundwater samples were collected prior to the start of MPE testing. Table 7 lists analysis results for groundwater samples collected from SOMA-2, SOMA-4, B-8, and B-10 on August 5, 2008. Certified laboratory analytical reports and chain of custody documentation are included in Appendix D.

4.2 Zone of Influence

The ZOI for the MPE pilot test is estimated by determining pressure change in observation wells versus distance from the extraction well at the end of the pilot test (EPA 1995). The log of vacuum pressure measured in the observation well at the end of pilot testing is plotted versus the distance from the MPE well. Figures 5, 7, 9, and 11 illustrate ZOI plotted for extraction wells SOMA-4, SOMA-2, B-8, and B-10, respectively. The data points describe straight lines. The lines intersect the pressure axis at 0.1 inches of water and the distance axis to estimate the MPE ZOI. For pilot testing using SOMA-4, SOMA2, B-8, and B-10, MPE ZOI is up to 38, 34, 40, and 54.5 ft., respectively.

Currently, there is insufficient data to estimate the amount of contaminant mass in the smear zone in order to estimate how long it would take to operate the extraction system to remove the free product source, thereby allowing for a risk based closure. To make such an estimate will require the installation of new soil boring in the vicinity of former USTs and suspected chemical source areas and collecting soil and groundwater samples. In addition to increase the efficiency of the mass removal, new MPE extraction wells must be installed. Once these are installed, additional testing will be required to determine their efficiency. The new extraction wells with longer screen intervals within the hot spots potentially can increase the efficiency of the pilot testing.

5. CONCLUSIONS AND RECOMMENDATIONS

The results of pilot tests indicate that MPE technology is highly effective in removing free product, chemically-impacted groundwater and soil vapor from the subsurface.

As indicated the pilot tests have been conducted using SOMA-4, SOMA-2, B-8 and B-10. These wells except B-10 are two-inch diameter wells and extended to the first water bearing zone. B-10 is only a 1-inch diameter well. The mass removal rate and zone of influence of these extraction wells are not sufficient to effectively remove the chemical mass from the subsurface. The perforation intervals of these wells are as follows:

- SOMA-4 10-20 feet bgs
- SOMA-2 10-20 feet bgs
- B-8 from 9 to 24' bgs
- B-10 from 4 to 9' bgs, total depth 19'

Reviewing the lithological logs and observations made during installation of these wells indicate that there is some contamination above the perforation intervals of these wells between 3 to 8 feet bgs. As such, these wells may not be capable of removing contaminants from shallower depths. Due to the presence of elevated levels of PCE at B-10, most likely free phase PCE in the form of dense non-aqueous phase liquid (DNAPL) may be present at this location. There is a rule of thumb that if the concentration of PCE in groundwater exceeds one percent of its solubility limit, there is a strong chance that DNAP is present in subsurface. As discussed elevated levels of PCE up to its one hundred percent solubility limit were reported during the First Quarter 2008 groundwater monitoring event. Prior to the pilot test up to 10,000 ug/L PCE 4,200 ug/L TCE and 15,000 ug/L cis-1,2-DCE was reported in B-10, see Table 7. Due to its high density, DNAPL may be located at the deeper depths below the perforation interval of B-10 well screen. Therefore, B-10 does not appear to be a suitable extraction well for removing DNAPL from subsurface. However, during the test the majority of VOC mass was removed from B-10 and other wells when they were collectively used as

extraction wells. Most likely converting B-10 to a bigger diameter MPE well with longer screen interval will increase the efficiency of removal process.

Significantly, the pilot test has shown that MPE can be effective in removing contamination from the smear zone, thereby eliminating the creation of free product. It is the free product which has delayed the risk based closure.

We recommend the following:

1. Conducting field activity to evaluate the current distribution of chemicals in soil and groundwater. The data will be used for better estimation of current chemical mass and remaining free product volume evaluation. The information is crucial for evaluation of free product removal time for risk-based closure purposes. Figure 11 shows the locations of the proposed soil borings.

2. Extending pilot test period to effectively remove the remaining contaminants from soil and groundwater without any delay. The removal activity should be continued until the removal rate falls below the levels that does not economically justify the continuation of the removal action.
3. Based on the recent test results, the duration of pilot testing can be decreased by installing additional MPE extraction wells and improving the conditions of existing wells SOMA-2, SOMA-4, B-8 and B-10.

4. Converting SOMA-4, SOMA-2, B-8 and B-10 into 4-inch diameter extraction wells with longer screen intervals starting from one foot bgs. Once the wells are constructed, we recommend conducting additional testing and evaluation of their effectiveness in removing free product and chemical mass.

5. Since the estimated radius of influence of MPE is within 30-50 feet, therefore, to completely remove the contaminant plume installation of additional MPE wells will be required. The location and number of new MPE wells will be decided once the results of proposed soil borings become available.

6. In the past, elevated levels of TPH-g and VOCs were reported in LFR-2. We recommend utilizing LFR-2 as a test well to evaluate the removal rate of chemicals.

6. REFERENCES

Borden, R.C., 1998. “Handbook of Bioremediation” Section 9 Natural Bioremediation of Hydrocarbon-Contaminated Ground Water, pp 177-199.

EPA 1998. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater, EPA/600/R-98/128. September.

Helley, E.J., K.R. Lajoie, and D.B. Burke. 1972. Geologic Map of Late Cenozoic Deposits, Alameda County, California.

LFR. 1999. Results of Utility Survey and Work Plan for Soil and Grab Groundwater Investigation. May 6.

LFR. 2000a. Soil and Groundwater Investigation Report. March 20.

LFR. 2000b. Work Plan for Installation of Groundwater Monitoring Wells, Former Glovatorium, 3815 Broadway, Oakland, California. June 14.

LFR. 2000c. Groundwater Monitoring Report, Second Quarter 2000, Former Glovatorium, 3815 Broadway, Oakland, California. July 7.

LFR. 2000d. Groundwater Monitoring Report, Third Quarter 2000, Former Glovatorium, 3815 Broadway, Oakland, California. November 2.

LFR. 2001. Groundwater Monitoring Report, Fourth Quarter 2000, Former Glovatorium, 3815 Broadway, Oakland, California. November 2.

Microseeps. 2000. Monitored Natural Attenuation As a Remedial Alternative In Groundwater Contamination. Lecture at LFR Levine - Fricke (LFR) Emeryville office by Robert J. Pirkle, Ph.D. of Microseeps. May 31.

Sepehr, M. 1999. “Methanogenesis and Anaerobic Biodegradation of Petroleum Hydrocarbons in Soil and Groundwater” a Paper Presented in 4th IAA Annual Conference at Petrochemical, Energy and Environment, New York. September.

SOMA Environmental Engineering, Inc. 2001. First Quarter 2001 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California, May 7, 2001.

SOMA Environmental Engineering, Inc. 2001. Second Quarter 2001 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California, May 7.

SOMA Environmental Engineering, Inc. 2001. Third Quarter 2001 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. May 7.

SOMA Environmental Engineering, Inc. 2001. Workplan to Conduct Additional Investigation at the Former Glovatorium Facility, 3815 Broadway, Oakland, California. June 15.

SOMA Environmental Engineering, Inc. 2001. Fourth Quarter 2001 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. December 11.

SOMA Environmental Engineering, Inc. 2002. First Quarter 2002 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. March 27.

SOMA Environmental Engineering, Inc. 2002. Second Quarter 2002 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. May 16.

SOMA Environmental Engineering, Inc. 2002. Third Quarter 2002 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. September 10.

SOMA Environmental Engineering, Inc. 2002. Fourth Quarter 2002 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. December 3.

SOMA Environmental Engineering, Inc. 2003. Groundwater Flow, Chemical Transport and Bioattenuation Modeling, Former Glovatorium Facility, 3815 Broadway, Oakland, California. February 28.

SOMA Environmental Engineering, Inc. 2003. First Quarter 2003 Groundwater Monitoring Report, Former Glovatorium Facility, 3815 Broadway, Oakland, California. April.

SOMA Environmental Engineering, Inc. 2003. Semi-Annual Groundwater Monitoring Report, June 2003 through December 2003, Former Glovatorium Facility, 3815 Broadway, Oakland, California.

U.S. Geological Survey. Quaternary Geology of Alameda Cty, and Parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin Counties, CA: A Digital Database. U.S. Dept of the Interior.

SOMA Environmental Engineering, Inc. 2004. First Semi-Annual Groundwater Monitoring Report 2004, Former Glovatorium Facility, 3815 Broadway, Oakland, California. March 3.

SOMA Environmental Engineering, Inc. 2004. Second Semi-Annual Groundwater Monitoring Report 2004, Former Glovatorium Facility, 3815 Broadway, Oakland, California. September 8.

SOMA Environmental Engineering, Inc. 2005. First Semi-Annual Groundwater Monitoring Report 2005, Former Glovatorium Facility, 3815 Broadway, Oakland, California. March 14.

SOMA Environmental Engineering, Inc. 2005. Second Semi-Annual Groundwater Monitoring Report 2005, Former Glovatorium Facility, 3815 Broadway, Oakland, California. August 15.

SOMA Environmental Engineering, Inc. 2006. First Semi-Annual Groundwater Monitoring Report 2006, Former Glovatorium Facility, 3815 Broadway, Oakland, California. February 16.

SOMA Environmental Engineering, Inc. 2006. Second Semi-Annual Groundwater Monitoring Report 2006, Former Glovatorium Facility, 3815 Broadway, Oakland, California. August 30.

SOMA Environmental Engineering, Inc. 2008. First Semi-Annual Groundwater Monitoring Report 2008, Former Glovatorium Facility, 3815 Broadway, Oakland, California. May 28.

SOMA Environmental Engineering, Inc. 2008. Second Semi-Annual Groundwater Monitoring Report 2008, Former Glovatorium Facility, 3815 Broadway, Oakland, California. September 17.

FIGURES

N

approximate scale in feet

0 250 500

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

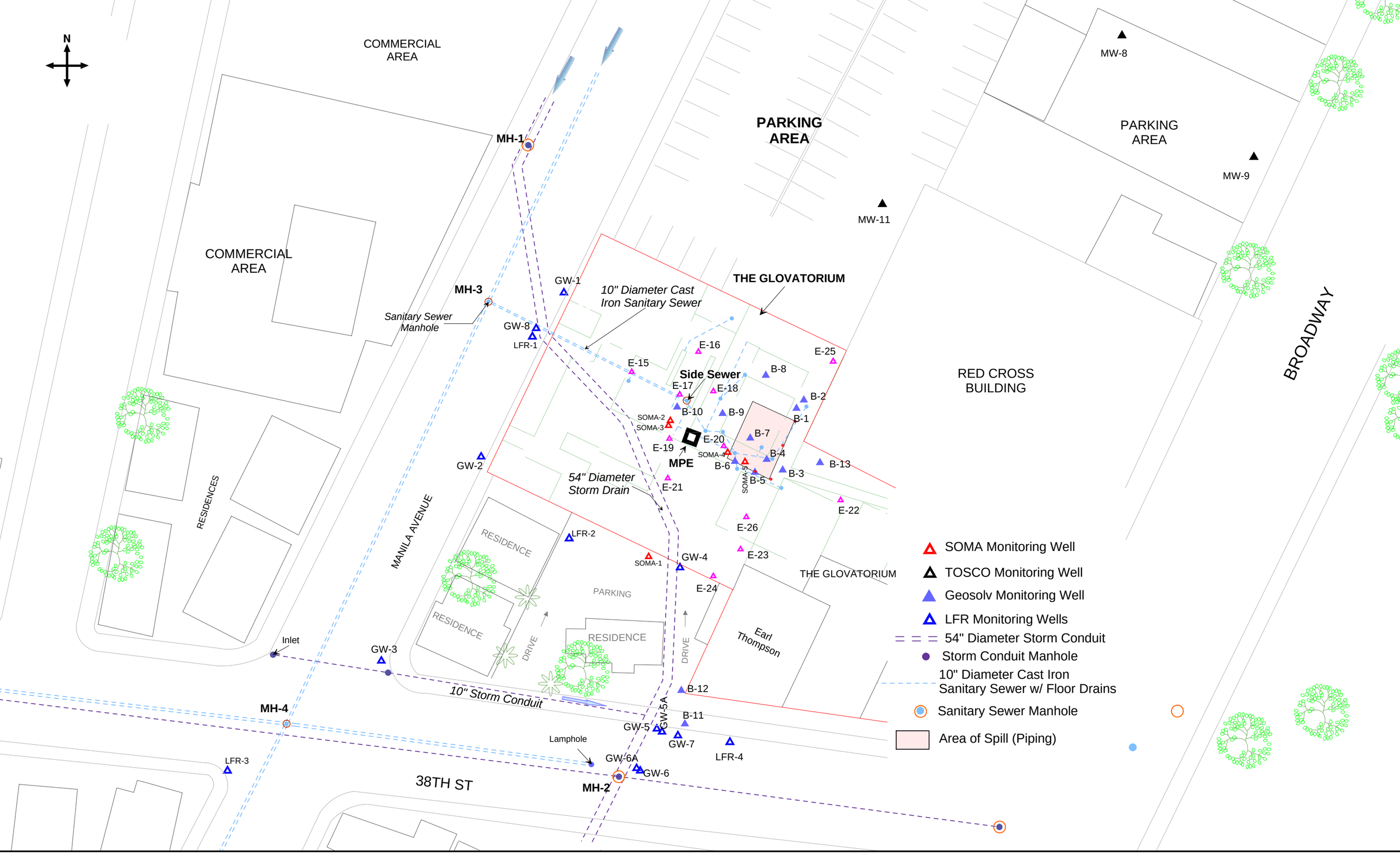

Figure 2: Site map showing locations of monitoring wells, soil borings, and preferential flow pathways.

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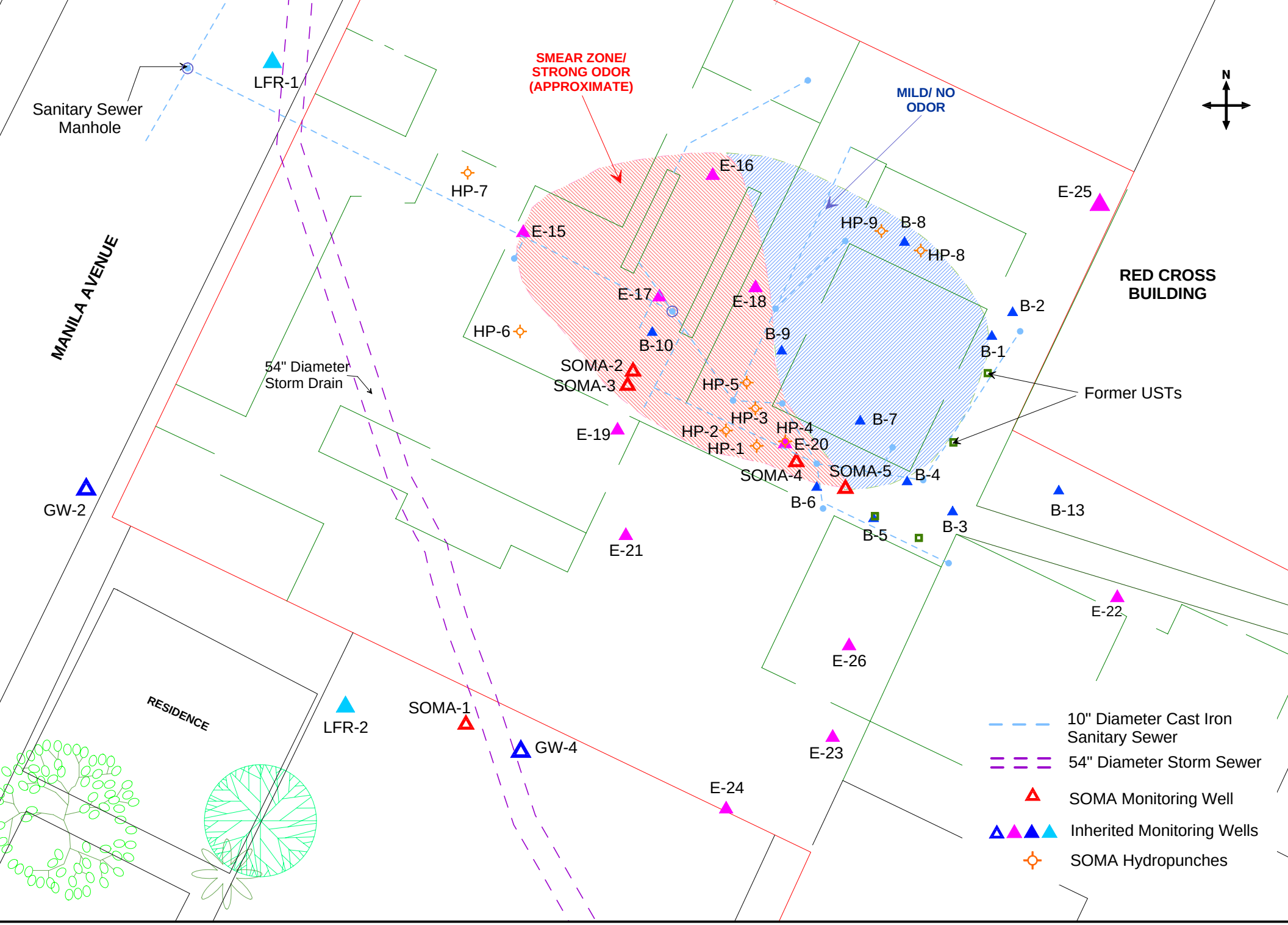
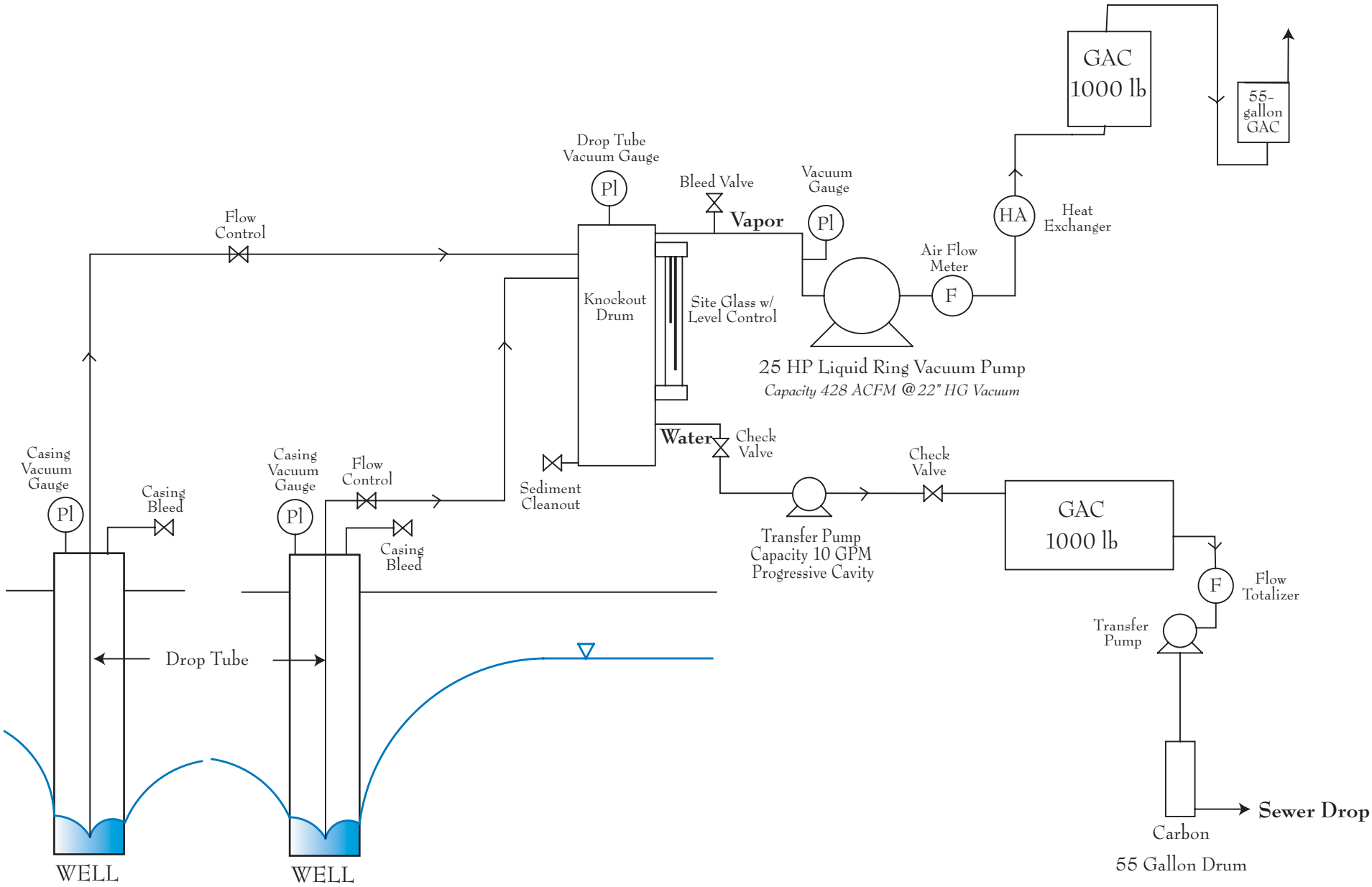


Figure 3: Lateral Extent of Smear Zone in First WBZ

SOMA
ENVIRONMENTAL ENGINEERING, INC.



Not to Scale

Figure 4: Multi-Phase Extraction Process Schematic

SOMA ENVIRONMENTAL ENGINEERING, INC.

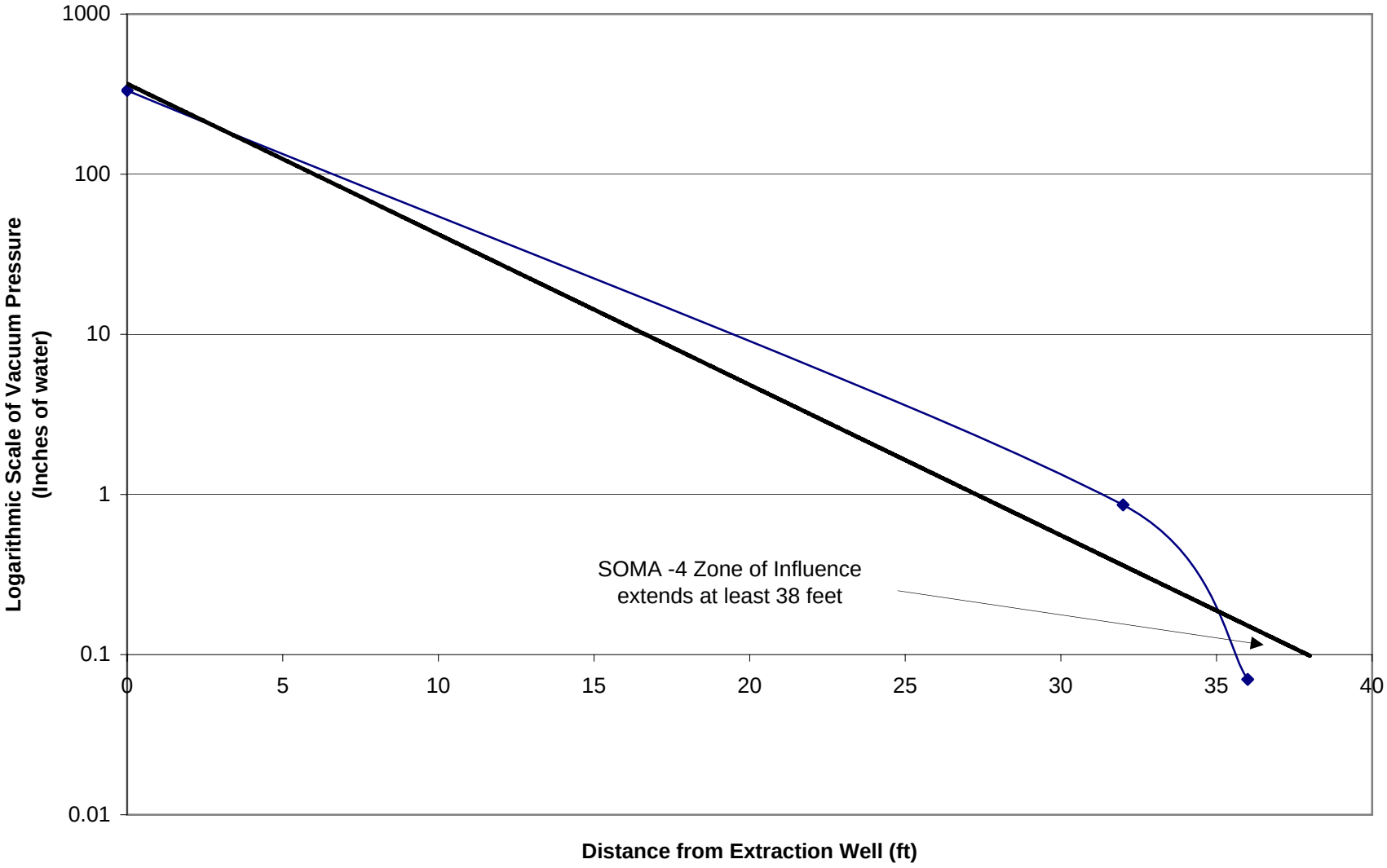


Figure 5: Zone of Influence Logarithmic Plot of Vacuum Influence- SOMA-4

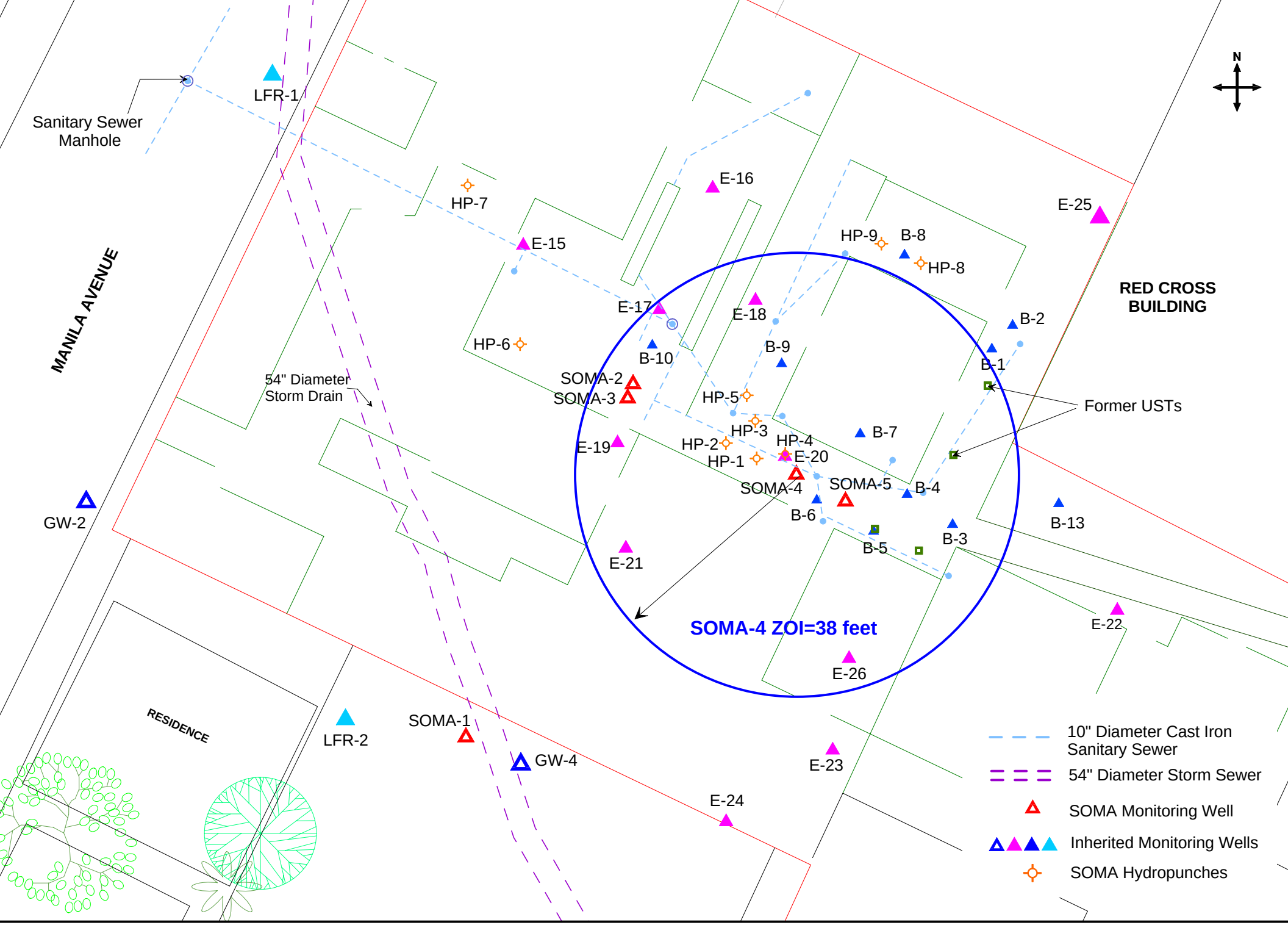


Figure 6: Zone of Influence, Site Map Centering SOMA-4

ENVIRONMENTAL ENGINEERING, INC.

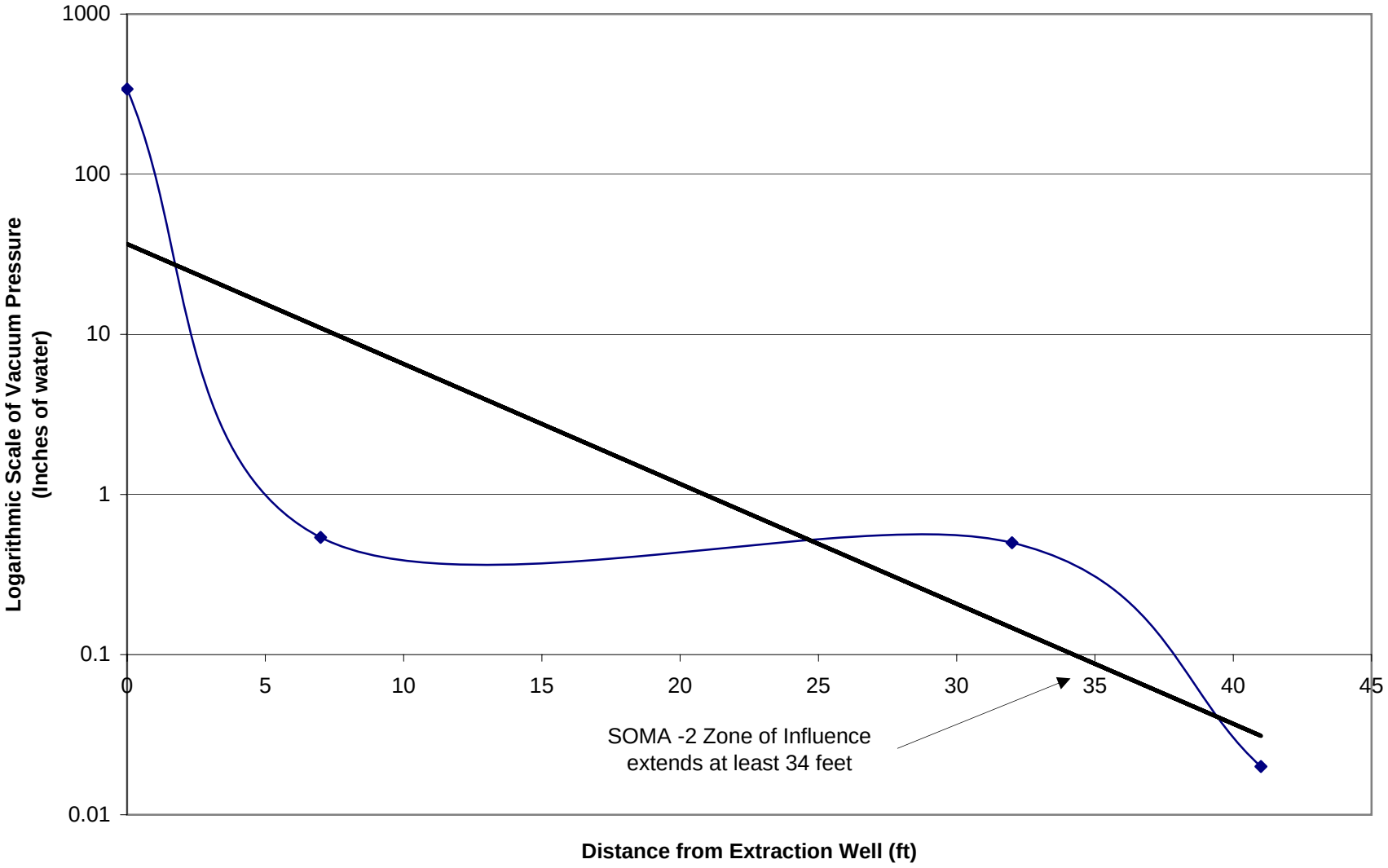


Figure 7: Zone of Influence Logarithmic Plot of Vacuum Influence- SOMA-2

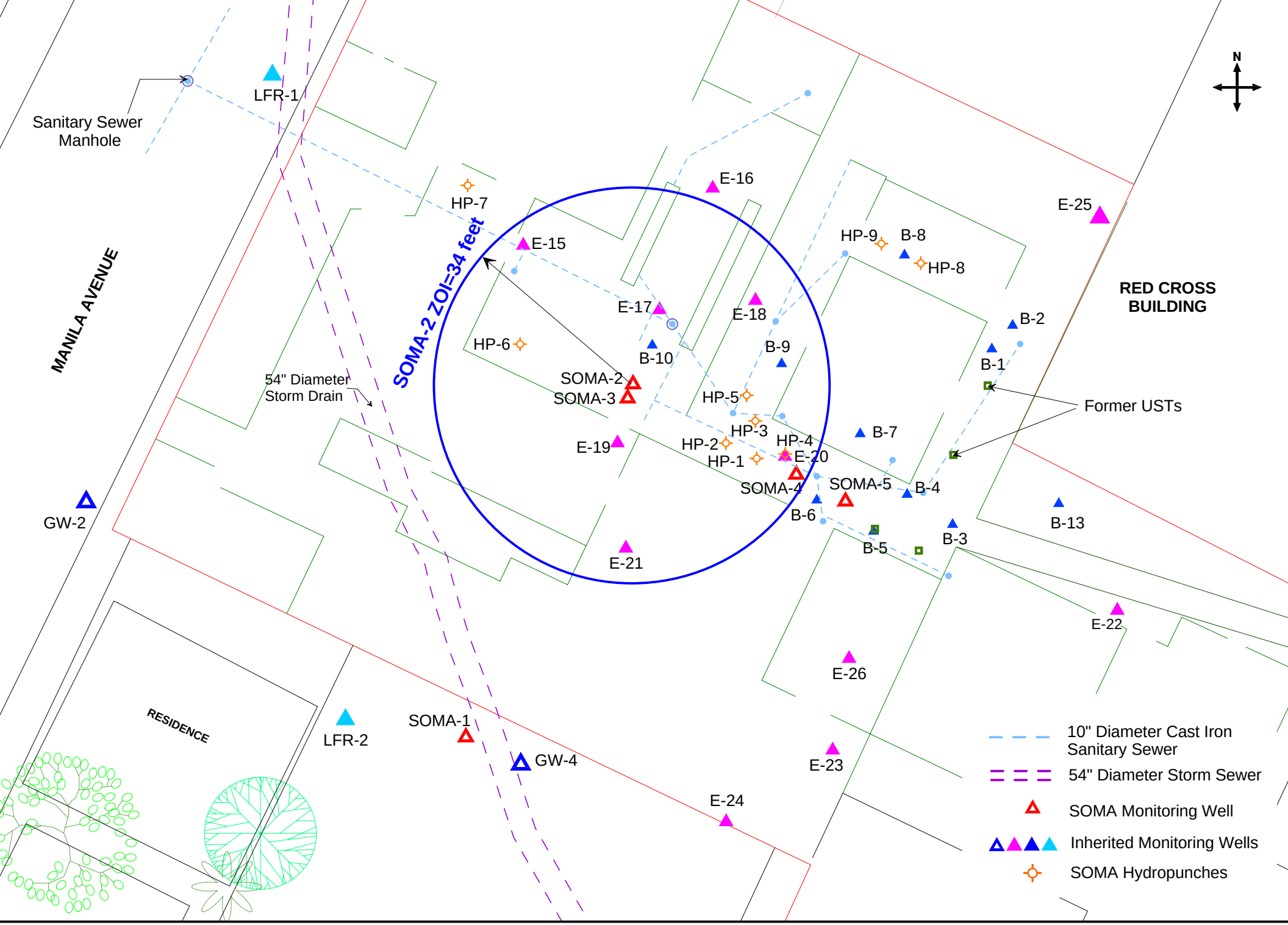


Figure 8: Zone of Influence, Site Map Centering SOMA-2

ENVIRONMENTAL ENGINEERING, INC.

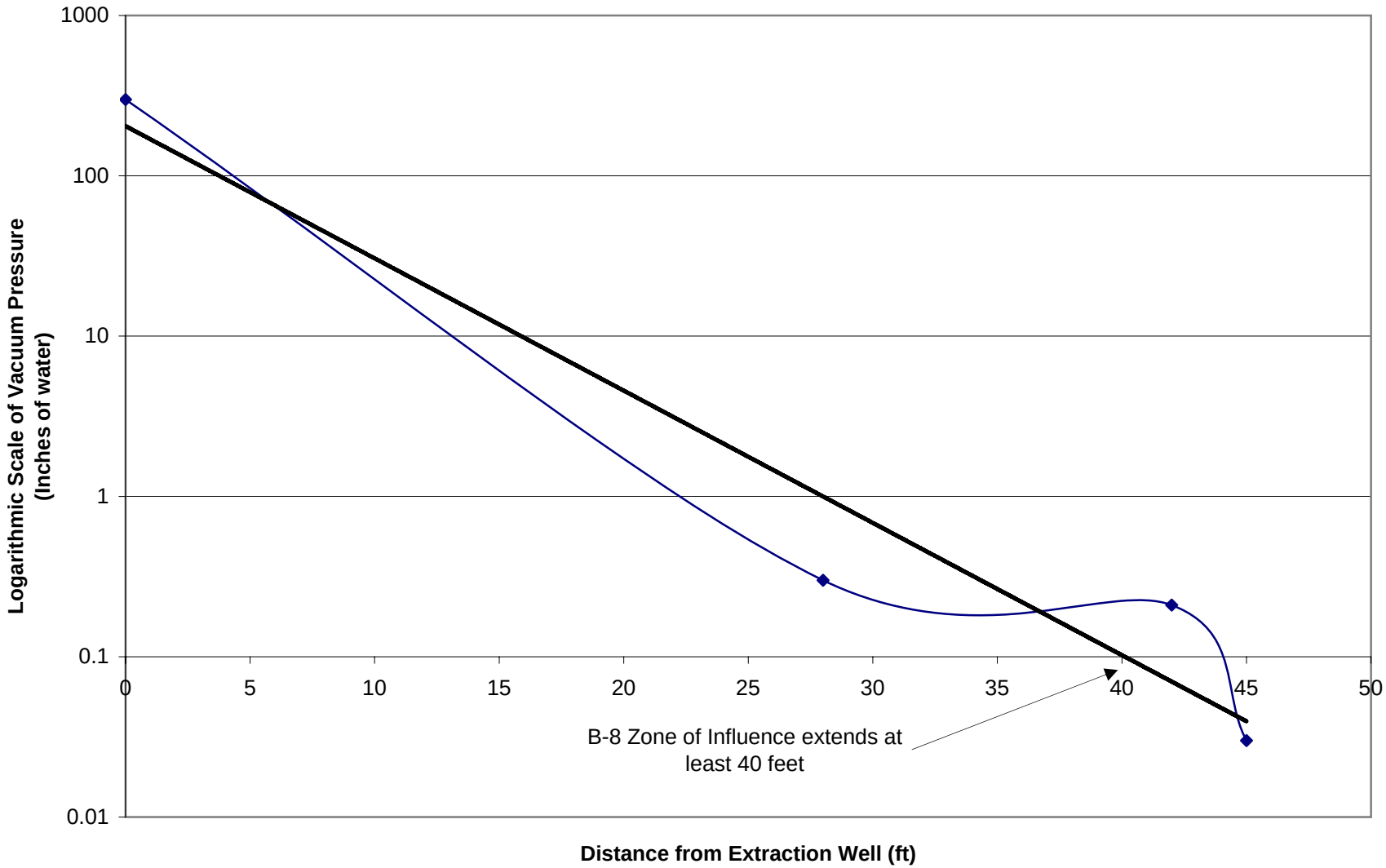


Figure 9: Zone of Influence Logarithmic Plot of Vacuum Influence- B-8

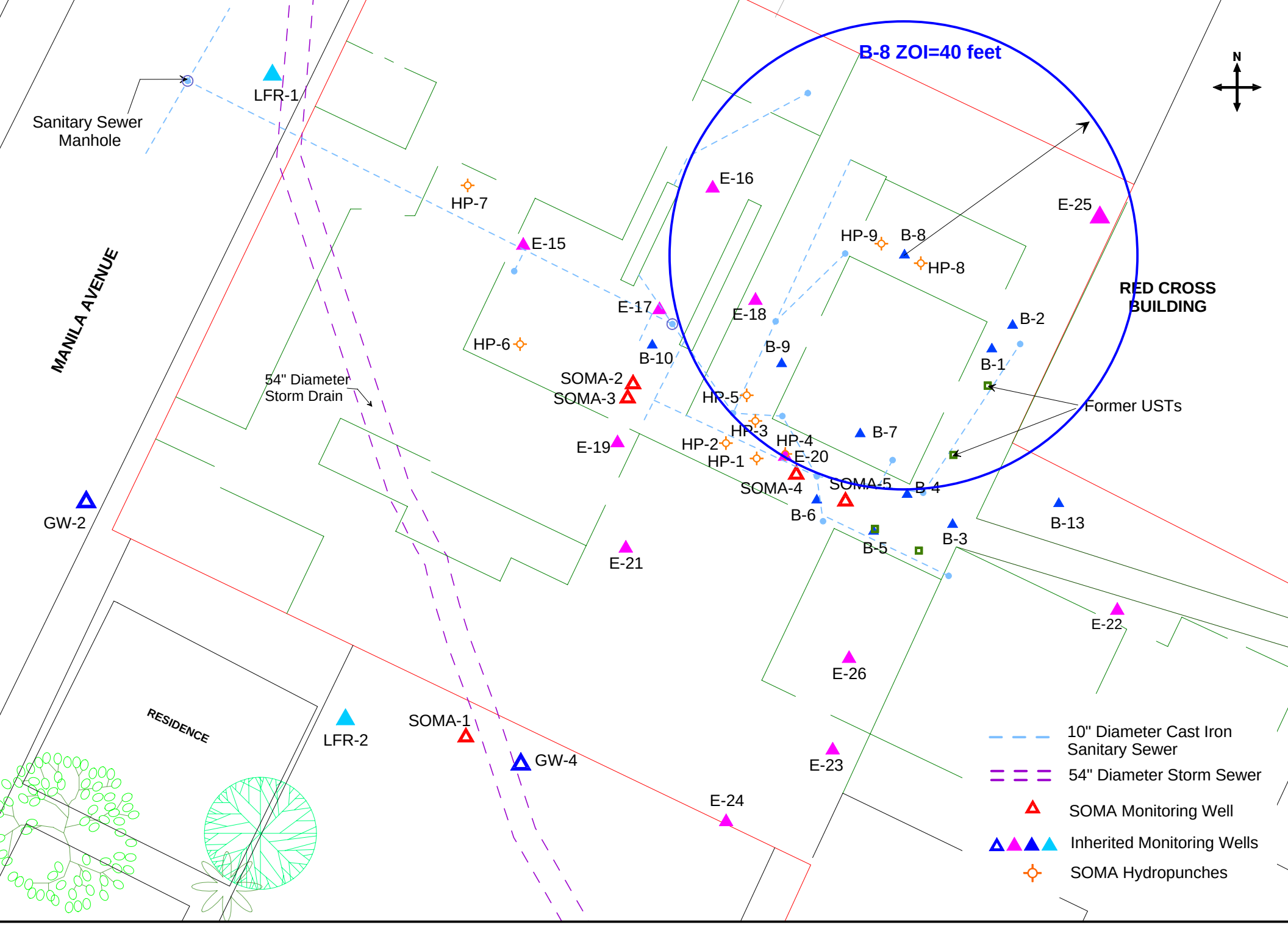


Figure 10: Zone of Influence, Site Map Centering B-8

ENVIRONMENTAL ENGINEERING, INC.

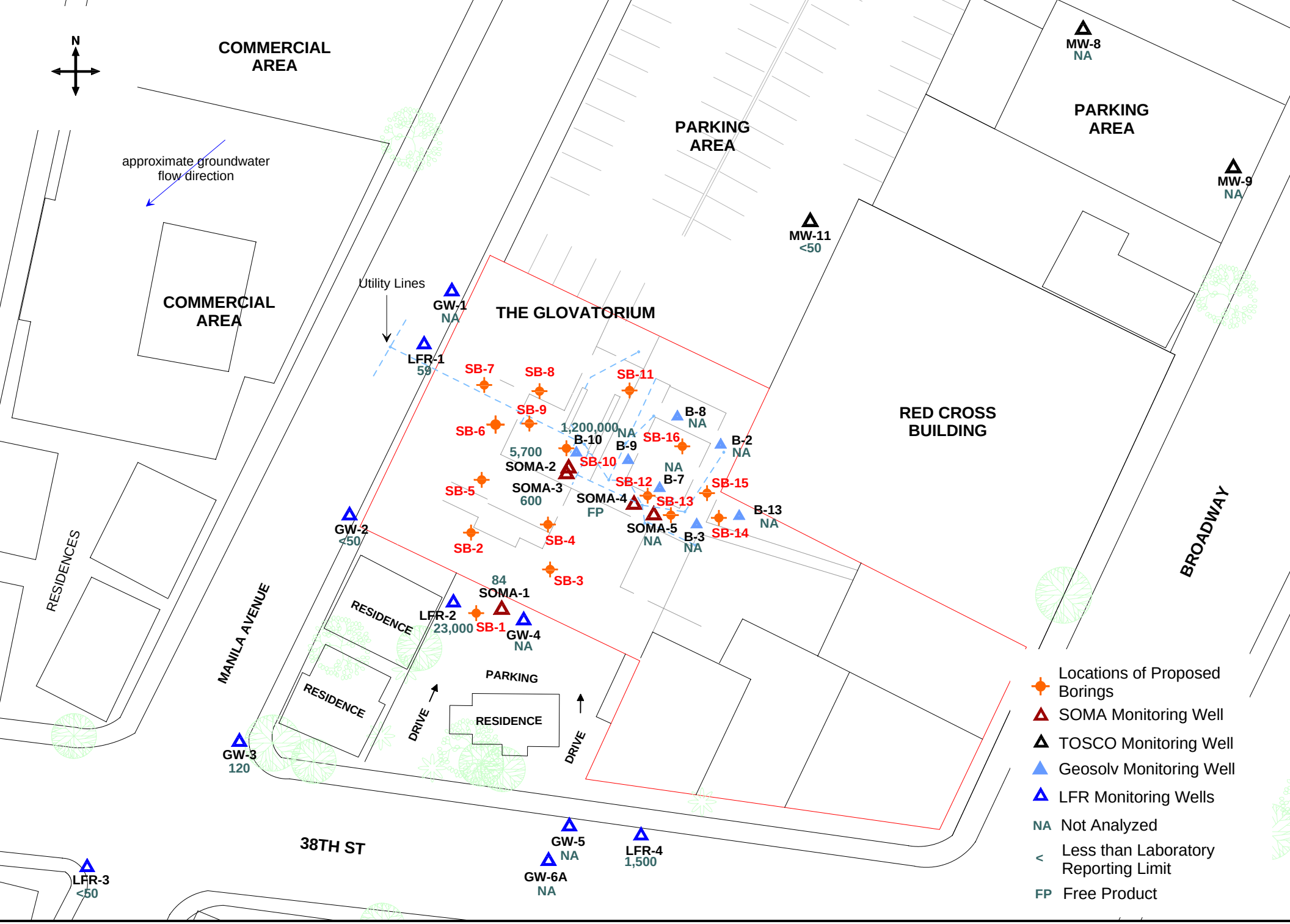


Figure 11: Locations of Proposed Borings

ENVIRONMENTAL ENGINEERING, INC.

TABLES

Table 1

Analytical Results of Soil Samples Analyzed for Petroleum Hydrocarbons

Former Glovatorium Site

3820 Manila Avenue, Oakland, California

Sample ID	Depth (feet bgs)	Date	Stoddard Solvent C7-C12 (mg/Kg)	Gasoline C7-C12 (mg/Kg)	MtBE (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl benzene (mg/Kg)	Total Xylenes (mg/Kg)
E-15	5	9/14/1998	ND	NA	ND	ND	0.018	ND	ND
E-15	10	9/14/1998	1,200.0	NA	ND	ND	0.130	0.600	0.890
E-15	41.5	9/14/1998	500.0	NA	ND	ND	ND	0.100	ND
E-15	19	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-16	5	9/14/1998	3.5	NA	ND	ND	0.017	ND	ND
E-16	10	9/14/1998	430.0	NA	ND	ND	ND	ND	ND
E-16	12.5	9/14/1998	990.0	NA	ND	ND	ND	ND	ND
E-16	15.5	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-17	3	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-17	7	9/14/1998	650.0	NA	ND	ND	ND	0.340	ND
E-17	14.5	9/14/1998	71.0	NA	ND	ND	0.008	0.008	0.270
E-17	16.5	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-17	19	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-18	3	9/14/1998	11.0	NA	ND	ND	0.008	ND	ND
E-18	7	9/14/1998	3,300.0	NA	ND	ND	ND	ND	ND
E-18	14.5	9/14/1998	12.0	NA	ND	ND	0.007	ND	0.051
E-18	17.5	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-19	5	9/14/1998	ND	NA	ND	ND	0.011	ND	ND
E-19	10	9/14/1998	4,200.0	NA	ND	ND	0.660	ND	ND
E-19	13	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-19	16	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-19	18.5	9/14/1998	ND	NA	ND	ND	ND	ND	ND
E-20	11.75	9/14/1998	900.0	NA	ND	ND	0.100	ND	0.0
E-26	12	9/14/1998	190.0	NA	ND	ND	ND	0.090	0.740
E-21	8.5	9/14/1998	5,000.0	NA	ND	ND	ND	ND	36.0
GW-1	8	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-1	7	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-4	9	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-5A	9	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-6A	10	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-7	9	7/15/1999	<1	1.4	<0.02	<0.005	<0.005	<0.005	<0.005
GW-7	16	7/15/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-7	14	7/15/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-7	11	7/15/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-8	9	7/16/1999	<1	<1	<0.02	<0.005	<0.005	<0.005	<0.005
GW-8	12	7/16/1999	4.8	8.2	<0.02	<0.005	<0.005	<0.005	0.140
SOMA 3	2	10/11/2001	4.5	7.2	ND	ND	ND	ND	ND
SOMA 3	4	10/11/2001	ND	ND	ND	ND	ND	ND	ND
SOMA 3	6	10/11/2001	ND	ND	ND	ND	ND	ND	ND
SOMA 3	8	10/11/2001	690.0	1,200.0	ND	ND	ND	ND	ND
SOMA 3	10	10/11/2001	1,900.0	3,200.0	ND	ND	ND	ND	ND
SOMA 3	12	10/11/2001	250.0	420.0	ND	ND	ND	ND	ND
SOMA 3	14	10/11/2001	210.0	360.0	ND	ND	ND	ND	ND
SOMA 3	16	10/11/2001	ND	ND	ND	ND	ND	ND	ND
SOMA 3	18	10/11/2001	ND	1.7	ND	ND	ND	ND	ND
SOMA 3	20	10/11/2001	12.0	21.0	ND	ND	ND	ND	ND
SOMA 3	22	10/12/2001	7.9	14.0	0.011	ND	0.009	0.007	0.053
SOMA 3	24	10/12/2001	ND	ND	0.066	ND	ND	ND	ND
SOMA 3	26	10/12/2001	ND	ND	0.079	ND	ND	ND	ND
SOMA 3	28	10/12/2001	ND	ND	0.045	ND	ND	ND	ND
SOMA 3	30	10/12/2001	ND	ND	0.029	ND	ND	ND	ND
SOMA 5	2	10/12/2001	ND	ND	ND	ND	ND	ND	ND
SOMA 5	4	10/12/2001	8.8	16.0	ND	ND	ND	ND	ND
SOMA 5	6	10/12/2001	ND	1.7	ND	ND	ND	ND	ND
SOMA 5	8	10/12/2001	100.0	170.0	ND	ND	ND	ND	ND
SOMA 5	10	10/12/2001	290.0	490.0	ND	ND	ND	ND	ND
SOMA 5	12	10/12/2001	4,500.0	7,300.0	ND	ND	ND	ND	ND
SOMA 5	14	10/12/2001	2.5	4.5	ND	ND	ND	ND	ND
SOMA 5	16	10/12/2001	4,500.0	7,600.0	ND	ND	ND	ND	ND
SOMA 5	18	10/12/2001	16.0	28.0	0.009	ND	ND	ND	ND
SOMA 5	20	10/12/2001	ND	ND	0.031	ND	ND	ND	ND
SOMA 5	22	10/12/2001	2.0	3.7	ND	ND	ND	ND	ND
SOMA 5	24	10/12/2001	ND	ND	0.027	ND	ND	ND	ND
SOMA 5	26	10/12/2001	ND	ND	0.021	ND	ND	ND	ND
Blank		10/19/2001	ND	ND	ND	ND	ND	ND	ND
ESL Shallow			83.0	83.0	0.023	0.044	2.9	2.3	2.3
ESL Deep			83.0	83.0	0.025	0.044	2.9	3.2	2.3

ND: Not Detected

NA: Not Analyzed

NS: Not Surveyed

ESL: California Regional Water Quality Control Board Environmental Screening Levels, Interm Final November 2007, Revised May 2008, Tables A and C

Table 1a

Analytical Results of Soil Samples Analyzed for Volatile Organic Compounds

Former Glovatorium Site

3820 Manila Avenue, Oakland, California

Sample ID	Depth (feet bgs)	Date	Acetone (mg/Kg)	Cis-1,2-DCE (mg/Kg)	TCE (mg/Kg)	Propyl-benzene (mg/Kg)	PCE (mg/Kg)	1,2,4-Trimethylbenzene (mg/Kg)	Naphthalene (mg/Kg)
B-10	15.5	8/22/1997	NA	NA	81	NA	1,300	NA	NA
B-10	16	8/22/1997	NA	NA	270	NA	5,500	NA	NA
E-15	5	9/14/1998	NA	ND	ND	NA	0.62	NA	NA
E-15	10	9/14/1998	NA	0.34	ND	NA	ND	NA	NA
E-15	14.5	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-15	19	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-16	5	9/14/1998	NA	0.0079	ND	NA	ND	NA	NA
E-16	10	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-16	12.5	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-16	15.5	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-17	3	9/14/1998	NA	0.23	0.007	NA	0.026	NA	NA
E-17	7	9/14/1998	NA	0.39	0.12	NA	ND	NA	NA
E-17	14.5	9/14/1998	NA	0.014	ND	NA	0.029	NA	NA
E-17	16.5	9/14/1998	NA	ND	0.031	NA	0.85	NA	NA
E-17	19	9/14/1998	NA	ND	ND	NA	0.039	NA	NA
E-18	3	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-18	7	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-18	14.5	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-18	17.5	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-19	5	9/14/1998	NA	0.078	0.076	NA	2.1	NA	NA
E-19	10	9/14/1998	NA	ND	ND	NA	ND	NA	NA
E-19	13	9/14/1998	NA	1.8	ND	NA	ND	NA	NA
E-19	16	9/14/1998	NA	0.061	ND	NA	0.039	NA	NA
E-19	18.5	9/14/1998	NA	0.008	ND	NA	ND	NA	NA
E-20	11.75	9/14/1998	NA	0.940	0.055	NA	ND	NA	NA
E-20	2.5	9/14/1998	NA	1.7	ND	NA	ND	NA	NA
E-20	5	9/14/1998	NA	3.2	ND	NA	ND	NA	NA
GW-1	8	7/16/1999	NA	<0.0048	<0.0048	NA	0.14	NA	NA
GW-1	7	7/16/1999	NA	<0.023	<0.023	NA	0.71	NA	NA
GW-4	9	7/16/1999	NA	<0.0046	<0.0046	NA	<0.0046	NA	NA
GW-5A	9	7/16/1999	NA	<0.005	<0.005	NA	<0.005	NA	NA
GW-6A	10	7/16/1999	NA	<0.0051	<0.0051	NA	<0.0051	NA	NA
GW-7	9	7/15/1999	NA	<0.0051	<0.0051	NA	<0.0051	NA	NA
GW-7	16	7/15/1999	NA	<0.0049	<0.0049	NA	<0.0049	NA	NA
GW-7	14	7/15/1999	NA	<0.0046	<0.0046	NA	<0.0046	NA	NA
GW-7	11	7/15/1999	NA	<0.0049	<0.0049	NA	<0.0049	NA	NA
GW-8	9	7/16/1999	NA	<0.0046	<0.0046	NA	0.050	NA	NA
GW-8	12	7/16/1999	NA	<0.005	<0.005	NA	<.005	NA	NA
SOMA 3	2	10/11/01	<0.02	0.032	0.007	<0.0049	0.050	<0.0049	<0.0049
SOMA 3	4	10/11/01	0.130	0.058	0.039	<0.0047	0.45 >LR	<0.0047	<0.0047
SOMA 3	6	10/11/01	0.040	0.140	0.046	<0.0048	0.21 >LR	<0.0048	<0.0048
SOMA 3	8	10/11/01	<2	<0.5	0.720	<0.5	34 >LR	<0.5	<0.5
SOMA 3	10	10/11/01	<4	<1.0	1.40	<1.0	1.40	<1.0	0.01
SOMA 3	12	10/11/01	<2	<0.5	<0.5	<0.5	<0.5	0.680	<0.5
SOMA 3	14	10/11/01	<0.5	<0.13	<0.13	0.210	<0.13	0.540	<0.13
SOMA 3	16	10/11/01	0.024	0.100	<0.0053	0.010	0.039	0.035	<0.0053
SOMA 3	18	10/11/01	0.020	0.28 >LR	0.011	<0.0046	0.032	0.009	<0.0046
SOMA 3	20	10/11/01	0.025	0.050	<0.0048	0.005	0.021	0.021	<0.0048
SOMA 3	22	10/12/01	0.100	0.180	<0.0052	0.048	0.027	0.180	<0.0097
SOMA 3	24	10/12/01	<.02	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SOMA 3	26	10/12/01	<0.051	0.009	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SOMA 3	28	10/12/01	<0.051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SOMA 3	30	10/12/01	<.02	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SOMA 5	2	10/12/01	<.019	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
SOMA 5	4	10/12/01	0.035	0.006	<0.0048	0.006	<0.0048	<0.0048	<0.0048
SOMA 5	6	10/12/01	0.099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SOMA 5	8	10/12/01	0.046	0.006	<0.0048	<0.0048	<0.0048	<0.0048	ND
SOMA 5	10	10/12/01	<4	<1.0	<1.0	4.60	<1.0	4.2	2.9
SOMA 5	12	10/12/01	0.057	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051	<0.0051
SOMA 5	14	10/12/01	<0.038	<0.0096	<0.0096	0.019	<0.0096	0.021	<0.0096
SOMA 5	16	10/12/01	<0.02	<1.0	<0.5	3.400	<0.005	3.700	2.800
SOMA 5	18	10/12/01	<4	<1.0	<1.0	0.007	<1.0	0.007	0.006
SOMA 5	20	10/12/01	<0.021	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052
SOMA 5	22	10/12/01	0.0	<0.0052	ND	0.012	ND	0.014	0.019
SOMA 5	24	10/12/01	<0.019	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
SOMA 5	26	10/12/01	<0.019	<0.0047	<0.0047	<0.042	<0.0047	<0.0047	<0.0047
ESL Shallow			0.500	0.190	0.460	NL	0.370	NL	1.3
ESL Deep			0.500	0.190	0.460	NL	0.700	NL	3.4

Table 2

September - October 2008 MPE Pilot Test
Operational Data

3820 Manila
Oakland, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	CONDESER TEMPERATURE (^{0}F)	WELL FIELD VAPOR FLOW RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM (BLOWER) EFFLUENT (Psi)	SYSTEM TOTALIZER READING (gallons)	OBSEVATION WELLS												COMMENTS
											DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	
9/2/2008	1100									0	B-3		SOMA-5		SOMA-2		B-10		B-9		B-7		Begin SOMA-4
	1200	326	25	83	27	27	0	26.5	5	0	10	0	25	0.1	11.02	0.46	11.02	0.05	10.99	0	Dry	0	Power Meter = 4 KWH
	1300	562	25	83	27	27	0	26.5	5	0	10	0	24.97	0.05	11.05/11.35	0.5	11.09/11.25	0.05	10.99	0	Dry	0	
	1400	1,140	25	87	27	27	0	26.75	5	0	10	0	24.97	0.1	11.1/11.35	0.8	11.1/11.3	0.05	11.01	0	Dry	0	
	1500	1,302	25	87	27	27	0	26.75	5	0	10	0	24.97	0.1	11.1/11.37	0.8	11.1/11.3	0.05	11.01	0	Dry	0	
9/3/2008	930	814	25	78	27	27	0	26.5	5	0	10.08	0	24.97	0.14	11.26/11.58	0.56	11.3/11.48	0.06	11.2	0	Dry	0	
	1030	739	25	82	27	27	0	26.5	5	0	10.09	0	24.97	0.1	11.26/11.60	0.56	11.33/11.48	0.05	11.2	0	Dry	0	
	1530	655	25	87	27	27	0	26.5	5	0													
	1630	575	25	87	27	27	0	26.5	5	0	10.03	0	25	0.1	11.3/11.62	0.86	11.33/11.51	0.06	11.2	0	Dry	0	
9/4/2008	830	491	25	72	27	27	0	26.5	5	0	10.08	0	24.97	0.06	11.35/11.68	0.64	11.37/11.55	0.06	11.3	0	Dry	0	
	930	489	25	72	27	27	0	26.5	5	0													
	1530	441	25	90	27	27	0	26.5	5	0	10.08	0	24.97	0.15	11.36/11.67	0.84	11.37/11.53	0.06	11.3	0	Dry	0	
	1630	399	25	89	27	27	0	26.5	5	0	10.08	0	24.97	0.15	11.36/11.67	0.84	11.37/11.53	0.06	11.3	0	Dry	0	
9/5/2008	1000	749	25	81	27	27	0	26.5	5	0	10.15	0	24.97	0.17	11.44/11./80	0.6	11.45/11.69	0.07	11.39	0	Dry	0	
	1400	877	25	92	27	27	0	26.5	5	0	10.13	0	24.97	0.15	11.42/11.77	0.86	11.42/11.68	0.07	11.39	0	Dry	0	
9/9/2008	1300	557	24.5	72	27	27	0	26	5	0													
	1400	547	24.5	75	27	27	0	26	5	0													

Table 2

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Operational Data

3820 Manila
Oakland, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	CONDESER TEMPERATURE (^{0}F)	WELL FIELD VAPOR FLOW RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM (BLOWER) EFFLUENT (Psi)	SYSTEM TOTALIZER READING (gallons)	OBSEVATION WELLS												COMMENTS
											DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	
9/10/2008	1100	580	24.5	73	27	27	0	26.5	5	0	10.24	0	24.97	0.14	11.52/11.9	0.56	11.42/11.55	0.07	11.45	0.01	Dry	0	35 gal FP removed in AWS
	1300										B-3		SOMA-5		SOMA-4		B-10		B-9		B-7		Begin SOMA-2
	1400	703	25	73	27	27	0	27.8	5	0													Power Meter = 56 KWH
9/11/2008	1000	777	25	67	27	27	0	27.6	5	0	10.15	0	24.97	0.02	13.6/14.0	0.7	12.55/13.93	0.8	12.28	0	Dry	0	
	1300	733	25	73	27	27	0	27.8	5	0	10.15	0	24.97	0.02	13.6/14.0	0.7	12.55/13.93	0.8	12.28	0	Dry	0	
9/12/2008	1030	700	25	68	27	27	0	27.4	5	0	10.2	0	24.97	0.01	13.50/14.0	0.54	12.89/14.25	0.7	12.35	0	Dry	0	
	1130	651	25	67	27	27	0	27.6	5	0	10.2	0	24.97	0	13.5/14.0	0.56	12.89/14.25	0.7	12.34	0	Dry	0	
9/15/2008	1000	581	26	68	27	27	0	27.6	5	1,010	10.3	0	25	0	13.40/14.1	0.5	13.35/14.75	0.5	12.32	0	Dry	0	
	1400	646	26	73	27	27	0	27.6	5	1,010	10.22	0	25	0	13.35/14.05	0.5	13.42/14.74	0.52	12.32	0	Dry	0	Power Meter = 87 KWH
	1600	599	25	69	27	27	0	27.6	5	1,119													
9/16/2008	900	508	26	66	27	27	0	27.4	5	1,312	10.24	0	25	0.02	13.35/14.05	0.5	13.35/14.75	0.54	12.3	0	Dry	0	20 gal FP removed in AWS
	1030										B-2				SOMA-4		B-10		B-9		B-7		Begin B-8
	1130	415	26	71	27	27	0	27	5	1,353	10.77	0			13.55/14.2	0.18	13.45/14.7	0.05	12.32	0	Dry	0	
9/17/2008	900	814	26	68	27	27	0	27	5	1,417	11	0			13.78/14.40	0.23	13.35/14.6	0.05	12.12	0	Dry	0	
	1100	814	26	69	27	27	0	27	5	1,582	10.95	0			13.75/14.40	0.2	13.36/14.62	0.05	12.12	0	Dry	0	
	1930																						System down
9/18/2008	800																						Carbon Change out on vapor side
	1230																						
	1330	418	23	71	20	27	7	25	2.4	1,582	10.86	0			13.45/14.2	0.2	12.65/13.9	0.05	11.89	0.09	Dry	0	Power Meter = 110 KWH
9/19/2008	1000	309	22.5	69	20	27	7	24.5	2.4	2,071	10.85	0			13.47/14.33	0.2			11.87	0.3	Dry	0	1000-1230 System down, adjusting
	1230																						flow rate, added gate valve
	1330	633	22.5	73	20	27	7	25	2.4	2,123	10.85	0			13.35/14.15	0.2	12.0/12.75	0.03	11.77	0.3	Dry	0	
	1430	887	22.5	73	20	27	7	25	2.4	2,284	10.85	0			13.40/14.25	0.2	12.1/12.87	0.03	11.79	0.3	Dry	0	
9/22/2008	1000	1,253	22	69	20	27	7	24.5	2.4	2,327	10.87	0			13.55/14.35	0.22	11.82/12.36	0.03	11.6	0.3	Dry	0	
	1100	1,172	22	70	20	27	7	24.5	2.4	2,440	10.87	0			13.55/14.35	0.21	11.82/12.35	0.03	11.6	0.3	Dry	0	
9/23/2008	1500	1,140	22	81	20	27	7	24.5	2.4	2,440	10.95	0			13.5/14.3	0.22	11.75/12.20	0.02	11.6	0.3	Dry	0	
	1600	1,078	22	81	20	27	7	24.5	2.4	2,440	10.95	0			13.5/14.27	0.22	11.75/12.22	0.02	11.6	0.3	Dry	0	
9/24/2008	930	1,589	22	67	20	27	7	24.5	2.4	2,440	10.95	0			13.5/14.3	0.21	11.75/12.22	0.03	11.55	0.3	Dry	0	Power Meter = 125 KWH
	1130										B-8				SOMA-4		SOMA-2		B-9		B-7		Begin B-10
	1230	885	21.5	77	20	27	7	24	2.4	2,440	14.12	0.12			13.27/14.15	1.5	12.25/12.87	0.8	11.77	0.23	Dry	0	
	1330	449	27	77	27	27	0	28	2.4	2,440	14.1	0.07			13.25/14.1	0.07	12.25/12.87	0.3	11.75	0.15	Dry	0	
9/25/2008	1200	746	27	69	27	27	0	28	2.4	2,440	12.8	0.02			13.12/14.05	0.05	12.1/12.82	0.2	11.47	0.05	Dry	0	
	1500	692	27	72	27	27	0	28	2.4	2,440	12.76	0.02			13.1/13.99	0.05	12.1/12.77	0.22	11.45	0.04	Dry	0	
9/26/2008	700	694	27	59	27	27	0	28	2.4	2,440	12.75	0.01			13.1/14.0	0.05	12.1/12.77	0.25	11.45	0.03	Dry	0	
	1130																						System down
	1230	436	27.25	76	33	33	0	28	2.4		12.75	0.01			13.1/14.03	0.06	12.05/12.75	0.26	11.45	0.05	Dry	0	Carbon Change out on vapor side
	1330	408	27	74	33	33	0	28	2.4	2,440	12.74	0.01			13.1/14.0	0.05	12.05/12.73	0.25	11.45	0.05	Dry	0	Power Meter = 133 KWH
	1430	416	27	75	33	33	0	28	2.4	2,440	12.75	0.01			13.1/14.01	0.05	12.05/12.75	0.26	11.45	0.05	Dry	0	
9/29/2008	1300	1,270	27	68	33	33	0	28	2.4	2,440													
	1400	1,294	27	68	33	33	0	28	2.4	2,440													
9/30/2008	1300	1,019	27.5	72	33	33	0	27.5	2.4	2,440	12.85	0.01			13.1/14.05	0.05	11.9/12.63	0.26	11.45	0	Dry	0	
	1500	670	26	73	33	33	0	27.5	2.4	2,440	12.83	0.02			13.1/14.0	0.1	11.90/12.6	0.3	11.35	0	Dry	0	
10/1/2008	1330	270	27	71	33	33	0	27.5	2.4	2,440	12.76	0.02			13.1/14.1	0.1	11.81/12.54	0.26	11.3	0	Dry	0	
	1430	324	27	71	33	33	0	25	2.4	2,440	12.75	0.02			13.1/14.0	0.1	11.82/12.56	0.26	11.3	0	Dry	0	
10/2/2008	1500	578	22.5	74	33	33	0	24	2.4	2,440	12.79	0.08			13/14	0.26	11.9/12.6	1.4	11.5	0	Dry	0	
10/3/2008	930	371	21	70	28	33	5	24	2.4	2,440													Carbon Change out on vapor side
	1230	489	21	73	23	33	10	24	2.4	2,440	12.77	0.07			12.95/13.95	0.26	11.94/12.7	1.2	11.44	0	Dry	0	
10/6/2008	1430	505	21	75	35	45	10	23.5	2.4	2,440	12.79	0.08			13.1/14.2	0.28	11.66/12.32	1.4	11.4	0	Dry	0	

Table 2

September - October 2008 MPE Pilot Test
Operational Data

3820 Manila
Oakland, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	CONDESER TEMPERATURE (^{0}F)	WELL FIELD VAPOR FLOW RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM (BLOWER) EFFLUENT (Psi)	SYSTEM TOTALIZER READING (gallons)	OBSEVATION WELLS												COMMENTS
											DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	DTW (feet)	Vacuum (In of H_20)	
10/7/2008	1430	244	21	78	35	45	10	23.5	2.4	2,440													
10/8/2008	1630	195	21	78	35	45	10	23.5	2.4	2,440													
10/9/2008	900	194	20.5	63	36	46	10	23.5	2.4	2,440	12.65	0.06			12.95/14	0.21	11.6/12.2	1.3	11.29	0	Dry	0	
	1000	197	20.5	63	36	46	10	23.5	2.4	2,490	12.65	0.06			12.95/14	0.21	11.6/12.2	1.3	11.29	0	Dry	0	
10/10/2008	1330	224	20.5	67	34	44	10	23.5	2.4	2,490													
																							begin extraction from B-10 and SOMA-4
10/13/2008	830	1,302	22	64	34	34	0	25	2.4	2,490													System down 0830-1000
																							Carbon Change out on vapor side
																							Power Meter = 174 KWH
											B-8		SOMA-5		SOMA-4		SOMA-2		B-9		B-10		5 gallon of FP from B-10, B-10 casing
	1000																						vac. = 2.0" Hg, SOMA-4 casing vac. =
	1100	1,117	22	71	35	35	0	25	2.4	2,490		0.15						0.94		0.6			7.5" Hg
10/14/2008	1700	1,140	22	71	34	34	0	25	2.4	3,178													
																							extraction from only B-10, SOMA-4
10/15/2008	1200	453	25	73	17	17	0	26.5	2.4	3,378													extraction stopped
																							pause to change polishing drum
	1300																						restart with B-10 @ 20" H20 and
	1400	619	22	81	30	30	0	25	2.4	3,568													SOMA-4 @ 8" Hg
10/16/2008	1100	1,084	22	73	30	30	0	25	2.4	3,568	13.35	0.17					11.85/12.6	0.86	11.4	0.58			
	1200	995	22	73	30	30	0	25	2.4	3,842	13.35	0.16					11.85/12.6	0.8	11.4	0.66			
																							begin extraction from SOMA-2 @ 20" H2O, SOMA-4@ 20" H2O, B-10 @ 20"
	1400	1,040	23.5	79	24	24	0	25.75	2.4	3,842			25	0.1					11.38	0.4			H2O, B-8 @ 20" H2O
10/17/2008	1430	1,393	23.5	80	24	24	0	25.75	2.4	3,842													
10/20/2008	930	899	26.5	60	16	16	0	27	2.4	3,894			25.15	0					11.27	0.13			
																							casing vacuum lowered : SOMA -2 =
	1030	690	26.5	62	16	16	0	27	2.4	3,894			25.15	0					11.27	0.13			SOMA -4 = B-10 = B-8 = 5" H2O
10/21/2008	930	706	26	62	15	15	0	27	2.4	3,894			25.06	0					11.22	0.16			
	1030	552	26	63	15	15	0	27	2.4	3,894			25.06	0					11.22	0.16			
	1130	367	24	67	30	30	0	25.5	2.4	3,894			25.09	0					11.24	0.15			
10/22/2008	1030	251	24	71	34	34	0	25.5	2.4	3,894			25.1	0.02					11.18	0.14			
	1130	254	24	74	30	30	0	25.5	2.4	3,904			25.08	0.01					11.18	0.05			
10/23/2008	930	239	24	67	30	30	0	25.5	2.4	3,904			25.1	0.01					11.17	0.03			
	1030	229	24	70	29	29	0	25.5	2.4	3,904			25.1	0.01					11.17	0.03			
	1130	225	24	73	29	29	0	25.5	2.4	3,904			25.1	0.01					11.17	0.03			
10/24/2008	1100	262	24	71	29	29	0	25.5	2.4	3,904			25.18						11.17	0.05			
	1200	224	24	71	29	29	0	25.5	2.4	3,904			25.16						11.17	0.05			5 gal FP removed from AWS
	1300	225	24	75	29	29	0	25.5	2.4	3,904	11.92/11.93		25.08		12.9/13.05		11.3/11.32		11.17	0.05	11.14		End Pilot Test
	1400										12.35		25.09		13.09/13.20		11.42		11.15		11.33		

Final Totalizer readings = 3,904 gallons: SOMA-4 = 1,010 gallons, SOMA-2 = 302 gallons, B-8 = 1,128 gallons, B-10 = 1,464 gallons

Total time of test = 69,060 minutes = 1,151 hours = 48 days : SOMA-4= 11,520 minutes = 192 hours = 8 days, SOMA-2 = 8,310 minutes = 138.5 hours = 5.8 days, B-8 = 9,510 minutes = 158.5 hours = 6.6 days, B-10 = 39,720 minutes = 662 hours = 27.6 days

Notes

PID	photoionization detector calibrated to hexane	scfm	standard cubic feet per minute	FP	free product
ppmv	parts per million vapor	Psi	pounds per square inch	AWS	air/water separator
In of Hg	inches of mercury	DTW	depth to groundwater from top of well casing		
In of H_20	inches of water	*9999/9999*	denotes depth to free product layer over groundwater		
^{0}F	degrees Fahrenheit				

Table 3

September 2008 MPE Pilot Test
Extraction Data and VOC Mass Removal Rate : SOMA-4

3820 Manila
Oakland, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as TPHss	mole %	lb VOC mass removal as TPHss	lbs/min	lbs/day
SOMA-4	**START**	**9/2/2008**	1100	0									
			1200	60	60	27	1,620	4.2744	326	0.0003	0.2004	0.0033	5
			1300	60	120	27	1,620	4.2744	562	0.0006	0.3457	0.0058	8
			1400	60	180	27	1,620	4.2744	1,140	0.0011	0.7014	0.0117	17
			1500	60	240	27	1,620	4.2744	1,302	0.0013	0.8016	0.0134	19
		9/3/2008	930	1110	1,350	27	29,970	79.0765	814	0.0008	9.2685	0.0084	12
			1030	60	1,410	27	1,620	4.2744	739	0.0007	0.4549	0.0076	11
			1530	300	1,710	27	8,100	21.3720	655	0.0007	2.0170	0.0067	10
			1630	60	1,770	27	1,620	4.2744	575	0.0006	0.3537	0.0059	8
		9/4/2008	830	960	2,730	27	25,920	68.3905	491	0.0005	4.8336	0.0050	7
			930	60	2,790	27	1,620	4.2744	489	0.0005	0.3012	0.0050	7
			1530	360	3,150	27	9,720	25.6464	441	0.0004	1.6268	0.0045	7
			1630	60	3,210	27	1,620	4.2744	399	0.0004	0.2455	0.0041	6
		9/5/2008	1000	1050	4,260	27	28,350	74.8021	749	0.0007	8.0661	0.0077	11
			1400	240	4,500	27	6,480	17.0976	877	0.0009	2.1603	0.0090	13
		9/9/2008	1300	5700	10,200	27	153,900	406.0686	557	0.0006	32.5550	0.0057	8
			1400	60	10,260	27	1,620	4.2744	547	0.0005	0.3368	0.0056	8
	STOP	**9/10/2008**	1100	1260	11,520	27	34,020	89.7625	580	0.0006	7.4910	0.0059	9
	TOTAL				**11,520**		**311,040**	**821**			**71.76**	**0.0062**	**8.97**
	MEDIAN					**27**			**575**	**0.0006**			

Notes

Q	volumetric flow rate
SCFM	standard cubic feet per minute
ft^3	cubic feet per minute
VOC	volatile organic compounds
PID	photo-ionization detector
ppmv	parts per million vapor

DERIVATION OF MASS REMOVAL RATE

ppmv as TPHss/1,000,000 = mole %
ft3 of extracted air/(379 ft3 air/lb-mole air) = moles of extracted air
(moles of extracted air)(mole %)(144 lb/lb-mole TPHss) = lbs of VOC removed as TPHss
(lbs of VOC mass removed as TPHss)(elapsed time) = lbs/min of VOC removed as TPHss
(lbs/min of VOC removed as TPHss)(60 min/1 hour)(24 hours/1 day) = lbs/day of VOC removed as TPHss

Table 4

September 2008 MPE Pilot Test
Extraction Data and VOC Mass Removal Rate : SOMA-2

3820 Manila
Oakland, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as TPHss	mole %	lb VOC mass removal as TPHss	lbs/min	lbs/day
SOMA-2	**START**	**9/10/2008**	1300	0									
			1400	60	60	27	1,620	4.2744	703	0.0007	0.4329	0.0072	10
		9/11/2008	1000	1200	1,260	27	32,400	85.4881	777	0.0008	9.5591	0.0080	11
			1300	180	1,440	27	4,860	12.8232	733	0.0007	1.3527	0.0075	11
		9/12/2008	1030	1290	2,730	27	34,830	91.8997	700	0.0007	9.2635	0.0072	10
			1130	60	2,790	27	1,620	4.2744	651	0.0007	0.4008	0.0067	10
		9/15/2008	1000	4230	7,020	27	114,210	301.3456	581	0.0006	25.2188	0.0060	9
	pause		1400	240	7,260	27	6,480	17.0976	646	0.0006	1.5912	0.0066	10
	restart		1530	0	7,260								
			1600	30	7,290	27	810	2.1372	599	0.0006	0.1844	0.0061	9
	STOP	**9/16/2008**	900	1020	8,310	27	27,540	72.6649	508	0.0005	5.3146	0.0052	8
	TOTAL				**8,310**		**224,370**	**592**			**53.32**	**0.0064**	**9.24**
	MEDIAN					**27**			**651**	**0.0007**			

Notes

Q	volumetric flow rate
SCFM	standard cubic feet per minute
ft^3	cubic feet per minute
VOC	volatile organic compounds
PID	photo-ionization detector
ppmv	parts per million vapor

DERIVATION OF MASS REMOVAL RATE

ppmv as TPHss/1,000,000 = mole %
ft3 of extracted air/(379 ft3 air/lb-mole air) = moles of extracted air
(moles of extracted air)(mole %)(144 lb/lb-mole TPHss) = lbs of VOC removed as TPHss
(lbs of VOC mass removed as TPHss)(elapsed time) = lbs/min of VOC removed as TPHss
(lbs/min of VOC removed as TPHss)(60 min/1 hour)(24 hours/1 day) = lbs/day of VOC removed as TPHss

Table 5

September 2008 MPE Pilot Test
Extraction Data and VOC Mass Removal Rate : B-8

3820 Manila
Oakland, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as TPHss	mole %	lb VOC mass removal as TPHss	lbs/min	lbs/day
B-8	**START**	**9/16/2008**	1030	0									
			1130	60	60	27	1,620	4.2744	415	0.0004	0.2555	0.0043	6
		9/17/2008	900	1290	1,350	27	34,830	91.8997	814	0.0008	10.7715	0.0084	12
			1100	120	1,470	27	3,240	8.5488	814	0.0008	1.0020	0.0084	12
	pause		1930	510	1,980	27	13,770	36.3325	814	0.0008	4.2587	0.0084	12
		9/18/2008	0800	0	1,980								
	restart		1230	0	1,980								
			1330	60	2,040	27	1,620	4.2744	418	0.0004	0.2572	0.0043	6
	pause	**9/19/2008**	1000	1230	3,270	27	33,210	87.6253	309	0.0003	3.9028	0.0032	5
			1330	60	3,330	27	1,620	4.2744	633	0.0006	0.3898	0.0065	9
			1430	60	3,390	27	1,620	4.2744	887	0.0009	0.5461	0.0091	13
		9/22/2008	1000	4050	7,440	27	109,350	288.5224	1,253	0.0013	52.0790	0.0129	19
	STOP		1100	60	7,500	27	1,620	4.2744	1,172	0.0012	0.7214	0.0120	17
		9/23/2008	1500	960	8,460	27	25,920	68.3905	1,140	0.0011	11.2224	0.0117	17
			1600	60	8,520	27	1,620	4.2744	1,078	0.0011	0.6633	0.0111	16
		9/24/2008	930	990	9,510	27	26,730	70.5277	1,589	0.0016	16.1379	0.0163	23
	TOTAL				**9,510**		**202,500**	**534**			**102.21**	**0.0107**	**15.48**
	MEDIAN					**27**			**814**	**0.0008**			

Notes

Q	volumetric flow rate
SCFM	standard cubic feet per minute
ft^3	cubic feet per minute
VOC	volatile organic compounds
PID	photo-ionization detector
ppmv	parts per million vapor

DERIVATION OF MASS REMOVAL RATE

ppmv as TPHss/1,000,000 = mole %
ft3 of extracted air/(379 ft3 air/lb-mole air) = moles of extracted air
(moles of extracted air)(mole %)(144 lb/lb-mole TPHss) = lbs of VOC removed as TPHss
(lbs of VOC mass removed as TPHss)(elapsed time) = lbs/min of VOC removed as TPHss
(lbs/min of VOC removed as TPHss)(60 min/1 hour)(24 hours/1 day) = lbs/day of VOC removed as TPHss

Table 6

September - October 2008 MPE Pilot Test
Extraction Data and VOC Mass Removal Rate : B-10 & combined wells

3820 Manila
Oakland, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as TPHss	mole %	lb VOC mass removal as TPHss	lbs/min	lbs/day
B-10	**START**	**9/24/2008**	1130	0	0								
	STEADY-STATE		1230	60	60	27	1,620	4.2744	885	0.0009	0.5446	0.0091	13
			1330	60	120	27	1,620	4.2744	449	0.0004	0.2766	0.0046	7
		9/25/2008	1200	1350	1,470	27	36,450	96.1741	746	0.0007	10.3256	0.0076	11
			1500	180	1,650	27	4,860	12.8232	692	0.0007	1.2776	0.0071	10
	pause	**9/26/2008**	700	960	2,610	27	25,920	68.3905	694	0.0007	6.8377	0.0071	10
	restart		1130	0	2,610								
			1230	60	2,670	33	1,958	5.1675	436	0.0004	0.3246	0.0054	8
			1330	60	2,730	33	1,958	5.1675	408	0.0004	0.3039	0.0051	7
			1430	60	2,790	33	1,958	5.1675	416	0.0004	0.3099	0.0052	7
		9/29/2008	1300	1350	4,140	33	44,271	116.8109	1,270	0.0013	21.3585	0.0158	23
			1400	60	4,200	33	1,968	5.1916	1,294	0.0013	0.9675	0.0161	23
		9/30/2008	1300	1380	5,580	33	45,045	118.8526	1,019	0.0010	17.4412	0.0126	18
			1500	120	5,700	33	3,917	10.3350	670	0.0007	0.9972	0.0083	12
		10/1/2008	1330	1350	7,050	33	44,066	116.2689	270	0.0003	4.5244	0.0034	5
			1430	60	7,110	33	1,958	5.1675	324	0.0003	0.2411	0.0040	6
		10/2/2008	1500	1470	8,580	33	47,806	126.1376	578	0.0006	10.4970	0.0071	10
	pause	**10/3/2008**	930	1110	9,690	33	36,572	96.4965	371	0.0004	5.1575	0.0046	7
	restart		1130	0	9,690								
			1230	60	9,750	33	1,977	5.2160	489	0.0005	0.3674	0.0061	9
		10/6/2008	1430	4440	14,190	45	200,612	529.3184	505	0.0005	38.4654	0.0087	12
		10/7/2008	1430	1230	15,420	45	55,474	146.3687	244	0.0002	5.1467	0.0042	6
		10/8/2008	1630	1560	16,980	45	70,357	185.6383	195	0.0002	5.2220	0.0033	5
		10/9/2008	900	990	17,970	46	45,103	119.0050	194	0.0002	3.3197	0.0034	5
			1000	60	18,030	46	2,734	7.2124	197	0.0002	0.2047	0.0034	5
		10/10/2008	1330	1650	19,680	44	72,992	192.5914	224	0.0002	6.2032	0.0038	5
B-10/SOMA-4		**10/13/2008**	830	4020	23,700	34	135,316	357.0350	1,302	0.0013	66.9565	0.0167	24
	pause			0	23,700								
	restart		1000	0	23,700								
			1100	60	23,760	35	2,084	5.4982	1,117	0.0011	0.8842	0.0147	21
		10/14/2008	1700	1920	25,680	34	66,062	174.3049	1,140	0.0011	28.6022	0.0149	21
B-10		**10/15/2008**	1200	1140	26,820	17	19,612	51.7468	453	0.0005	3.3771	0.0030	4
	pause			0	26,820								
B-10/SOMA-4	**restart**		1300	0	26,820								
			1400	60	26,880	30	1,781	4.6999	619	0.0006	0.4187	0.0070	10
		10/16/2008	1100	1260	28,140	30	37,406	98.6977	1,084	0.0011	15.3997	0.0122	18
			1200	60	28,200	30	1,781	4.6999	995	0.0010	0.6733	0.0112	16
B-10/SOMA-4/ SOMA-2/B-8			1400	120	28,320	24	2,893	7.6329	1,040	0.0010	1.1430	0.0095	14
		10/17/2008	1430	1410	29,730	24	33,991	89.6867	1,393	0.0014	17.9862	0.0128	18
		10/20/2008	930	4020	33,750	16	62,320	164.4336	899	0.0009	21.2968	0.0053	8
			1030	60	33,810	16	930	2.4542	690	0.0007	0.2439	0.0041	6
		10/21/2008	930	1380	35,190	15	21,353	56.3415	706	0.0007	5.7294	0.0042	6
			1030	60	35,250	15	928	2.4496	552	0.0006	0.1946	0.0032	5
			1130	60	35,310	30	1,798	4.7437	367	0.0004	0.2506	0.0042	6
		10/22/2008	1030	1380	36,690	34	47,482	125.2817	251	0.0003	4.5227	0.0033	5
			1130	60	36,750	30	1,788	4.7173	254	0.0003	0.1725	0.0029	4
		10/23/2008	930	1320	38,070	30	39,406	103.9726	239	0.0002	3.5828	0.0027	4
			1030	60	38,130	29	1,727	4.5573	229	0.0002	0.1501	0.0025	4
			1130	60	38,190	29	1,727	4.5573	225	0.0002	0.1474	0.0025	4
		10/24/2008	1100	1410	39,600	29	40,590	107.0968	262	0.0003	4.0395	0.0029	4
			1200	60	39,660	29	1,727	4.5573	224	0.0002	0.1472	0.0025	4
			1300	60	39,720	29	1,724	4.5489	225	0.0002	0.1472	0.0025	4
	TOTAL				**39,720**		**630,368**	**1663**			**316.38**	**0.0080**	**11.47**
	MEDIAN					**30**			**497**	**0.0005**			

Notes

Q	volumetric flow rate
SCFM	standard cubic feet per minute
ft^3	cubic feet per minute
VOC	volatile organic compounds
PID	photo-ionization detector
ppmv	parts per million vapor

DERIVATION OF MASS REMOVAL RATE

ppmv as TPHss/1,000,000 = mole %
ft3 of extracted air/(379 ft3 air/lb-mole air) = moles of extracted air
(moles of extracted air)(mole %)(144 lb/lb-mole TPHss) = lbs of VOC removed as TPHss
(lbs of VOC mass removed as TPHss)(elapsed time) = lbs/min of VOC removed as TPHss
(lbs/min of VOC removed as TPHss)(60 min/1 hour)(24 hours/1 day) = lbs/day of VOC removed as TPHss

Table 7

Dissolved-Phase Hydrocarbon Concentrations
Pre- and Post-MPE Pilot Test

3820 Manila
Oakland, California

Monitoring Well	Date	MPE Event	TPH-g (µg/L)	TPH-ss (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl benzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)
SOMA-4	8/5/2008	Pre- Pilot Test	2,600,000	1,800,000	<20	52	<20	87	50	<20	<20	3,500	31
		Post-Pilot Test	-	-	-	-	-	-	-	-	-	-	-
SOMA-2	8/5/2008	Pre- Pilot Test	620,000	430,000	<130	<130	<130	<130	<130	370	550	13,000	<130
		Post-Pilot Test	-	-	-	-	-	-	-	-	-	-	-
B-10	8/5/2008	Pre- Pilot Test	210,000	140,000	<130	<130	<130	<130	<130	10,000	4,200	15,000	<130
		Post-Pilot Test	-	-	-	-	-	-	-	-	-	-	-
B-8	8/5/2008	Pre- Pilot Test	58,000	41,000	0.9	0.7	<0.5	0.6	<0.5	<0.5	<0.5	64	<0.5
		Post-Pilot Test	-	-	-	-	-	-	-	-	-	-	-

Notes:
TPH-g = Total petroleum hydrocarbons as gasoline
TPH-ss = Total petroleum hydrocarbons as stoddard solvent
MtBE = methyl-tertiary-butyl ether
PCE = Tetrachloroethene
TCE = Trichloroethene
Cis-1,2-DCE = Cis-1,2- dichloroethene
Trans-1,2-DCE = Trans-1,2- dichloroethene
ug/l - Micrograms per liter
< = below laboratory reporting limit
nd = not detected

Table 8

September 2008 MPE Pilot Test
Mass Removal

3820 Manila
Oakland, California

Extraction Well	Vapor Sample ID	Collection Date/Time	USEPA TO-3 MODIFIED	USEPA TO-15 MODIFIED						Q (CFM)	Mass Removal Rate (lbs/day) (TPHss / Chlorinated VOCs)	Total Test time (minutes/days)	Total Mass Removed (lbs) (TPHss / Chlorinated VOCs)
			TPH-ss (ug/m^3)	Benzene (ug/m^3)	PCE (ug/m^3)	TCE (ug/m^3)	1,1-DCA (ug/m^3)	cis 1,2-DCE (ug/m^3)	trans 1,2-DCE (ug/m^3)	Vinyl Chloride (ug/m^3)				
SOMA-4	Effluent	9/3/2008 @ 1000	6,500(b)	nd	nd	nd	nd	nd	nd	nd	27	21.5 / 0.2 (f)	11,520 / 8	290.7 / 1.7 (f)
SOMA-4	Influent	9/3/2008 @ 1010	15,000,000 (g)	790 (d)	nd	nd	nd	88,000 (g)	1,600 (d)	420 (d)				
		REMOVAL EFFICIENCIES	99.9567%	99.4304%	na	na	na	99.9968%	99.8250%	99.7143%				
SOMA-2	Effluent	9/11/2008 @ 1210	160,000 (c)	nd	nd	nd	nd	74,000 (e)	940 (a)	410 (a)	27	26.4 / 2.7 (f)	8,310 /5.8	196.7 / 15.9 (f)
SOMA-2	Influent		14,000,000 (g)	470 (d)	500,000 (g)	190,000 (g)	nd	440,000 (g)	2,800 (d)	nd				
		REMOVAL EFFICIENCIES	98.8571%	98.2979%	99.9966%	99.9932%	na	99.9832%	66.4286%	na				
B-8	Effluent	9/17/2008 @1015	2420 (b)	nd	9.2 (a)	nd	nd	nd	nd	nd	27	12.1 / 0.02 (f)	9,510 / 6.6	102.3 / 0.1 (f)
B-8	Influent	9/17/2008 @ 1030	6,400,000 (g)	nd	6900(g)	nd	nd	nd	nd	nd				
		REMOVAL EFFICIENCIES	99.9622%	na	99.8667%	na	na	na	na	na				
B-10, B-8, SOMA-4, SOMA-2	Effluent	10/20/08 @ 945	4,000 (a)	nd	nd	nd	nd	nd	nd	nd	30	9.3 / 0.3 (f)	39,720 / 27.6	170.9 / 8.1 (f)
	Influent	10/20/08 @1000	2,300,000 (h)	nd	87,000 (e)	6,800 (e)	nd	15,000 (e)	nd	nd				
		REMOVAL EFFICIENCIES	99.8261%	na	99.9922%	99.9206%	na	99.9733%	na	na				

Notes

CFM	cubic feet per minute
lbs/day	pounds per day
ug/m^3	micrograms per cubic meter
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
TAME	methyl tertiary amyl ether
TBA	tertiary butyl alcohol
nd	not detected at or above detection limit
(a)	dilution factor 5
(b)	dilution factor 10
(c)	dilution factor 100
(d)	dilution factor 50
(e)	dilution factor 500
(f)	average value
(g)	dilution factor 2000
(h)	dilution factor 5000

DERIVATION OF MASS REMOVAL RATE

(**ug/m^3**) [(1mg/1000ug) ($1m^3$/1000 L)] = **mg/L**
(**mg/L**) (28.32 L/1 ft^3) ([Q} ft^3/min) = **mg/min**
(**mg/min**)(1g/1000mg)(1kg/1000g)(60min/1hr)(24hr/1day) = **kg/day**
(**kg/day**)(2.2lbs/1kg) = **lbs/day**

DERIVATION OF TOTAL MASS REMOVED

Total time of test = **days** (Tables 2 - 6)
(mass removal rate [**lbs/day**])(total time of test [**days**]) = Total Removed (**lbs**)

DERIVATION OF REMOVAL EFFICIENCIES
Influent sample concentration : STACK sample concentration

APPENDIX A

BAAQMD and EBMUD Permits

BAY AREA AIR QUALITY MANAGEMENT DISTRICT SINCE 1955

PERMIT TO OPERATE

PLANT No. **19199**

SOURCE No. **1**

Soma Environmental Eng, Inc

3820 Manila Avenue, Oakland, CA 94609

IS HEREBY GRANTED A PERMIT TO OPERATE THE FOLLOWING EQUIPMENT

Soil Vapor Extraction System, 250 scfm vacuum blower

abated by

A-1 Adsorption, Activated Carbon/Charcoal
SVE Abatement System, Activated Carbon, Two (200 lb mininmum) vessels in series

Subject to attached condition no. 24119.[1]

JACK P. BROADBENT
EXECUTIVE OFFICER/APCO

Permit Issue Date September 9, 2008
Reported Start Up Date September 9, 2008
Permit Expiration Date **September 9, 2009**

By Scott Lutz

Right of Entry

The Air Pollution Control Officer of the Bay Area Air Quality Management District, the Chairman of the California Air Resources Board, the Regional Administrator of the Environmental Protection Agency, and/or their designees, upon presentation of credentials, shall be granted the right of entry to any premises on which an air pollution source is located for the purposes of : i) the inspection of the source ii) the sampling of materials used at the source iii) the conduction of an emissions source test iv) the inspection of any records required by District rule or permit condition.

Permit Expiration

In accordance with Regulation 3-408, a Permit to Operate is valid for 12 months from the date of issuance or other time period as approved by the APCO. Use of this Permit to Operate is authorized by the District until the later of: the Permit Expiration Date or the Permit Renewal Date. Permit to operate fees will be prorated as described in Regulation 3-402 when the permit is renewed.

This permit does not authorize violation of the rules and regulations of the BAAQMD or the Health and Safety Code of the State of California. District regulations may be viewed on line at www.baaqmd.gov. This permit is not transferable to another person without approval from the District. It is the responsibiliy of the permit holder to have knowledge of and be in compliance with all District Rules and Regulations.

1. Compliance with conditions contained in this permit does not mean that the permit holder is currently in compliance with District Rules and Regulations.

Permit Holder Must Sign Here _____

EBMUD

PERMIT NUMBER **50638151**

SPECIAL DISCHARGE PERMIT
Terms and Conditions

GENERAL CONDITIONS

I. SOMA Environmental Engineering, Inc. shall comply with all items of the attached *Special Discharge Permit Standard Terms and Conditions.*

II. SOMA Environmental Engineering, Inc. shall discharge Special Discharge Wastewater only from the specific source described in the *Special Discharge Permit Terms & Conditions, Criteria and Fees* form. The discharge of all other wastewater must comply with EBMUD Ordinance No. 311A-03.

III. SOMA Environmental Engineering, Inc. shall immediately cease discharge of treated or managed Special Discharge Wastewater if not in compliance with any of the terms and conditions of this Special Discharge Permit.

IV. This Special Discharge Permit is considered a waiver of EBMUD Ordinance No. 311A-03, prohibiting:
- o Discharge of wastewater directly into a manhole or other opening into the community sewer system, contingent upon approval from the City of Oakland, Public Works Department.
- o Discharge of stormwater, drainage water, and groundwater to the community sewer, contingent upon compliance with Permit terms and conditions regarding those discharges.

V. SOMA Environmental Engineering, Inc. shall not discharge Special Discharge Wastewater authorized by this Special Discharge Permit after the expiration date.

COMPLIANCE REQUIREMENTS

I. SOMA Environmental Engineering, Inc. shall implement sedimentation controls on all Special Discharge Wastewater prior to discharge to the side sewer. Sediment control shall be sufficient to achieve compliance with the limits established in this Special Discharge Permit.

II. SOMA Environmental Engineering, Inc. shall post a sign in the work area stating "All Wastewater Discharge must comply with the Special Discharge Permit."

III. SOMA Environmental Engineering, Inc. shall not discharge to the sanitary sewer during a rain event or within 24 hours after a rain event, which is defined as any precipitation greater than a drizzle.

IV. SOMA Environmental Engineering, Inc. shall not discharge wastewater at a flow rate greater than 100 gallons per minute.

V. SOMA Environmental Engineering, Inc. is responsible for obtaining local permits for use of manholes or cleanouts for discharge.

VI. SOMA Environmental Engineering, Inc. shall obtain approval if required from the City of Oakland, Public Works Department for the side sewer discharge location through which the special discharge wastewater is to be discharged, and shall comply with the terms and conditions set by this public agency owning the sanitary sewer system at the subject location.

REPORTING REQUIREMENTS

All discharge shall be through a totalizing flow meter and logged in with date, time, and volume of discharge and signed by Site Manager. The log shall be submitted electronically every two months to csoohoo@ebmud.com. The **final report documenting the total discharge to sewer is due immediately after the final discharge.**

WASTEWATER DISCHARGE LIMITS

SOMA Environmental Engineering, Inc. shall not discharge Special Discharge Wastewater into the community sewer if the strength of the wastewater exceeds EBMUD Ordinance No. 311A-03 Wastewater Discharge Limits.

INSPECTIONS

The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this Special Discharge Permit. SOMA Environmental Engineering, Inc. shall grant District personnel access to the facility and discharge logs to conduct inspections and collect Special Discharge Wastewater samples.

EBMUD

PERMIT NUMBER **50638151**

SPECIAL DISCHARGE PERMIT
Terms and Conditions

ENFORCEMENT AND PENALTIES

Failure to comply with the terms and conditions of this Special Discharge Permit and *Special Discharge Permit Standard Terms and Conditions* may result in enforcement actions, including violation follow-up fees, civil enforcement penalties, and administrative fines of up to $5,000 per day.

RATES AND CHARGES

This Special Discharge Permit may be amended to include changes to rates and charges that may be established by the District during the term of this Special Discharge Permit. The discharge shall be charged at $0.02 per gallon for the entire volume of discharge and the permit fee is $900.

AUTHORIZATION

Special Discharger SOMA Environmental Engineering, Inc. is hereby authorized to discharge Special Discharge Wastewater to the community sewer, subject to compliance with EBMUD Ordinance No. 311A-03, Special Discharge Permit Terms and Conditions, and billing conditions.

Effective: September 15, 2008

Expiration: March 15, 2009

David R Williams
Director, Wastewater Department

9/18/08
Date

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955

September 9, 2008

Soma Environmental Eng, Inc
6620 Owens Dr, Ste A
Pleasanton, CA

Attention: Mansour Sepehr

Application Number: 18538
Plant Number: 19199
Equipment Location:
3820 Manila Avenue
Oakland, CA 94609

Dear Applicant:

Enclosed is your Permit to Operate the following:

S-1 Soil Vapor Extraction System, 250 scfm vacuum blower
abated by
A-1 Adsorption, Activated Carbon/Charcoal
SVE Abatement System, Activated Carbon, Two (200 lb mininmum) vessels in series

The equipment described above is subject to condition no. 24119.

In accordance with Regulation 2-1-411.2, you must sign your Permit to Operate. All Permits should be posted in a clearly visible and accessible place on or near the equipment to be operated, or kept available for inspection at any time. Operation of this equipment in violation of District Regulations or any permit conditions is subject to penalty action.

In the absence of specific permit conditions to the contrary, the throughputs, fuel and material consumption, capacities, and hours of operation described in your permit application will be considered maximum allowable limits. A new permit will be required before any increase in these parameters, or change in raw material handled may be made.

Please include your permit number with any correspondence with the District. If you have any questions on this matter please call Flora W Chan, Air Quality Engineer I at (415) 749-4630.

Very truly yours,

Jack P. Broadbent
Executive Officer/APCO

by
Engineering Division

FWC
Enclosure

EAST BAY
MUNICIPAL UTILITY DISTRICT

DAVID R. WILLIAMS
DIRECTOR OF WASTEWATER

September 15, 2008

CERTIFIED MAIL
(Return Receipt Requested)
Certified Mail No. 7005 2570 0000 6629 8139

Mr. Mansour Sepehr
SOMA Environmental Engineering, Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94558

Dear Mr. Sepehr:

Re: Wastewater Discharge Permit No. 5063815 1

Enclosed is the Special Discharge Permit (Permit) for your facility, effective September 15, 2008 through March 15, 2009, for your information and records. Please read the Permit terms and conditions and the enclosed *Special Discharge Permit Standard Terms and Conditions*. As a Permit Holder, you are legally responsible for complying with all Permit conditions and requirements.

SOMA Environmental Engineering, Inc. shall email, to the Environmental Services Division, the log of meter/totalizer readings to EBMUD bi-monthly after the project begins. The log is to be signed off by the site/project manager for each day of discharge. Upon completion of the project at 3820 Manila Avenue, Oakland, CA, SOMA Environmental Engineering, Inc. will submit a final report summarizing the total volume discharged to the side sewer.

SOMA Environmental Engineering, Inc. shall report to the Environmental Services Division any changes, permanent or temporary, to the premises or operations that significantly affect the quality or volume of permitted discharge or deviate from the terms and conditions under which the Permit was granted.

If you have any questions regarding this Permit, please contact Cynthia Soohoo of the Environmental Services Division at (510) 287-0290.

Sincerely,

BENNETT K. HORENSTEIN
Manager of Environmental Services

BKH:CLS:cls

W:\NAB\IDS\Permits\Special Discharge\Permits\SOMA Environmental Engineering, Inc. \Permit Cover Letter.doc

EBMUD

PERMIT NUMBER **50638151**

SPECIAL DISCHARGE PERMIT
Terms and Conditions

GENERAL CONDITIONS

I. SOMA Environmental Engineering, Inc. shall comply with all items of the attached *Special Discharge Permit Standard Terms and Conditions.*

II. SOMA Environmental Engineering, Inc. shall discharge Special Discharge Wastewater only from the specific source described in the *Special Discharge Permit Terms & Conditions, Criteria and Fees* form. The discharge of all other wastewater must comply with EBMUD Ordinance No. 311A-03.

III. SOMA Environmental Engineering, Inc. shall immediately cease discharge of treated or managed Special Discharge Wastewater if not in compliance with any of the terms and conditions of this Special Discharge Permit.

IV. This Special Discharge Permit is considered a waiver of EBMUD Ordinance No. 311A-03, prohibiting:
- Discharge of wastewater directly into a manhole or other opening into the community sewer system, contingent upon approval from the City of Oakland, Public Works Department.
- Discharge of stormwater, drainage water, and groundwater to the community sewer, contingent upon compliance with Permit terms and conditions regarding those discharges.

V. SOMA Environmental Engineering, Inc. shall not discharge Special Discharge Wastewater authorized by this Special Discharge Permit after the expiration date.

COMPLIANCE REQUIREMENTS

I. SOMA Environmental Engineering, Inc. shall implement sedimentation controls on all Special Discharge Wastewater prior to discharge to the side sewer. Sediment control shall be sufficient to achieve compliance with the limits established in this Special Discharge Permit.

II. SOMA Environmental Engineering, Inc. shall post a sign in the work area stating "All Wastewater Discharge must comply with the Special Discharge Permit."

III. SOMA Environmental Engineering, Inc. shall not discharge to the sanitary sewer during a rain event or within 24 hours after a rain event, which is defined as any precipitation greater than a drizzle.

IV. SOMA Environmental Engineering, Inc. shall not discharge wastewater at a flow rate greater than 100 gallons per minute.

V. SOMA Environmental Engineering, Inc. is responsible for obtaining local permits for use of manholes or cleanouts for discharge.

VI. SOMA Environmental Engineering, Inc. shall obtain approval if required from the City of Oakland, Public Works Department for the side sewer discharge location through which the special discharge wastewater is to be discharged, and shall comply with the terms and conditions set by this public agency owning the sanitary sewer system at the subject location.

REPORTING REQUIREMENTS

All discharge shall be through a totalizing flow meter and logged in with date, time, and volume of discharge and signed by Site Manager. The log shall be submitted electronically every two months to csoohoo@ebmud.com. The **final report documenting the total discharge to sewer is due immediately after the final discharge.**

WASTEWATER DISCHARGE LIMITS

SOMA Environmental Engineering, Inc. shall not discharge Special Discharge Wastewater into the community sewer if the strength of the wastewater exceeds EBMUD Ordinance No. 311A-03 Wastewater Discharge Limits.

INSPECTIONS

The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this Special Discharge Permit. SOMA Environmental Engineering, Inc. shall grant District personnel access to the facility and discharge logs to conduct inspections and collect Special Discharge Wastewater samples.

EBMUD

SPECIAL DISCHARGE PERMIT
Terms and Conditions

PERMIT NUMBER **50638151**

ENFORCEMENT AND PENALTIES

Failure to comply with the terms and conditions of this Special Discharge Permit and *Special Discharge Permit Standard Terms and Conditions* may result in enforcement actions, including violation follow-up fees, civil enforcement penalties, and administrative fines of up to $5,000 per day.

RATES AND CHARGES

This Special Discharge Permit may be amended to include changes to rates and charges that may be established by the District during the term of this Special Discharge Permit. The discharge shall be charged at $0.02 per gallon for the entire volume of discharge and the permit fee is $900.

AUTHORIZATION

Special Discharger SOMA Environmental Engineering, Inc. is hereby authorized to discharge Special Discharge Wastewater to the community sewer, subject to compliance with EBMUD Ordinance No. 311A-03, Special Discharge Permit Terms and Conditions, and billing conditions.

Effective: September 15, 2008

Expiration: March 15, 2009

David R Williams
Director, Wastewater Department

9/18/08
Date

ALL WASTEWATER DISCHARGED MUST COMPLY WITH THE SPECIAL DISCHARGE PERMIT

SOMA Environmental Engineering, Inc.
Permit # 5063815 1
Effective: 9/15/08 through 3/15/09

PREVENT POLLUTION
Help Us Keep the Bay Clean

IN CASE OF SPILL
Call 510 287-1651

Or 1-866-40-EBMUD during Non-Business Hours
(toll free 1-866-403-2683)

EBMUD

APPENDIX B

MPE Event Field Data Sheets

Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila Ave., Oakland, California
PROJECT #: 2514

MTS MONITORING POINT DATA

DATE	TIME	WELL ID		WELL ID		WELL ID		WELL ID		WELL ID		WELL ID	
		GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)
		9999/9999 denotes free product level over depth to groundwater											
		BEGIN EXTRACTION AT SOMA-4											
9/2/2008	1100	**B-3**		**SOMA-5**		**SOMA-2**		**B-10**		**B-9**		**B-7**	
		29 Ft from SOMA-4		**10 Ft from SOMA-4**		**32 Ft from SOMA-4**		**36 Ft from SOMA-4**		**20 Ft from SOMA-4**		**13 Ft from SOMA-4**	
	1200	10	0	25	0.1	11.02	0.46	11.02	0.05	10.99	0	Dry	0
	1300	10	0	24.97	0.05	11.05/11.35	0.5	11.09/11.25	0.05	10.99	0	Dry	0
	1400	10	0	24.97	0.1	11.1/11.35	0.8	11.1/11.3	0.05	11.01	0	Dry	0
	1500	10	0	24.97	0.1	11.1/11.37	0.8	11.1/11.3	0.05	11.01	0	Dry	0
9/3/2008	930	10.08	0	24.97	0.14	11.26/11.58	0.56	11.3/11.48	0.06	11.2	0	Dry	0
	1030	10.09	0	24.97	0.1	11.26/11.60	0.56	11.33/11.48	0.05	11.2	0	Dry	0
	1530												
	1630	10.03	0	25	0.1	11.3/11.62	0.86	11.33/11.51	0.06	11.2	0	Dry	0
9/4/2008	830	10.08	0	24.97	0.06	11.35/11.68	0.64	11.37/11.55	0.06	11.3	0	Dry	0
	930												
	1530	10.08	0	24.97	0.15	11.36/11.67	0.84	11.37/11.53	0.06	11.3	0	Dry	0
	1630	10.08	0	24.97	0.15	11.36/11.67	0.84	11.37/11.53	0.06	11.3	0	Dry	0
9/5/2008	1000	10.15	0	24.97	0.17	11.44/11./80	0.6	11.45/11.69	0.07	11.39	0	Dry	0
	1400	10.13	0	24.97	0.15	11.42/11.77	0.86	11.42/11.68	0.07	11.39	0	Dry	0
9/10/2008	1100	10.24	0	24.97	0.14	11.52/11.9	0.56	11.42/11.55	0.07	11.45	0.01	Dry	0
		BEGIN EXTRACTION AT SOMA-2											
	1300	**B-3**		**SOMA-5**		**SOMA-4**		**B-10**		**B-9**		**B-7**	
		60 Ft from SOMA-2		**41 Ft from SOMA-2**		**32 Ft from SOMA-2**		**7 Ft from SOMA-2**		**16 Ft from SOMA-2**		**40 Ft from SOMA-2**	
	1400												
9/11/2008	1000	10.15	0	24.97	0.02	13.6/14.0	0.7	12.55/13.93	0.8	12.28	0	Dry	0
	1200	10.15	0	24.97	0.02	13.6/14.0	0.7	12.55/13.93	0.8	12.28	0	Dry	0
9/12/2008	1030	10.2	0	24.97	0.01	13.50/14.0	0.54	12.89/14.25	0.7	12.35	0	Dry	0
	1130	10.2	0	24.97	0	13.5/14.0	0.56	12.89/14.25	0.7	12.34	0	Dry	0

P. O. Box 12072, Pleasanton, CA 94588 (925) 847-0684

Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila Ave., Oakland, California
PROJECT #: 2514

MTS MONITORING POINT DATA

DATE	TIME	WELL ID		WELL ID		WELL ID		WELL ID		WELL ID		WELL ID	
		GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)
9/15/2008	1000	10.3	0	25	0	13.40/14.1	0.5	13.35/14.75	0.5	12.32	0	Dry	0
	1400	10.22	0	25	0	13.35/14.05	0.5	13.42/14.74	0.52	12.32	0	Dry	0
	1600												
9/16/2008	900	10.24	0.02	25	0.5	13.35/14.05	0.54	13.35/14.75	0.54	12.3	0	Dry	0
		BEGIN EXTRACTION AT B-8											
	1030	**B-2**				**SOMA-4**		**B-10**		**B-9**		**B-7**	
		23 Ft from B-8				**42 Ft from B-8**		**45 Ft from B-8**		**28 Ft from B-8**		**32 Ft from B-8**	
	1130	10.77	0			13.55/14.2	0.18	13.45/14.7	0.05	12.32	0	Dry	0
9/17/2008	900	10.95	0			13.78/14.40	0.23	13.35/14.6	0.05	12.12	0	Dry	0
	1100	10.95	0			13.75/14.40	0.2	13.36/14.62	0.05	12.12	0	Dry	0
	1930												
9/18/2008	800												
	1230												
	1330	10.86	0			13.45/14.2	0.2	12.65/13.9	0.05	11.89	0.09	Dry	0
9/19/2008	1000	10.85	0			13.47/14.33	0.2			11.87	0.3	Dry	0
	1230												
	1330	10.85	0			13.35/14.15	0.2	12.0/12.75	0.03	11.77	0.3	Dry	0
	1430	10.85	0			13.40/14.25	0.2	12.1/12.87	0.03	11.79	0.3	Dry	0
9/22/2008	1000	10.87	0			13.55/14.35	0.22	11.82/12.36	0.03	11.6	0.3	Dry	0
	1100	10.87	0			13.55/14.35	0.21	11.82/12.35	0.03	11.6	0.3	Dry	0
9/23/2008	1500	10.95	0			13.5/14.3	0.22	11.75/12.20	0.02	11.6	0.3	Dry	0
	1600	10.95	0			13.5/14.27	0.22	11.75/12.22	0.02	11.6	0.3	Dry	0
9/24/2008	930	10.95	0			13.5/14.3	0.21	11.75/12.22	0.03	11.55	0.3	Dry	0
		BEGIN EXTRACTION AT B-10											
	1130	**B-8**				**SOMA-4**		**SOMA-2**		**B-9**		**B-7**	
		45 Ft from B-10				**36 Ft from B-10**		**7 Ft from B-10**		**22.5 Ft from B-10**		**39 Ft from B-10**	
	1230	14.12	0.12			13.27/14.15	1.5	12.25/12.87	0.8	11.77	0.23	Dry	0

P. O. Box 12072, Pleasanton, CA 94588 (925) 847-0684

Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila Ave., Oakland, California
PROJECT #: 2514

MTS MONITORING POINT DATA

DATE	TIME	WELL ID		WELL ID		WELL ID		WELL ID		WELL ID		WELL ID	
		GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)
	1330	14.1	0.07			13.25/14.1	0.07	12.25/12.87	0.3	11.75	0.15	Dry	0
9/25/2008	1200	12.8	0.02			13.12/14.05	0.05	12.1/12.82	0.2	11.47	0.05	Dry	0
	1500	12.76	0.02			13.1/13.99	0.05	12.1/12.77	0.22	11.45	0.04	Dry	0
9/26/2008	700	12.75	0.01			13.1/14.0	0.05	12.1/12.77	0.25	11.45	0.03	Dry	0
	1130												
	1230	12.75	0.01			13.1/14.03	0.06	12.05/12.75	0.26	11.45	0.05	Dry	0
	1330	12.74	0.01			13.1/14.0	0.05	12.05/12.73	0.25	11.45	0.05	Dry	0
	1430	12.75	0.01			13.1/14.01	0.05	12.05/12.75	0.26	11.45	0.05	Dry	0
9/29/2008	1300												
	1400												
9/30/2008	1300	12.85	0.01			13.1/14.05	0.05	11.9/12.63	0.26	11.45	0	Dry	0
	1500	12.83	0.02			13.1/14.0	0.1	11.90/12.6	0.3	11.35	0	Dry	0
10/1/2008	1330	12.76	0.02			13.1/14.1	0.1	11.81/12.54	0.26	11.3	0	Dry	0
	1430	12.75	0.02			13.1/14.0	0.1	11.82/12.56	0.26	11.3	0	Dry	0
10/2/2008	1500	12.79	0.08			13/14	0.26	11.9/12.6	1.4	11.5	0	Dry	0
10/3/2008	930												
	1230	12.77	0.07			12.95/13.95	0.26	11.94/12.7	1.2	11.44	0	Dry	0
10/6/2008	1430	12.79	0.08			13.1/14.2	0.28	11.66/12.32	1.4	11.4	0	Dry	0
10/7/2008	1430												
10/8/2008	1630												
10/9/2008	900	12.65	0.06			12.95/14	0.21	11.6/12.2	1.3	11.29	0	Dry	0
	1000	12.65	0.06			12.95/14	0.21	11.6/12.2	1.3	11.29	0	Dry	0
10/10/2008	1330	**BEGIN EXTRACTION AT SOMA-4 and B-10**											
		B-8		**SOMA-5**		**SOMA-4**		**SOMA-2**		**B-9**		**B-10**	
10/13/2008	830												

P. O. Box 12072, Pleasanton, CA 94588 (925) 847-0684

Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila Ave., Oakland, California
PROJECT #: 2514

MTS MONITORING POINT DATA

DATE	TIME	WELL ID		WELL ID		WELL ID		WELL ID		WELL ID		WELL ID	
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	1000												
	1100		0.15						0.94		0.6		
10/14/2008	1700												
10/15/2008	1200												
	1300												
	1400												
10/16/2008	1100	13.35	0.17					11.85/12.6	0.86	11.4	0.58		
	1200	13.35	0.16					11.85/12.6	0.8	11.4	0.66		
		BEGIN EXTRACTION AT SOMA-2, SOMA-4, B-8, and B-10											
	1400			25	0.1					11.38	0.4		
10/17/2008	1430												
10/20/2008	930			25.15	0					11.27	0.13		
	1030			25.15	0					11.27	0.13		
10/21/2008	930			25.06	0					11.22	0.16		
	1030			25.06	0					11.22	0.16		
	1130			25.09	0					11.24	0.15		
10/22/2008	1030			25.1	0.02					11.18	0.14		
	1130			25.08	0.01					11.18	0.05		
10/23/2008	930			25.1	0.01					11.17	0.03		
	1030			25.1	0.01					11.17	0.03		
	1130			25.1	0.01					11.17	0.03		

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Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila Ave., Oakland, California
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MTS MONITORING POINT DATA

DATE	TIME	WELL ID		WELL ID		WELL ID		WELL ID		WELL ID		WELL ID	
		GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)
10/24/2008	1100			25.18	0.01					11.17	0.05		
	1200			25.16	0.02					11.17	0.05		
	1300	11.92/11.93		25.08	0.02	12.9/13.05		11.3/11.32		11.17	0.05	11.14	
		END PILOT TEST											
	1400	12.35		25.09		13.09/13.20		11.42		11.15		11.33	

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Golden Gate Remediation Technology

SITE ADDRESS: 3820 Manila ave, Oakland, California
PROJECT #: 2514

MTS OPERATIONAL DATA

DATE	TIME	PUMP TEMPERATURE (F)	CONDENSER TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	CASING VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	PITOT TUBE Δ PRESSURE (IN H20)	PUMP OUTLET (Psi)	TOTAL FLOW RATE (SCFM)	DILUTION FLOW RATE (SCFM)	WELL FLOW RATE (SCFM)	EFFLUENT TEMPERATURE (F)	INFLUENT CONCENTRATION (PPMV)	MID EFFLUENT CONCENTRATION (PPMV)	END EFFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER	POWER USAGE (KWH)
9/2/2008	1100	begin extraction from SOMA-4; 2" diameter well														0	
	1200	170	83	25	10	26.5	0.25	5	27	0	27	70	326	0.0	0.0	0	4
	1300	170	83	25	10	26.5	0.25	5	27	0	27	83	562	0.0	0.0	0	
	1400	170	87	25	10	26.75	0.25	5	27	0	27	87	1,140	0.0	0.0	0	
	1500	170	87	25	10	26.75	0.25	5	27	0	27	87	1,302	0.0	0.0	0	
9/3/2008	930	170	78	25	10	26.5	0.25	5	27	0	27	78	814	0.0	0.0	0	
	1030	170	82	25	10	26.5	0.25	5	27	0	27	82	739	0.0	0.0	0	
	1530	170	87	25	10	26.5	0.25	5	27	0	27	100	655	0.0	0.0	0	
	1630	170	87	25	10	26.5	0.25	5	27	0	27	100	575	0.0	0.0	0	
9/4/2008	830	166	72	25	10	26.5	0.25	5	27	0	27	100	491	0.0	0.0	0	
	930	166	72	25	10	26.5	0.25	5	27	0	27	100	489	0.0	0.0	0	
	1530	170	90	25	10	26.5	0.25	5	27	0	27	100	441	0.0	0.0	0	
	1630	170	89	25	10	26.5	0.25	5	27	0	27	100	399	0.0	0.0	0	
9/5/2008	1000	170	81	25	10	26.5	0.25	5	27	0	27	90	749	0.0	0.0	0	
	1400	170	92	25	10	26.5	0.25	5	27	0	27	100	877	0.0	0.0	0	
9/9/2008	1300	164	72	24.5	10	26	0.25	5	27	0	27	84	557	0.0	0.0	0	
	1400	164	75	24.5	10	26	0.25	5	27	0	27	84	547	0.0	0.0	0	
9/10/2008	1100	170	73	24.5	10	26.5	0.25	5	27	0	27	84	580	0.1	0.0	0	56
	1300	begin extraction from SOMA-2; 2" diameter well															
	1400	166	73	25	10	27.8	0.25	5	27	0	27	84	703	0.1	0.0	0	
9/11/2008	1000	166	67	25	10	27.6	0.25	5	27	0	27	80	777	0.0	0.0	0	
	1300	166	73	25	10	27.8	0.25	5	27	0	27	84	733	0.1	0.0	0	
9/12/2008	1030	164	68	25	10	27.4	0.25	5	27	0	27	78	700	32.6	0	0	
	1130	164	67	25	10	27.6	0.25	5	27	0	27	78	651	37.4	0	0	
9/15/2008	1000	166	68	26	10	27.6	0.25	5	27	0	27	74	581		0	1,010	
	1400	166	73	26	10	27.6	0.25	5	27	0	27	74	646	0.7	0.0	1,010	
		1400-1530 changed 200 lb. polishing drum on vapor treatment side													0		87
	1600	166	69	25	10	27.6	0.25	5	27	0	27	74	599	0.1	0.0	1,119	

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Golden Gate Remediation Technology

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MTS OPERATIONAL DATA

DATE	TIME	PUMP TEMPERATURE (F)	CONDENSER TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	CASING VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	PITOT TUBE Δ PRESSURE (IN H20)	PUMP OUTLET (Psi)	TOTAL FLOW RATE (SCFM)	DILUTION FLOW RATE (SCFM)	WELL FLOW RATE (SCFM)	EFFLUENT TEMPERATURE (F)	INFLUENT CONCENTRATION (PPMV)	MID EFFLUENT CONCENTRATION (PPMV)	END EFFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER	POWER USAGE (KWH)
9/16/2008	900	166	66	26	10	27.4	0.25	5	27	0	27	76	508	1.7	0.0	1,312	
	1030	begin extraction from B-8; 2" diater well					0.25										
	1130	166	71	26	10	27	0.25	5	27	0	27	80	415	0.8	0.0	1,353	
9/17/2008	900	166	68	26	10	27	0.25	5	27	0	27	76	814	0.8	0.0	1,417	
	1100	166	69	26	10	27	0.25	5	27	0	27	80	814	1.1	0.0	1,582	
		system down @ ~1930; pump outlet over pressurized															
9/18/2008	800	carbon changeout of 1000 lb. vessel on vapor treatment side															
	1230	system restart extraction from B-8															110
	1330	168	71	23	1.47	25	0.25	2.4	27	7	20	80	418	0.3	0.0	1,582	
9/19/2008	1000	166	69	22.5	1.47	24.5	0.25	2.4	27	7	20	78	309	3.0	0.3	2,071	
		1000-1230 System down; adjusting flow rate; added gate valve														2,123	
	1330	168	73	22.5	1.47	25	0.25	2.4	27	7	20	80	633	2.0	1.5	2,284	
	1430	168	73	22.5	1.47	25	0.25	2.4	27	7	20	80	887	2.0	1.5	2,327	
9/22/2008	1000	166	69	22	1.47	24.5	0.25	2.4	27	7	20	80	1,253	5.9	1.5	2,440	
	1100	166	70	22	1.47	24.5	0.25	2.4	27	7	20	80	1,172	2.3	1.5	2,440	
9/23/2008	1500	170	81	22	1.47	24.5	0.25	2.4	27	7	20	90	1,140	22.8	1.5	2,440	
	1600	170	81	22	1.47	24.5	0.25	2.4	27	7	20	94	1,078	35.8	1.5	2,440	
9/24/2008	930	164	67	22	1.47	24.5	0.25	2.4	27	7	20	80	1,589	114.0	1.6	2,440	125
	1130	begin extraction from B-10; 3/4" diameter well															
	1230	170	77	21.5	1.47	24	0.25	2.4	27	7	20	84	885	54.9	2.8	2,440	
	1330	166	77	27	1.47	28	0.25	2.4	27	0	27	84	449	16.3	0.2	2,440	
9/25/2008	1200	166	69	27	1.47	28	0.25	2.4	27	0	27	80	746	34.3	0.8	2,440	
	1500	166	72	27	1.47	28	0.25	2.4	27	0	27	80	692	50.6	1.0	2,440	
9/26/2008	700	164	59	27	1.47	28	0.25	2.4	27	0	27	74	694	54.2	0.1	2,440	
		carbon changeout of 1000 lb. vessel on vapor treatment side 0700 - 1130															133
	1230	168	76	27.25	1.40	28	0.36	2.4	33	0	33	80	436	1.1	0.3	2,440	
	1330	168	74	27	1.40	28	0.36	2.4	33	0	33	80	408	0.0	0.5	2,440	
	1430	168	75	27	1.40	28	0.36	2.4	33	0	33	80	416	4.1	0.7	2,440	
9/29/2008	1300	168	68	27	1.40	28	0.36	2.4	33	0	33	75	1,270	0.8	0.7	2,440	
	1400	168	68	27	1.40	28	0.36	2.4	33	0	33	75	1,294	1.0	0.7	2,440	
9/30/2008	1300	168	72	27.5	1.40	28	0.36	2.4	33	0	33	80	1,019	1.3	1.0	2,440	
	1500	166	73	26	2.00	27.5	0.36	2.4	33	0	33	80	670	0.2	0.2	2,440	
10/1/2008	1330	168	71	27	2.00	27.5	0.36	2.4	33	0	33	80	270	1.4	0.1	2,440	
	1430	168	71	27	2.00	27.5	0.36	2.4	33	0	33	80	324	1.0	0.1	2,440	
10/2/2008	1500	168	74	22.5	10.50	25	0.36	2.4	33	0	33	84	578	2.3	1.1	2,440	

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Golden Gate Remediation Technology

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MTS OPERATIONAL DATA

DATE	TIME	PUMP TEMPERATURE (F)	CONDENSER TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	CASING VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	PITOT TUBE Δ PRESSURE (IN H20)	PUMP OUTLET (Psi)	TOTAL FLOW RATE (SCFM)	DILUTION FLOW RATE (SCFM)	WELL FLOW RATE (SCFM)	EFFLUENT TEMPERATURE (F)	INFLUENT CONCENTRATION (PPMV)	MID EFFLUENT CONCENTRATION (PPMV)	END EFFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER	POWER USAGE (KWH)
10/3/2008	930	168	70	21	10.00	24	0.36	2.4	33	5	28	70	371	36.0	3.9	2,440	
		carbon changeout of 1000 lb. vessel on vapor treatment side 0930-1130															
	1230	168	73	21	9.50	24	0.36	2.4	33	10	23	70	489	0.7	1.1	2,440	
10/6/2008	1430	170	75	21	7.00	23.5	0.7	2.4	45	10	35	88	505	3.1	1.5	2,440	
10/7/2008	1430	170	78	21	7.00	23.5	0.7	2.4	45	10	35	90	244	2.6	1.0	2,440	
10/8/2008	1630	170	78	21	7.00	23.5	0.7	2.4	45	10	35	90	195	2.3	1.1	2,440	
10/9/2008	900	166	63	20.5	6.50	23.5	0.7	2.4	46	10	36	79	194	0.4	0.0	2,490	
	1000	166	63	20.5	6.50	23.5	0.7	2.4	46	10	36	79	197	0.3	0.0	2,490	
10/10/2008	1330	166	67	20.5	6.50	23.5	0.66	2.4	44	10	34	79	224	1.6	0.0	2,490	
		begin extraction from B-10 and SOMA-4															
10/13/2008		5 gallon of FP from B-10, B-10 casing vac. = 2.0" Hg, SOMA-4 casing vac. = 8" Hg, Pout vac. Pump = 2.4 PSI															
	830	166	64	22	8.00	25	0.38	2.4	34	0	34	76	1,302	182.3	1.5	2,490	174
		carbon changeout of 1000 lb. vessel on vapor treatment side															
	1000	restart extraction from B-10 and SOMA-4															
	1100	168	71	22	8.00	25	0.4	2.4	35	0	35	70	1,117	1	0	2,490	
10/14/2008	1700	168	71	22	8.00	25	0.4	2.4	34	0	34	80	1,140	147	1	3,178	
		extraction isolated to B-10, extraction from SOMA-4 stopped													0	3,178	
10/15/2008	1200	166	73	25	2.00	26.5	0.1	2.4	17	0	17	80	453	3	2	3,378	
		pause to change 200 lb. polishing drum 1200-1300															
	1300	restart with B-10 @ 20" H20 and SOMA-4 @ 8" Hg; system outlet pressure = 2.4 psi															
	1400	168	81	22	8.00	25	0.3	2.4	30	0	30	84	619	2	0	3,568	
10/16/2008	1100	168	73	22	8.00	25	0.3	2.4	30	0	30	84	1,084	1	0	3,568	
	1200	168	73	22	8.00	25	0.3	2.4	30	0	30	84	995	1	0	3,842	
		begin extraction from SOMA-2 @ 20" H2O, SOMA-4@ 20" H2O, B-10 @ 20" H2O, B-8 @ 20" H2O													0		
	1400	168	79	23.5	1.50	25.75	0.2	2.4	24	0	24	90	1,040	1	0	3,842	
10/17/2008	1430	168	80	23.5	1.50	25.75	0.2	2.4	24	0	24	90	1,393	0	0	3,842	
10/20/2008	930	164	60	26.5	1.50	27	0.08	2.4	16	0	16	72	899	10	2	3,894	
		casing vacuum lowered : SOMA -2 = SOMA -4 = B-10 = B-8 = 5" H2O															
	1030	164	62	26.5	0.40	27	0.08	2.4	16	0	16	72	690	2	1	3,894	
10/21/2008	930	166	62	26	0.40	27	0.08	2.4	15	0	15	74	706	2	1	3,894	
	1030	166	63	26	0.40	27	0.08	2.4	15	0	15	74	552	2	1	3,894	
	1130	168	67	24	0.40	25.5	0.3	2.4	30	0	30	74	367	2	1	3,894	
10/22/2008	1030	168	71	24	0.40	25.5	0.4	2.4	34	0	34	80	251	2	1	3,894	
	1130	168	74	24	0.40	25.5	0.3	2.4	30	0	30	80	254	2	1	3,904	
10/23/2008	930	168	67	24	0.40	25.5	0.3	2.4	30	0	30	78	239	3	1	3,904	

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Golden Gate Remediation Technology

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DATE	TIME	PUMP TEMPERATURE (F)	CONDENSER TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	CASING VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	PITOT TUBE Δ PRESSURE (IN H20)	PUMP OUTLET (Psi)	TOTAL FLOW RATE (SCFM)	DILUTION FLOW RATE (SCFM)	WELL FLOW RATE (SCFM)	EFFLUENT TEMPERATURE (F)	INFLUENT CONCENTRATION (PPMV)	MID EFFLUENT CONCENTRATION (PPMV)	END EFFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER	POWER USAGE (KWH)
	1030	168	70	24	0.40	25.5	0.28	2.4	29	0	29	80	229	4	1	3,904	
	1130	168	73	24	0.40	25.5	0.28	2.4	29	0	29	80	225	4	1	3,904	
10/24/2008	1100	170	71	24	0.40	25.5	0.28	2.4	29	0	29	80	262	5	1	3,904	
	1200	170	71	24	0.40	25.5	0.28	2.4	29	0	29	80	224	4	1	3,904	
	1300	170	75	24	0.40	25.5	0.28	2.4	29	0	29	82	225	4	1	3,904	205
		End Pilot Test															

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APPENDIX C

Carbon Specification Sheets

Water Technologies

Westates™ brand AquaCarb® 1230C and 1230AWC coconut shell based granular activated carbon

(Formerly CC-602 and CC-602AW)

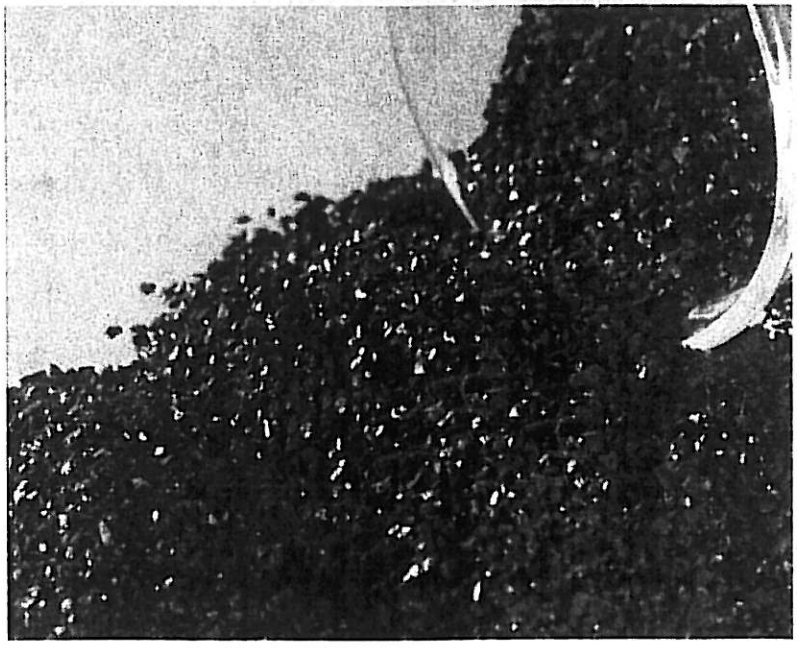
SIEMENS

FOR USE IN POTABLE, WASTE AND PROCESS WATER APPLICATIONS

DESCRIPTION AND APPLICATIONS

Westates™ brand AquaCarb® 1230C and AquaCarb® 1230AWC carbons are high activity coconut shell based granular activated carbons. These hard, attrition resistant high surface area carbons are designed to remove difficult to adsorb organics from potable, waste and process water. They are especially effective for adsorbing chlorine, disinfection by-products, TCE, PCE, MTBE and other trace level organics. Westates™ brand AquaCarb® 1230AWC carbon is acid washed yielding a very low ash content, pH neutral carbon that is ideally suited for use in potable water and high purity water systems for the microelectronics and other industries.

- ANSI/NSF Standard 61 classified for use in potable water applications
- Fully conforms to physical, performance and leachability requirements established by the current ANSI/AWWA B604 (which includes the Food Chemical Codex requirements)
- A detailed quality assurance program guarantees consistent quality from lot to lot and shipment to shipment



QUALITY CONTROL

All Westates™ brand AquaCarb® activated carbons are extensively quality checked at our State of California certified environmental and carbon testing laboratory located in Los Angeles, CA. Siemens' laboratory is fully equipped to provide complete quality control analyses using ASTM standard test methods in order to assure the consistent quality of all Westates™ brand carbons.

Our technical staff offers hands-on guidance in selecting the most appropriate system, operating conditions and carbon to meet your needs. For more information, contact your nearest Siemens representative.

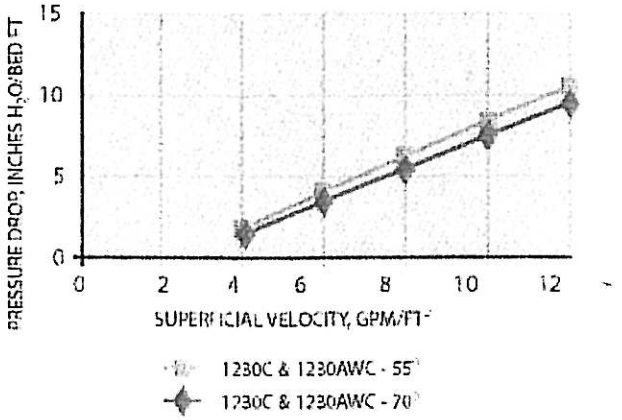
Westates™ brand AquaCarb® 1230C and 1230AWC coconut shell based granular activated carbon

(Formerly CC-602 and CC-602AW)

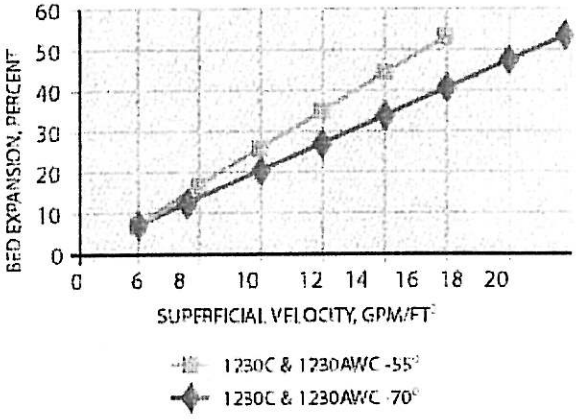
Safety Note: Wet activated carbon depletes oxygen from the air and therefore dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed. Read Material Safety Data Sheet (MSDS) before using this product.

All information presented herein is believed reliable and in accordance with accepted engineering practices. Siemens makes no warranties as to the completeness of this information. Users are responsible for evaluating individual product suitability for specific applications. Siemens assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.

DOWNFLOW PRESSURE DROP THROUGH A BACKWASHED AND STRATIFIED BED



PERCENT BED EXPANSION DURING BACKWASH



SPECIFICATIONS/TYPICAL PROPERTIES		
Specification	AquaCarb® 1230C	AquaCarb® 1230AWC
Carbon Type	Coconut Shell	Coconut Shell
Mesh Size, U.S. Sieve	12 x 30	12 x 30
Effective Size, mm	0.6 - 0.85	0.6 - 0.85
Uniformity Coefficient (max.)	2.0 (max)	2.0 (max)
Iodine No., mgI2/g (min.)	1100 (min)	1100 (min)
Hardness No., Wt. % (min.)	98 (min)	98 (min)
Abrasion No., Wt. % (min.)	85 (min)	85 (min)
Apparent Density, g/cc	0.45 - 0.52	0.45 - 0.52
Water Soluble Ash, Wt. % (max)	2.0	0.2
Contact pH	9.0 - 10.0	6.5 - 8.0

Siemens
Water Technologies

Environmental Services
2430 Rose Place
Roseville, MN 55113
800.525.0658 phone

information.water@siemens.com

WS-AQ12-DS-1206

Siemens Water Technologies Corp. Environmental Services
11711 Reading Road
Red Bluff, CA 96080

Telephone (530) 527-2664
Facsimile (530) 527-8724

VSC1000

Specification Summary

VSC1000 Vapor Phase Adsorption Filter is designed to treat a wide range of contaminated process streams, ease of handling and economical usage. This adsorber is capable of maximum flow rate of 600 CFM.

Data Summary:

Dimensions	48" dia x 56" high
Maximum Pressure	14.9 psi
Maximum Vacuum	15 in Hg
Vessel Volume	45 cu-ft
Carbon Capacity	1000 lbs
Carbon Bed Volume-Typical	34 Ft^3
Maximum Flow	600 CFM
Material	Carbon Steel
Lifting	Lugs & Fork/Skid
Interior Surface Coating	3M ScotchKote 134, 10-15 mil min dft
Exterior Surface Primer	Rust Preventative Epoxy 3 mil min dft
Exterior Surface Coating	High Solids Urethane 3mil min dft
Standard Color	White (Federal Standard 17925)

UNDERDRAIN:

Screen	4" x 36" PVC

WEIGHT:

Vessel	890 lbs
Shipping (With Carbon)	1890 lbs
Operating	1890 lbs

Siemens Water Technologies Corp. Environmental Services
11711 Reading Road
Red Bluff, CA 96080
Telephone (530) 527-2664
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ASC1000

Specification Summary

ASC1000 Liquid Phase Adsorption Filter is designed to treat a wide range of contaminated process streams, ease of handling and economical usage. This adsorber is capable of maximum flow rate of 50 GPM.

Data Summary:

Dimensions	48" dia x 56" high
Maximum Working Pressure	25 psi.
Vessel Volume	45 cu-ft
Carbon Capacity	1000 lbs.
Carbon Bed Volume-Typical	34 Ft^3
Maximum Flow	50 GPM
Empty Bed Contact Time	5.1 MIN @ 50 GPM
Material	Carbon Steel
Lifting	Lugs & Fork/Skid
Interior Surface Coating	3M ScotchKote 134, 10-15 mil min dft
Exterior Surface Primer	Rust Preventative Epoxy 3 mil min dft
Exterior Surface Coating	High Solids Urethane 3mil min dft
Standard Color	White (Federal Standard 17925)

UNDERDRAIN:

Screen	4" x 36" PVC

WEIGHT:

Shipping	1890 lbs
Operating	4280 lbs

BAKERCORP™

VCC 8x30 Virgin Coconut Shell Carbon

BakerCorp's VCC 8x30 mesh virgin carbon made from select grades of coconut shell. These activated carbon granules are a uniform adsorbent with well developed pore structure, allowing for a wide range of adsorbate retention. This carbon is ideal for purification of potable water, industrial wastewater treatment and groundwater treatment. This product is also suitable for refinement of organic liquids requiring purification and color reduction, such as amine and glycol solutions and will remove MTBE from groundwater.

PHYSICAL PROPERTIES:

Carbon Tetrachloride Activity:	60% minimum
Apparent Density (lbs./cu.ft.):	29 average
Total Ash Content:	3% maximum
Hardness (Ball Abrasion):	98% minimum
Iodine Number:	1,000 minimum
Moisture (as packed):	5% maximum
Mesh Size:	8x30

Standard Packaging: 1000 lb. super sacks. Other packaging available upon request.

These specifications represent general parameters and are subject to change. Please consult with BakerCorp before processing with your applications.

4306 W. 190th Street, Torrance, California 90504
Phone: 310.303.3700 ♦ Fax: 310.406.3001

BAKERCORP™

R 4x8 Mesh Activated Carbon

BakerCorp's R 4x8 series granular activated carbon is made from a selected grade of coal and is reactivated for use in control of Volatile Organic Chemicals (VOCs). Typical applications for R 4x8 carbon are in small and large adsorber vessels, refillable filter trays and disposable filters. R 4x8 is process under optimal conditions to develop its pore structure and maintain a high hardness number to resist abrasion during handling.

PHYSICAL PROPERTIES:

Carbon Tetrachloride Activity:	60% minimum	(ASTM D 3467)
Apparent Density:	29 average lb/ft^3	(ASTM D 2854)
Moisture Content (as packed):	5% maximum	(ASTM D 2867)
Ash Content, % weight	15% maximum	(ASTM D 2866)
Hardness (Ball Abrasion):	90% minimum	(ASTM D 3802)
Particle Size:	4 x 8 mesh	
% plus 4 mesh	10% max	
% minus 8 mesh	10% max	

Standard Packaging: 1000 lb. super sacks. Other packaging available upon request.

These specifications represent general parameters and are subject to change. Please consult with BakerCorp before processing with your applications.

4306 W. 190th Street, Torrance, California 90504
Phone: 310.303.3700 ♦ Fax: 310.406.3001

BAKERCORP™

VCC Virgin Coconut Shell Carbon

BakerCorp's VCC 4x8 mesh virgin carbon made from select grades of coconut shell. These activated carbon granules are a uniform adsorbent with well developed pore structure, allowing for a wide range of adsorbate retention. This carbon is ideal for purification of your air stream.

PHYSICAL PROPERTIES:

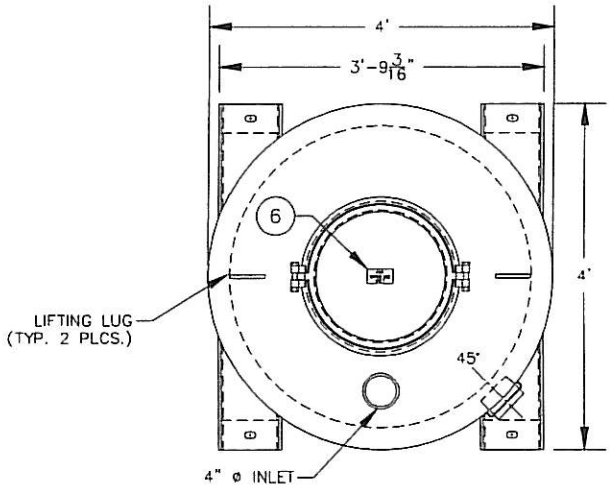
Carbon Tetrachloride Activity:	60% minimum
Apparent Density (lbs./cu.ft.):	29 average
Total Ash Content:	5% maximum
Hardness (Ball Abrasion):	95% minimum
Moisture (as packed):	5% maximum
Mesh Sizes*:	4x8

*custom sizing available

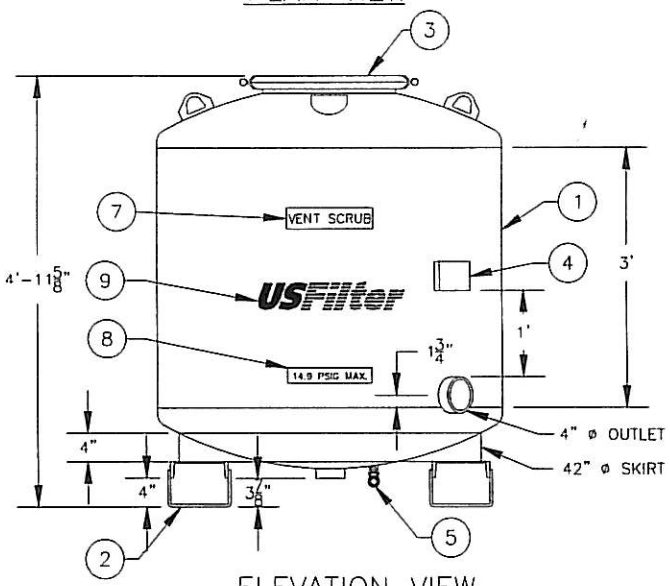
These specifications represent general parameters and are subject to change. Please consult with BakerCorp before proceeding with your applications.

4306 W. 190th Street, Torrance, California 90504
Phone: 310.303.3700 ♦ Fax: 310.406.3001

STD: 2-0600-8X11A | INTL REF:



PLAN VIEW



ELEVATION VIEW

LIST OF COMPONENTS

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	TANK ASSEMBLY	SEE SHEET 2
2	1	SKID ASSEMBLY	SEE SHEET 3
3	1	MANWAY ASSEMBLY, 18" DIA.	SEE SHEET 4
4	1	PLATE, I.D. & SERIAL NUMBER	N/A
5	1	BRONZE BALL VALVE, 3/4"	1003
6	1	DECAL, "FOR VAPOR USE ONLY", 2 1/2" x 4 1/4"	N/A
7	2	DECAL, "VENT-SCRUB", WHITE MYLAR	N/A
8	2	DECAL, "14.9 PSIG MAX", WHITE MYLAR	N/A
9	2	DECAL, "USFILTER/WESTATES" WHITE MYLAR W/BLUE LETTERS	N/A

NOTES:

1. DESIGN DATA:
   48" DIAMETER PRESSURE VESSEL-14.9 PSIG(MAX)
   VACUUM RATING - 15" HG
   @ 120°F-NOT ASME CODE STAMPED FOR VAPOR USE ONLY
   600 CFM
   1000 LBS. ACTIVATED CARBON

2. MATERIAL:
   HEADS - SA 36-HR
   SHELL - SA 36-HR
   SKID - SA 36-HR

3. SURFACE PREPARATION:
   INTERIOR:
   SANDBLAST: SSPC-SP-5 WHITE METAL
   ABRASIVE: GARNET OR GRIT - PROFILE: 1.5-2 MILS
   COATING: 3M BRAND SCOTCHKOTE 134
   THICKNESS: 10-15 DFMT - COLOR: GREEN
   EXTERIOR:
   SANDBLAST: SSPC-SP-10 NEAR WHITE METAL
   ABRASIVE: GARNET OR GRIT - PROFILE: 1.5-2 MILS
   PRIMER COAT: RUST PREVENTATIVE EPOXY PRIMER

   THICKNESS: 4-6 DFMT - COLOR: RED
   FINISH COAT: HIGH BUILD POLYURETHANE
   THICKNESS: 3-4 DFMT - COLOR: WHITE (FED. I.D.#17925)

4. LIFTING REQUIREMENTS:
   5200 LBS. MINIMUM RATING.
   EST. WEIGHTS:
   890 LBS. - EMPTY VESSEL
   1890 LBS. - WITH CARBON

DESIGNER AJA	DATE 7-17-03
CHECKER	DATE
ENGINEER	DATE
MANAGER	DATE
FILE:	
SCALE: NONE	

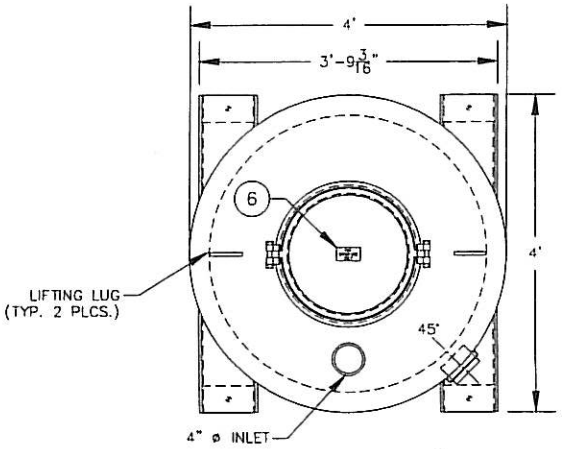
TITLE: VSC1000
GENERAL ASSEMBLY

CLIENT

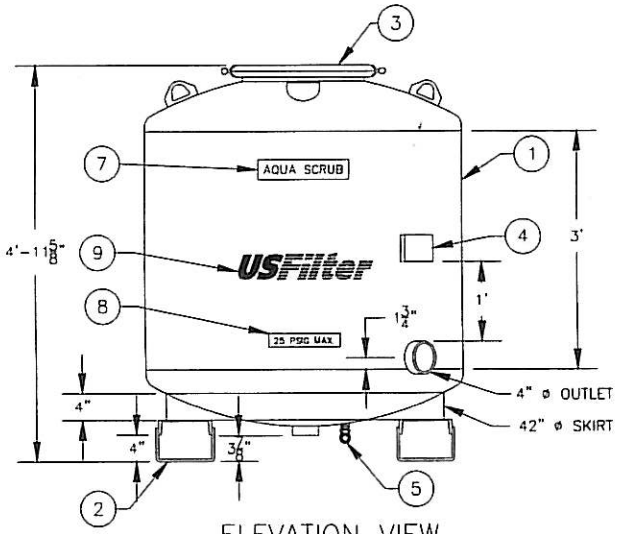
USFilter
USFILTER/WESTATES
RED BLUFF, CA
1-800-795-2664

PROJECT	DRAWING	SHEET	REV
	VSC1000SHEET1.DWG	1 OF 1	

STD: 2-0600-8X11A	INTL REF:	



PLAN VIEW



ELEVATION VIEW

LIST OF COMPONENTS

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	TANK ASSEMBLY	SEE SHEET 2
2	1	SKID ASSEMBLY	SEE SHEET 3
3	1	MANWAY ASSEMBLY, 18" DIA.	SEE SHEET 4
4	1	PLATE, I.D. & SERIAL NUMBER	N/A
5	1	BRONZE BALL VALVE, 3/4"	1003
6	1	DECAL, "FOR WATER USE ONLY", 2 1/2" x 4 1/4"	N/A
7	2	DECAL, "AQUA-SCRUB", WHITE MYLAR	N/A
8	2	DECAL, "25 PSIG MAX", WHITE MYLAR	N/A
9	2	DECAL, "USFILTER/WESTATES" WHITE MYLAR W/BLUE LETTERS	N/A

NOTES:

1. DESIGN DATA:
   48" DIAMETER PRESSURE VESSEL-25 PSIG(MAX)
   @ 120°F-NOT ASME CODE STAMPED FOR AQUA USE ONLY
   600 CFM
   1000 LBS. ACTIVATED CARBON

2. MATERIAL:
   HEADS - SA 36-HR
   SHELL - SA 36-HR
   SKID - SA 36-HR

3. SURFACE PREPARATION:
   INTERIOR:
   SANDBLAST: SSPC-SP-5 WHITE METAL
   ABRASIVE: GARNET OR GRIT - PROFILE: 1.5-2 MILS
   COATING: 3M BRAND SCOTCHKOTE 134
   THICKNESS: 10-15 DFMT - COLOR: GREEN
   EXTERIOR:
   SANDBLAST: SSPC-SP-10 NEAR WHITE METAL
   ABRASIVE: GARNET OR GRIT - PROFILE: 1.5-2 MILS
   PRIMER COAT: RUST PREVENTATIVE EPOXY PRIMER
   (CARBOLINE 893)
   THICKNESS: 4-6 DFMT - COLOR: RED
   FINISH COAT: HIGH BUILD POLYURETHANE (CARBOLINE 134HG)
   THICKNESS: 3-4 DFMT - COLOR: WHITE (FED. I.D.#17925)

4. LIFTING REQUIREMENTS:
   5200 LBS. MINIMUM RATING.
   EST. WEIGHTS:
   890 LBS. - EMPTY VESSEL
   1890 LBS. - WITH CARBON
   4280 LBS. - OPERATING

DESIGNER	DATE
AJA	5/28/02
CHECKER	DATE
ENGINEER	DATE
MANAGER	DATE
FILE:	
SCALE: NONE	

TITLE: ASC1000
GENERAL ASSEMBLY

CLIENT

USFILTER/WESTATES
RED BLUFF, CA
1-800-795-2664

PROJECT	DRAWING	SHEET	REV
	ASC1000GenAssy.DWG	1 OF 1	

APPENDIX D

Certified Laboratory Analytical Reports
Chain-of-Custody Documentation

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 # 205101

Sampler: ERIC GASSNER-WOLLAGE

Project No: 2514

Project Name: 3815 Broadway, Oakland, CA

Turnaround Time: Standard

Report To: Joyce Bobek

Company : SOMA Environmental

Telephone: 925-734-6400

Fax: 925-734-6401

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	Analyses: TPHg (including Stoddard Solvent) 8260B	Analyses: 8260 (Full List)	Analyses: Methane
1	SOMA-4	8/5/08 11:52		*		9-40ml VOAs	*			*	*	*	*
2	SOMA-2	12:47		*		9-40ml VOAs	*			*	*	*	*
3	B-10	13:47		*		9-40ml VOAs	*			*	*	*	*
4	B-8	11:26		*		9-40ml VOAs	*			*	*	*	*

Notes:

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

RELINQUISHED BY:

8/5/08 15:27 DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:

8/5/08 15:27 DATE/TIME

DATE/TIME

DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 205101 Date Received 8-5-08 Number of coolers 1
Client SOMA Project 3615 Broadway

Date Opened 8-5-08 By (print) F Nichols (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

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

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received?..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)?..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)..... (YES) NO
6. Indicate the packing in cooler: (if other, describe)_____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C)_____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? .....YES (NO)
If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples?..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery?.....YES NO
If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

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

Laboratory Job Number 205101
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2514
6620 Owens Dr.	Location : 3815 Broadway, Oakland, CA
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
SOMA-4	205101-001
SOMA-2	205101-002
B-10	205101-003
B-8	205101-004

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

Signature: _____ Date: 08/14/2008
Project Manager

Signature: _____ Date: 08/28/2008
Senior Program Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**205101**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2514**
Location:	**3815 Broadway, Oakland, CA**
Request Date:	**08/05/08**
Samples Received:	**08/05/08**

This hardcopy data package contains sample and QC results for four water samples, requested for the above referenced project on 08/05/08. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
High surrogate recoveries were observed for bromofluorobenzene (FID) and trifluorotoluene (FID) in the MSD for batch 141242 and the MS/MSD for batch 141396; the parent sample was not a project sample. SOMA-4 (lab # 205101-001), SOMA-2 (lab # 205101-002), and B-10 (lab # 205101-003) were analyzed with more than 1 mL of headspace in the VOA vial. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recovery was observed for bromofluorobenzene in B-8 (lab # 205101-004), due to matrix interference. No other analytical problems were encountered.

Dissolved Gases by GC/FID (RSK-175):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/05/08
Units:	ug/L	Received:	08/05/08

Field ID:	SOMA-4	Diln Fac:	5,000
Type:	SAMPLE	Batch#:	141396
Lab ID:	205101-001	Analyzed:	08/13/08

Analyte	Result	RL
Gasoline C7-C12	2,600,000 Y	250,000
Stoddard Solvent C7-C12	1,800,000	250,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	69-140
Bromofluorobenzene (FID)	118	73-144

Field ID:	SOMA-2	Diln Fac:	5,000
Type:	SAMPLE	Batch#:	141396
Lab ID:	205101-002	Analyzed:	08/13/08

Analyte	Result	RL
Gasoline C7-C12	620,000 Y	250,000
Stoddard Solvent C7-C12	430,000	250,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	69-140
Bromofluorobenzene (FID)	104	73-144

Field ID:	B-10	Diln Fac:	1,000
Type:	SAMPLE	Batch#:	141396
Lab ID:	205101-003	Analyzed:	08/13/08

Analyte	Result	RL
Gasoline C7-C12	210,000 Y	50,000
Stoddard Solvent C7-C12	140,000	50,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	69-140
Bromofluorobenzene (FID)	107	73-144

Field ID:	B-8	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	141242
Lab ID:	205101-004	Analyzed:	08/08/08

Analyte	Result	RL
Gasoline C7-C12	58,000 Y	2,500
Stoddard Solvent C7-C12	41,000	2,500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	69-140
Bromofluorobenzene (FID)	142	73-144

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/05/08
Units:	ug/L	Received:	08/05/08

Type:	BLANK	Batch#:	141242
Lab ID:	QC454768	Analyzed:	08/08/08
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	69-140
Bromofluorobenzene (FID)	107	73-144

Type:	BLANK	Batch#:	141396
Lab ID:	QC455413	Analyzed:	08/13/08
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	69-140
Bromofluorobenzene (FID)	91	73-144

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC454769	Batch#:	141242
Matrix:	Water	Analyzed:	08/08/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,029	103	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	69-140
Bromofluorobenzene (FID)	106	73-144

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	141242
MSS Lab ID:	205158-003	Sampled:	08/04/08
Matrix:	Water	Received:	08/07/08
Units:	ug/L	Analyzed:	08/09/08
Diln Fac:	1.000		

Type: MS Lab ID: QC454771

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	62.32	2,000	1,966	95	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	138	69-140
Bromofluorobenzene (FID)	114	73-144

Type: MSD Lab ID: QC454772

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,978	96	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	141 *	69-140
Bromofluorobenzene (FID)	118	73-144

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	141281
Units:	ug/L	Analyzed:	08/11/08
Diln Fac:	1.000		

Type: BS Lab ID: QC454945

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	974.8	97	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	130	69-140
Bromofluorobenzene (FID)	106	73-144

Type: BSD Lab ID: QC454946

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,913	96	80-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	69-140
Bromofluorobenzene (FID)	111	73-144

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC455414	Batch#:	141396
Matrix:	Water	Analyzed:	08/13/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,025	102	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	126	69-140
Bromofluorobenzene (FID)	100	73-144

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	141396
MSS Lab ID:	205235-001	Sampled:	08/12/08
Matrix:	Water	Received:	08/12/08
Units:	ug/L	Analyzed:	08/13/08
Diln Fac:	1.000		

Type: MS Lab ID: QC455415

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	10,190 >LR	2,000	9,973	-11 NM	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	359 *	69-140
Bromofluorobenzene (FID)	188 *	73-144

Type: MSD Lab ID: QC455416

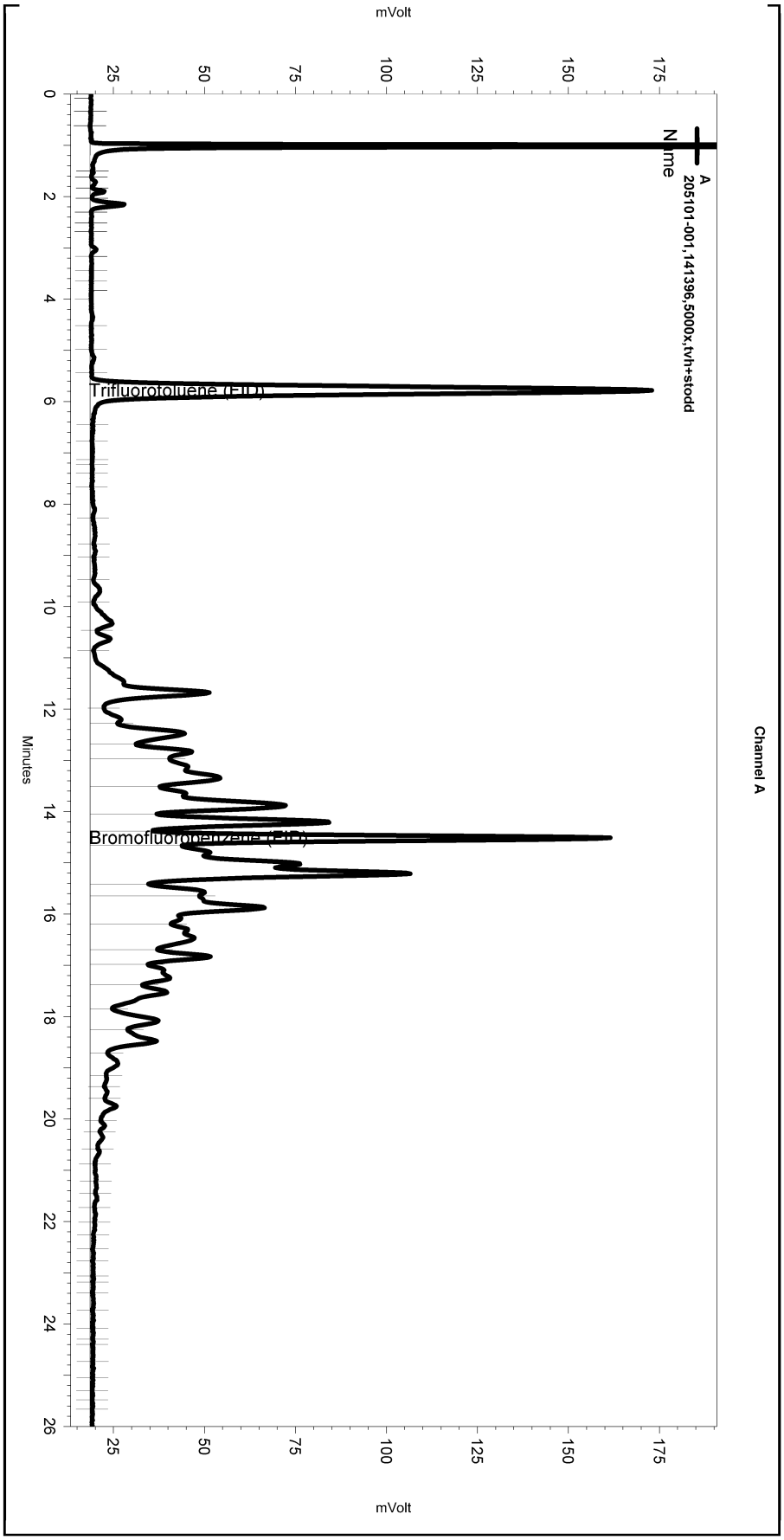
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	9,948	-12 NM	67-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	284 *	69-140
Bromofluorobenzene (FID)	189 *	73-144

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\226.seq**
Sample Name: **205101-001,141396,5000x,tvh+stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\226_006**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 8/13/2008 11:55:36 AM
Analysis Date: 8/14/2008 9:55:49 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: e1.3, HS>1



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

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

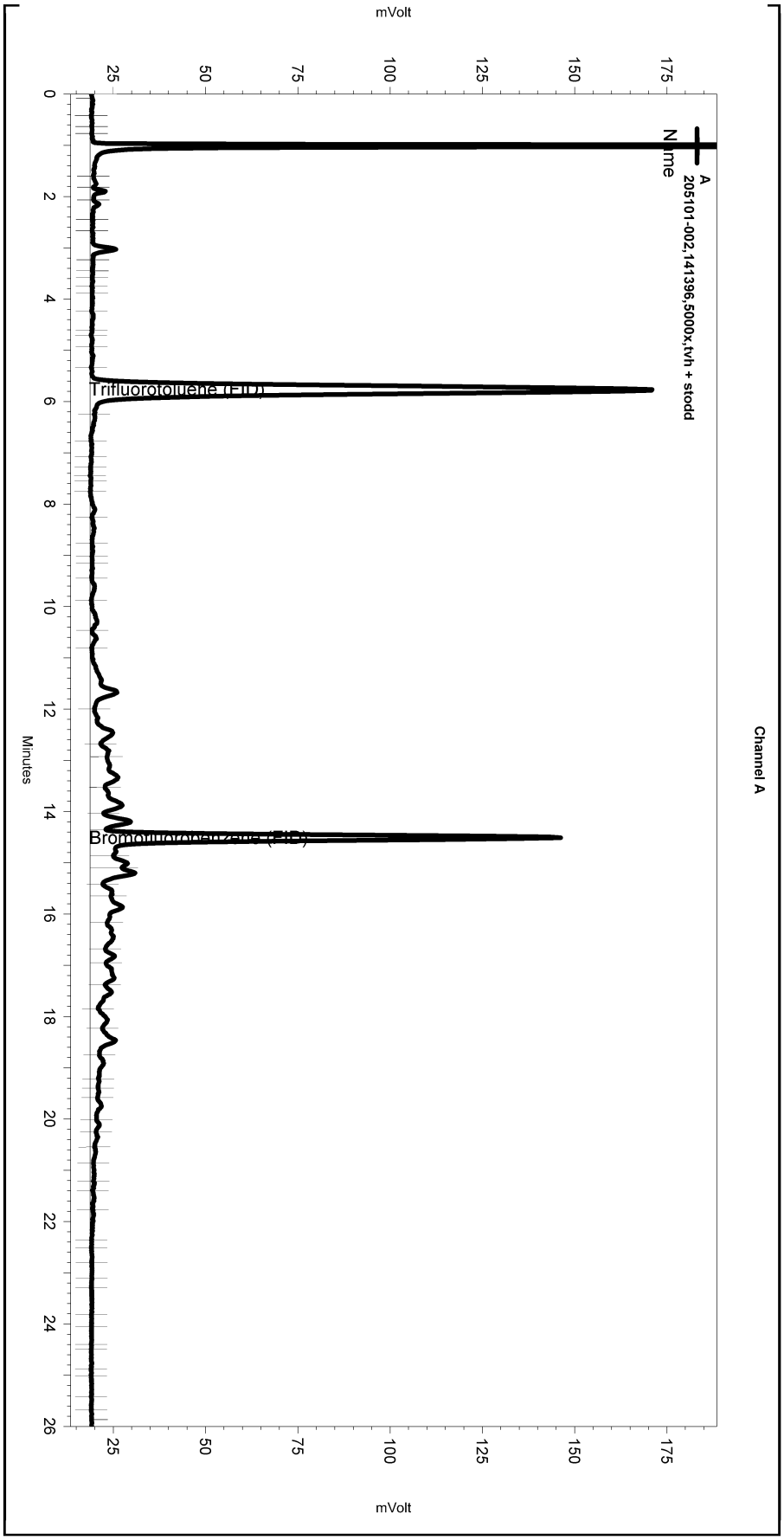
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\226_006

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

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\226.seq**
Sample Name: **205101-002,141396,5000x,tvh + stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\226_009**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 8/13/2008 1:48:29 PM
Analysis Date: 8/14/2008 9:55:59 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: d1.3, HS>1



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No items selected for this section

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No items selected for this section

Integration Events

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

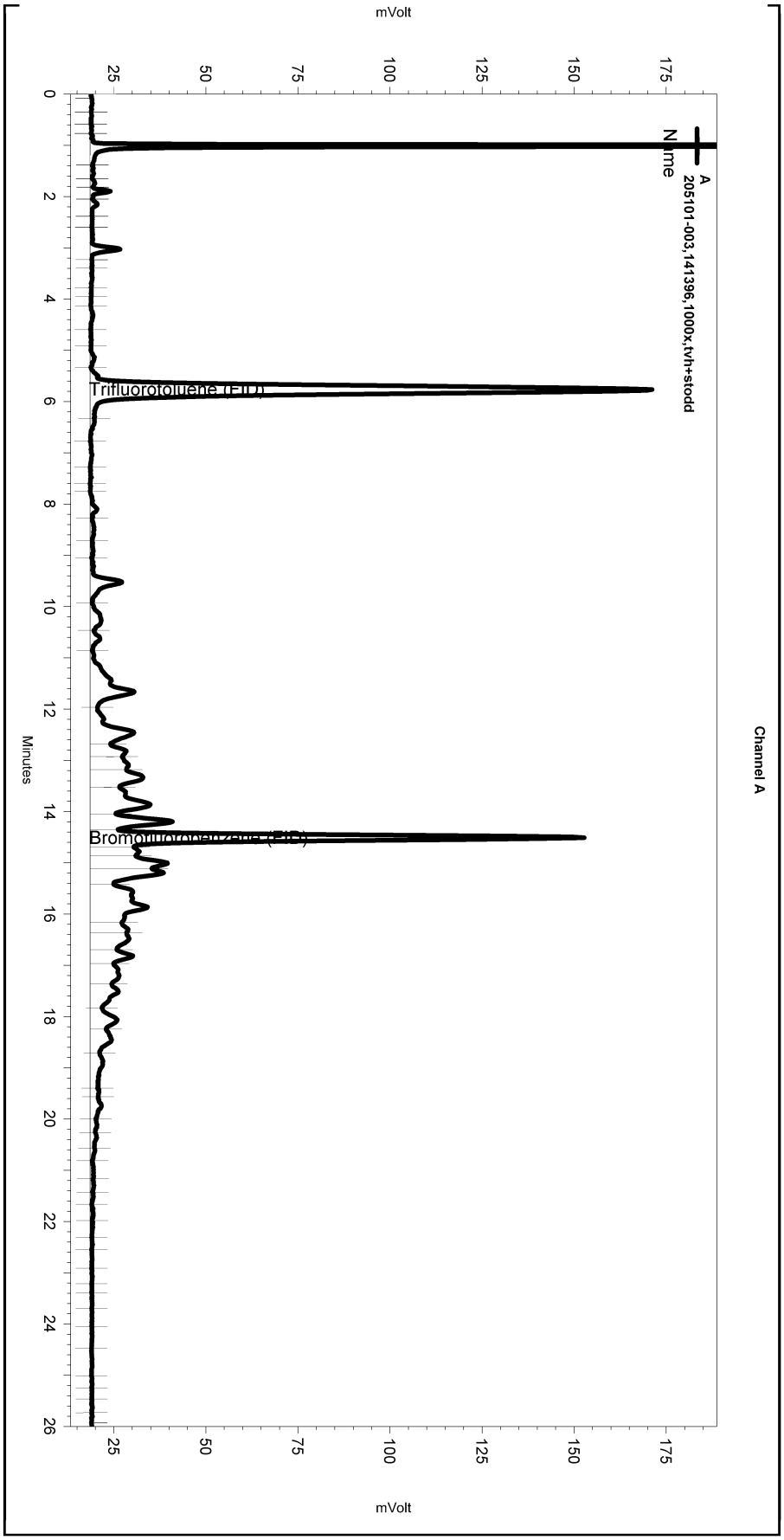
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\226_009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0.034	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\226.seq**
Sample Name: **205101-003,141396,1000x,tvh+stodd**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\226_013**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 8/13/2008 4:51:09 PM
Analysis Date: 8/14/2008 9:56:12 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: e1.3, HS>1



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Integration Events

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

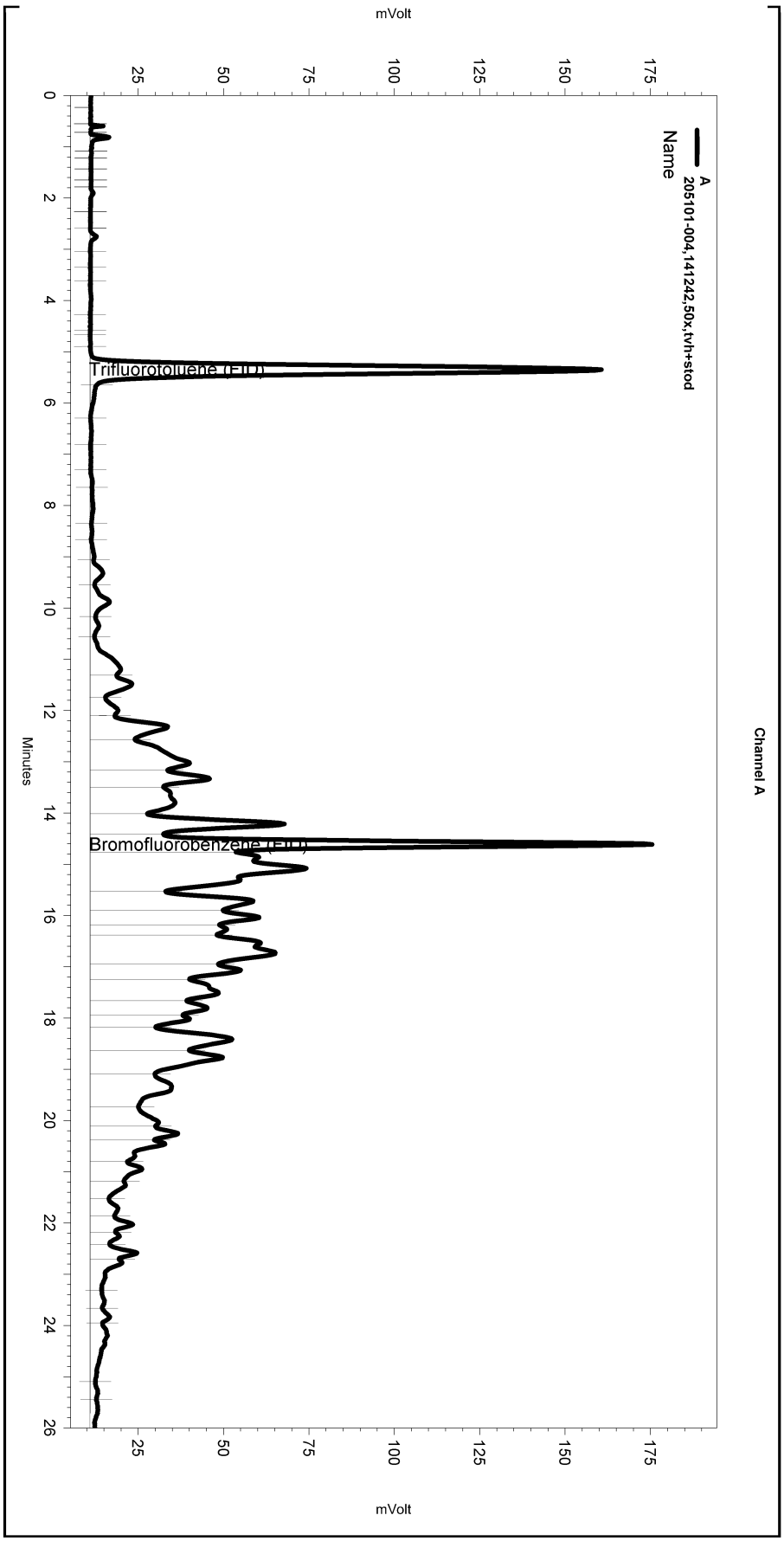
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\226_013

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

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC07\Sequence\221.seq**
Sample Name: **205101-004,141242,50x,tvh+stod**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC07\Data\221_010**
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe219.met

Software Version 3.1.7
Run Date: 8/8/2008 9:18:22 PM
Analysis Date: 8/9/2008 10:39:24 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: e1.3



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No items selected for this section

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No items selected for this section

Integration Events

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

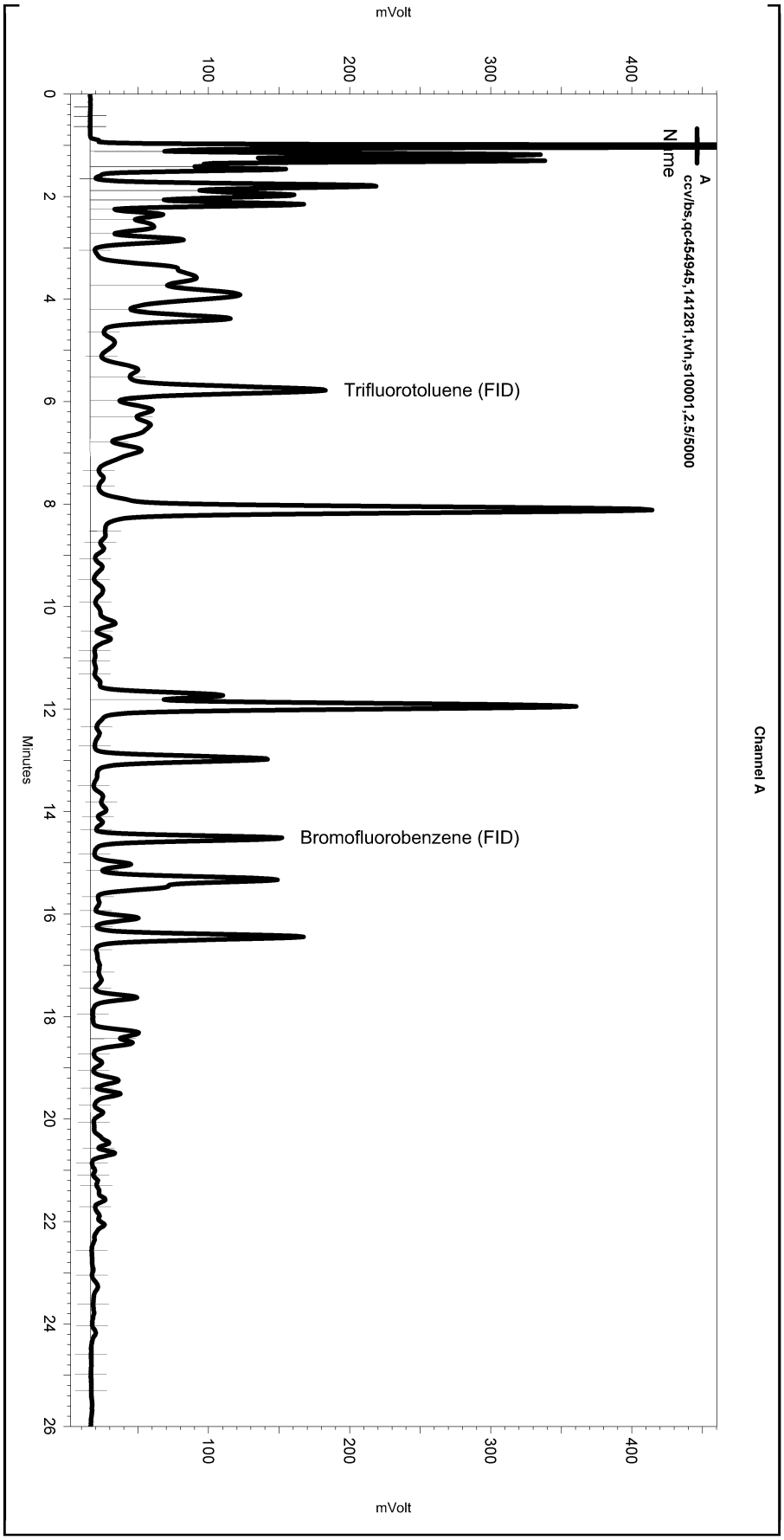
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\221_010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	5.652	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\224.seq**
Sample Name: **ccv/bs,qc454945,141281,tvh,s10001,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\224_004**
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 8/11/2008 10:59:28 AM
Analysis Date: 8/12/2008 7:21:45 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

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No items selected for this section

Integration Events

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

Manual Integration Fixes

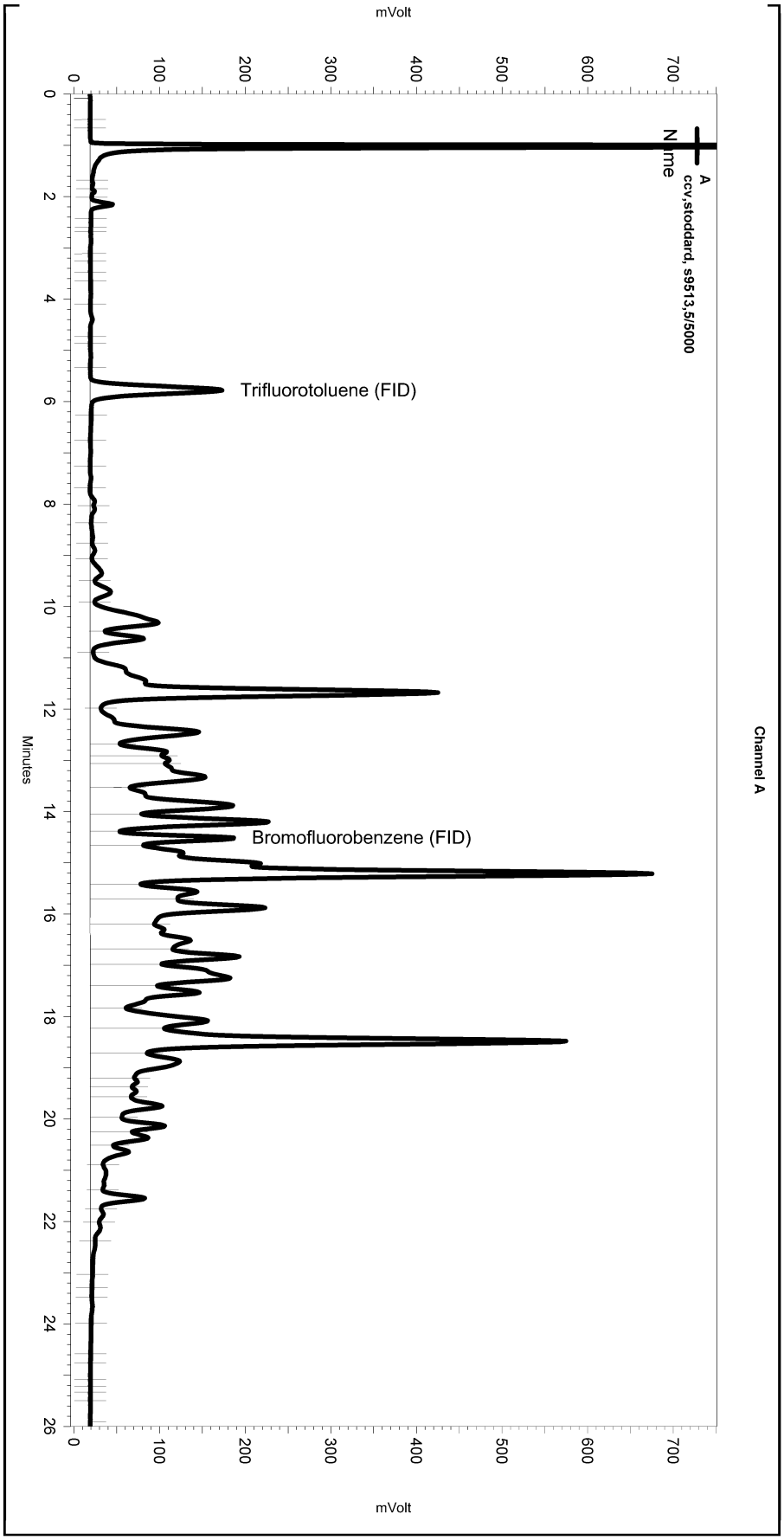
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\224_004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\226.seq**
Sample Name: **ccv,stoddard, s9513,5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\226_004**
Instrument: GC04 Vial: N/A Operator: Tvh 3. Analyst (lims2k3\tvh3)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe184.met

Software Version 3.1.7
Run Date: 8/13/2008 10:28:25 AM
Analysis Date: 8/14/2008 9:55:43 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



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No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\226_004

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	SOMA-4	Units:	ug/L
Lab ID:	205101-001	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	40	40.00	141171	08/07/08
tert-Butyl Alcohol (TBA)	ND	400	40.00	141171	08/07/08
Chloromethane	ND	40	40.00	141171	08/07/08
Isopropyl Ether (DIPE)	ND	20	40.00	141171	08/07/08
Vinyl Chloride	ND	20	40.00	141171	08/07/08
Bromomethane	ND	40	40.00	141171	08/07/08
Ethyl tert-Butyl Ether (ETBE)	ND	20	40.00	141171	08/07/08
Chloroethane	ND	40	40.00	141171	08/07/08
Methyl tert-Amyl Ether (TAME)	ND	20	40.00	141171	08/07/08
Trichlorofluoromethane	ND	40	40.00	141171	08/07/08
Acetone	ND	400	40.00	141171	08/07/08
Freon 113	ND	80	40.00	141171	08/07/08
1,1-Dichloroethene	ND	20	40.00	141171	08/07/08
Methylene Chloride	ND	400	40.00	141171	08/07/08
Carbon Disulfide	ND	20	40.00	141171	08/07/08
MTBE	50	20	40.00	141171	08/07/08
trans-1,2-Dichloroethene	31	20	40.00	141171	08/07/08
Vinyl Acetate	ND	400	40.00	141171	08/07/08
1,1-Dichloroethane	ND	20	40.00	141171	08/07/08
2-Butanone	ND	400	40.00	141171	08/07/08
cis-1,2-Dichloroethene	3,500	25	50.00	141216	08/09/08
2,2-Dichloropropane	ND	20	40.00	141171	08/07/08
Chloroform	ND	20	40.00	141171	08/07/08
Bromochloromethane	ND	20	40.00	141171	08/07/08
1,1,1-Trichloroethane	ND	20	40.00	141171	08/07/08
1,1-Dichloropropene	ND	20	40.00	141171	08/07/08
Carbon Tetrachloride	ND	20	40.00	141171	08/07/08
1,2-Dichloroethane	ND	20	40.00	141171	08/07/08
Benzene	ND	20	40.00	141171	08/07/08
Trichloroethene	ND	20	40.00	141171	08/07/08
1,2-Dichloropropane	ND	20	40.00	141171	08/07/08
Bromodichloromethane	ND	20	40.00	141171	08/07/08
Dibromomethane	ND	20	40.00	141171	08/07/08
4-Methyl-2-Pentanone	ND	400	40.00	141171	08/07/08
cis-1,3-Dichloropropene	ND	20	40.00	141171	08/07/08
Toluene	52	20	40.00	141171	08/07/08
trans-1,3-Dichloropropene	ND	20	40.00	141171	08/07/08
1,1,2-Trichloroethane	ND	20	40.00	141171	08/07/08
2-Hexanone	ND	400	40.00	141171	08/07/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	SOMA-4	Units:	ug/L
Lab ID:	205101-001	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
1,3-Dichloropropane	ND	20	40.00	141171	08/07/08
Tetrachloroethene	ND	20	40.00	141171	08/07/08
Dibromochloromethane	ND	20	40.00	141171	08/07/08
1,2-Dibromoethane	ND	20	40.00	141171	08/07/08
Chlorobenzene	ND	20	40.00	141171	08/07/08
1,1,1,2-Tetrachloroethane	ND	20	40.00	141171	08/07/08
Ethylbenzene	ND	20	40.00	141171	08/07/08
m,p-Xylenes	46	20	40.00	141171	08/07/08
o-Xylene	41	20	40.00	141171	08/07/08
Styrene	ND	20	40.00	141171	08/07/08
Bromoform	ND	40	40.00	141171	08/07/08
Isopropylbenzene	ND	20	40.00	141171	08/07/08
1,1,2,2-Tetrachloroethane	ND	20	40.00	141171	08/07/08
1,2,3-Trichloropropane	ND	20	40.00	141171	08/07/08
Propylbenzene	32	20	40.00	141171	08/07/08
Bromobenzene	ND	20	40.00	141171	08/07/08
1,3,5-Trimethylbenzene	99	20	40.00	141171	08/07/08
2-Chlorotoluene	ND	20	40.00	141171	08/07/08
4-Chlorotoluene	ND	20	40.00	141171	08/07/08
tert-Butylbenzene	ND	20	40.00	141171	08/07/08
1,2,4-Trimethylbenzene	230	20	40.00	141171	08/07/08
sec-Butylbenzene	ND	20	40.00	141171	08/07/08
para-Isopropyl Toluene	ND	20	40.00	141171	08/07/08
1,3-Dichlorobenzene	ND	20	40.00	141171	08/07/08
1,4-Dichlorobenzene	ND	20	40.00	141171	08/07/08
n-Butylbenzene	23	20	40.00	141171	08/07/08
1,2-Dichlorobenzene	ND	20	40.00	141171	08/07/08
1,2-Dibromo-3-Chloropropane	ND	80	40.00	141171	08/07/08
1,2,4-Trichlorobenzene	ND	20	40.00	141171	08/07/08
Hexachlorobutadiene	ND	80	40.00	141171	08/07/08
Naphthalene	ND	80	40.00	141171	08/07/08
1,2,3-Trichlorobenzene	ND	20	40.00	141171	08/07/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	98	80-123	40.00	141171	08/07/08
1,2-Dichloroethane-d4	102	76-138	40.00	141171	08/07/08
Toluene-d8	105	80-120	40.00	141171	08/07/08
Bromofluorobenzene	102	80-120	40.00	141171	08/07/08

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	SOMA-2	Batch#:	141171
Lab ID:	205101-002	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/07/08
Diln Fac:	250.0		

Analyte	Result	RL
Freon 12	ND	250
tert-Butyl Alcohol (TBA)	ND	2,500
Chloromethane	ND	250
Isopropyl Ether (DIPE)	ND	130
Vinyl Chloride	ND	130
Bromomethane	ND	250
Ethyl tert-Butyl Ether (ETBE)	ND	130
Chloroethane	ND	250
Methyl tert-Amyl Ether (TAME)	ND	130
Trichlorofluoromethane	ND	250
Acetone	ND	2,500
Freon 113	ND	500
1,1-Dichloroethene	ND	130
Methylene Chloride	ND	2,500
Carbon Disulfide	ND	130
MTBE	ND	130
trans-1,2-Dichloroethene	ND	130
Vinyl Acetate	ND	2,500
1,1-Dichloroethane	ND	130
2-Butanone	ND	2,500
cis-1,2-Dichloroethene	13,000	130
2,2-Dichloropropane	ND	130
Chloroform	ND	130
Bromochloromethane	ND	130
1,1,1-Trichloroethane	ND	130
1,1-Dichloropropene	ND	130
Carbon Tetrachloride	ND	130
1,2-Dichloroethane	ND	130
Benzene	ND	130
Trichloroethene	550	130
1,2-Dichloropropane	ND	130
Bromodichloromethane	ND	130
Dibromomethane	ND	130
4-Methyl-2-Pentanone	ND	2,500
cis-1,3-Dichloropropene	ND	130
Toluene	ND	130
trans-1,3-Dichloropropene	ND	130
1,1,2-Trichloroethane	ND	130
2-Hexanone	ND	2,500
1,3-Dichloropropane	ND	130
Tetrachloroethene	370	130
Dibromochloromethane	ND	130
1,2-Dibromoethane	ND	130
Chlorobenzene	ND	130
1,1,1,2-Tetrachloroethane	ND	130
Ethylbenzene	ND	130
m,p-Xylenes	ND	130
o-Xylene	ND	130
Styrene	ND	130
Bromoform	ND	250
Isopropylbenzene	ND	130
1,1,2,2-Tetrachloroethane	ND	130
1,2,3-Trichloropropane	ND	130
Propylbenzene	ND	130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	SOMA-2	Batch#:	141171
Lab ID:	205101-002	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/07/08
Diln Fac:	250.0		

Analyte	Result	RL
Bromobenzene	ND	130
1,3,5-Trimethylbenzene	ND	130
2-Chlorotoluene	ND	130
4-Chlorotoluene	ND	130
tert-Butylbenzene	ND	130
1,2,4-Trimethylbenzene	190	130
sec-Butylbenzene	ND	130
para-Isopropyl Toluene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
n-Butylbenzene	ND	130
1,2-Dichlorobenzene	ND	130
1,2-Dibromo-3-Chloropropane	ND	500
1,2,4-Trichlorobenzene	ND	130
Hexachlorobutadiene	ND	500
Naphthalene	ND	500
1,2,3-Trichlorobenzene	ND	130

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	106	76-138
Toluene-d8	110	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	B-10	Batch#:	141171
Lab ID:	205101-003	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/07/08
Diln Fac:	250.0		

Analyte	Result	RL
Freon 12	ND	250
tert-Butyl Alcohol (TBA)	ND	2,500
Chloromethane	ND	250
Isopropyl Ether (DIPE)	ND	130
Vinyl Chloride	ND	130
Bromomethane	ND	250
Ethyl tert-Butyl Ether (ETBE)	ND	130
Chloroethane	ND	250
Methyl tert-Amyl Ether (TAME)	ND	130
Trichlorofluoromethane	ND	250
Acetone	ND	2,500
Freon 113	ND	500
1,1-Dichloroethene	ND	130
Methylene Chloride	ND	2,500
Carbon Disulfide	ND	130
MTBE	ND	130
trans-1,2-Dichloroethene	ND	130
Vinyl Acetate	ND	2,500
1,1-Dichloroethane	ND	130
2-Butanone	ND	2,500
cis-1,2-Dichloroethene	15,000	130
2,2-Dichloropropane	ND	130
Chloroform	ND	130
Bromochloromethane	ND	130
1,1,1-Trichloroethane	ND	130
1,1-Dichloropropene	ND	130
Carbon Tetrachloride	ND	130
1,2-Dichloroethane	ND	130
Benzene	ND	130
Trichloroethene	4,200	130
1,2-Dichloropropane	ND	130
Bromodichloromethane	ND	130
Dibromomethane	ND	130
4-Methyl-2-Pentanone	ND	2,500
cis-1,3-Dichloropropene	ND	130
Toluene	ND	130
trans-1,3-Dichloropropene	ND	130
1,1,2-Trichloroethane	ND	130
2-Hexanone	ND	2,500
1,3-Dichloropropane	ND	130
Tetrachloroethene	10,000	130
Dibromochloromethane	ND	130
1,2-Dibromoethane	ND	130
Chlorobenzene	ND	130
1,1,1,2-Tetrachloroethane	ND	130
Ethylbenzene	ND	130
m,p-Xylenes	ND	130
o-Xylene	ND	130
Styrene	ND	130
Bromoform	ND	250
Isopropylbenzene	ND	130
1,1,2,2-Tetrachloroethane	ND	130
1,2,3-Trichloropropane	ND	130
Propylbenzene	ND	130

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	B-10	Batch#:	141171
Lab ID:	205101-003	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/07/08
Diln Fac:	250.0		

Analyte	Result	RL
Bromobenzene	ND	130
1,3,5-Trimethylbenzene	ND	130
2-Chlorotoluene	ND	130
4-Chlorotoluene	ND	130
tert-Butylbenzene	ND	130
1,2,4-Trimethylbenzene	ND	130
sec-Butylbenzene	ND	130
para-Isopropyl Toluene	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
n-Butylbenzene	ND	130
1,2-Dichlorobenzene	ND	130
1,2-Dibromo-3-Chloropropane	ND	500
1,2,4-Trichlorobenzene	ND	130
Hexachlorobutadiene	ND	500
Naphthalene	ND	500
1,2,3-Trichlorobenzene	ND	130

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	106	76-138
Toluene-d8	109	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	B-8	Batch#:	141216
Lab ID:	205101-004	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/08/08
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	2.2	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	64	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	0.9	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	0.7	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	0.6	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Field ID:	B-8	Batch#:	141216
Lab ID:	205101-004	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	ug/L	Analyzed:	08/08/08
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	0.6	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	1.7	0.5
1,2,4-Trimethylbenzene	1.6	0.5
sec-Butylbenzene	0.6	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	101	76-138
Toluene-d8	112	80-120
Bromofluorobenzene	132 *	80-120

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	141171
Units:	ug/L	Analyzed:	08/07/08
Diln Fac:	1.000		

Type: BS Lab ID: QC454431

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	136.6	109	55-158
Isopropyl Ether (DIPE)	25.00	23.10	92	63-122
Ethyl tert-Butyl Ether (ETBE)	25.00	24.70	99	62-133
Methyl tert-Amyl Ether (TAME)	25.00	24.17	97	69-137
1,1-Dichloroethene	25.00	24.10	96	77-132
Benzene	25.00	22.62	90	80-120
Trichloroethene	25.00	23.77	95	80-120
Toluene	25.00	22.53	90	80-121
Chlorobenzene	25.00	22.32	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	106	76-138
Toluene-d8	108	80-120
Bromofluorobenzene	104	80-120

Type: BSD Lab ID: QC454432

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	131.4	105	55-158	4	20
Isopropyl Ether (DIPE)	25.00	22.81	91	63-122	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.53	98	62-133	1	20
Methyl tert-Amyl Ether (TAME)	25.00	23.86	95	69-137	1	20
1,1-Dichloroethene	25.00	23.19	93	77-132	4	20
Benzene	25.00	22.29	89	80-120	1	20
Trichloroethene	25.00	22.93	92	80-120	4	20
Toluene	25.00	23.04	92	80-121	2	20
Chlorobenzene	25.00	23.05	92	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	95	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	104	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC454433	Batch#:	141171
Matrix:	Water	Analyzed:	08/07/08
Units:	ug/L		

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

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC454433	Batch#:	141171
Matrix:	Water	Analyzed:	08/07/08
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	108	76-138
Toluene-d8	105	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	141216
Units:	ug/L	Analyzed:	08/08/08
Diln Fac:	1.000		

Type: BS Lab ID: QC454635

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	117.5	94	55-158
Isopropyl Ether (DIPE)	25.00	23.18	93	63-122
Ethyl tert-Butyl Ether (ETBE)	25.00	23.40	94	62-133
Methyl tert-Amyl Ether (TAME)	25.00	24.39	98	69-137
1,1-Dichloroethene	25.00	23.26	93	77-132
Benzene	25.00	22.60	90	80-120
Trichloroethene	25.00	22.39	90	80-120
Toluene	25.00	23.37	93	80-121
Chlorobenzene	25.00	23.27	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-123
1,2-Dichloroethane-d4	95	76-138
Toluene-d8	105	80-120
Bromofluorobenzene	106	80-120

Type: BSD Lab ID: QC454636

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	138.6	111	55-158	16	20
Isopropyl Ether (DIPE)	25.00	23.97	96	63-122	3	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.63	99	62-133	5	20
Methyl tert-Amyl Ether (TAME)	25.00	25.87	103	69-137	6	20
1,1-Dichloroethene	25.00	25.15	101	77-132	8	20
Benzene	25.00	24.20	97	80-120	7	20
Trichloroethene	25.00	23.98	96	80-120	7	20
Toluene	25.00	24.37	97	80-121	4	20
Chlorobenzene	25.00	24.01	96	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	99	76-138
Toluene-d8	106	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Dil'n Fac:	1.000
Lab ID:	QC454637	Batch#:	141216
Matrix:	Water	Analyzed:	08/08/08
Units:	ug/L		

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

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC454637	Batch#:	141216
Matrix:	Water	Analyzed:	08/08/08
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-123
1,2-Dichloroethane-d4	101	76-138
Toluene-d8	111	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC455045	Batch#:	141216
Matrix:	Water	Analyzed:	08/08/08
Units:	ug/L		

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

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2514	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC455045	Batch#:	141216
Matrix:	Water	Analyzed:	08/08/08
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-123
1,2-Dichloroethane-d4	95	76-138
Toluene-d8	106	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Dissolved Gases

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2514	Analysis:	RSK-175
Analyte:	Methane	Sampled:	08/05/08
Matrix:	Water	Received:	08/05/08
Units:	mg/L	Analyzed:	08/12/08
Batch#:	141300		

Field ID	Type	Lab ID	Result	RL	Diln Fac
SOMA-4	SAMPLE	205101-001	1.2	0.0050	1.000
SOMA-2	SAMPLE	205101-002	4.3	0.010	2.000
B-10	SAMPLE	205101-003	4.2	0.010	2.000
B-8	SAMPLE	205101-004	1.5	0.0050	1.000
	BLANK	QC455014	ND	0.0050	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Gases

Lab #:	205101	Location:	3815 Broadway, Oakland, CA
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2514	Analysis:	RSK-175
Analyte:	Methane	Diln Fac:	1.000
Matrix:	Water	Batch#:	141300
Units:	mg/L	Analyzed:	08/12/08

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC455012	0.6544	0.5552	85	80-120		
BSD	QC455013	0.6544	0.5841	89	80-120	5	20

RPD= Relative Percent Difference

Torrent
LABORATORY, INC.

September 11, 2008

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

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

RE: 3815 Broadway,Oakland

Order No.: 0809022

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 samples on 9/5/2008 for the analyses presented in the following report.

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

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

Sincerely,

Laboratory Director

9/11/08
Date

TORRENT LABORATORY, INC.

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

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

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

Date Received: 9/5/2008
Date Reported: 9/11/2008

Client Sample ID: Soma-4 EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/3/2008 10:00:00 AM

Lab Sample ID: 0809022-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/5/2008	0.794	5	4.0	ND	µg/m³	R17269
1,1,1,2-Tetrachloroethane	TO-15	9/5/2008	0.687	5	3.4	ND	µg/m³	R17269
1,1,1-Trichloroethane	TO-15	9/5/2008	0.819	5	4.1	9.5 J	µg/m³	R17269
1,1,2,2-Tetrachloroethane	TO-15	9/5/2008	1.0305	5	5.2	ND	µg/m³	R17269
1,1,2-Trichloroethane	TO-15	9/5/2008	1.0374	5	5.2	ND	µg/m³	R17269
1,1-Dichloroethane	TO-15	9/5/2008	0.6885	5	3.4	ND	µg/m³	R17269
1,2,4-Trichlorobenzene	TO-15	9/5/2008	0.4984	5	2.5	ND	µg/m³	R17269
1,2,4-Trimethylbenzene	TO-15	9/5/2008	0.8856	5	4.4	ND	µg/m³	R17269
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/5/2008	1.0752	5	5.4	ND	µg/m³	R17269
1,2-Dichlorobenzene	TO-15	9/5/2008	0.601	5	3.0	ND	µg/m³	R17269
1,2-Dichloroethane	TO-15	9/5/2008	0.648	5	3.2	ND	µg/m³	R17269
1,2-Dichloropropane	TO-15	9/5/2008	1.0164	5	5.1	ND	µg/m³	R17269
1,3,5-Trimethylbenzene	TO-15	9/5/2008	0.6888	5	3.4	ND	µg/m³	R17269
1,3-Butadiene	TO-15	9/5/2008	0.5967	5	3.0	ND	µg/m³	R17269
1,3-Dichlorobenzene	TO-15	9/5/2008	0.3606	5	1.8	ND	µg/m³	R17269
1,4-Dichlorobenzene	TO-15	9/5/2008	0.6611	5	3.3	ND	µg/m³	R17269
1,4-Dioxane	TO-15	9/5/2008	0.504	5	2.5	ND	µg/m³	R17269
2-Butanone (MEK)	TO-15	9/5/2008	0.4425	5	2.2	47	µg/m³	R17269
2-Hexanone	TO-15	9/5/2008	0.861	5	4.3	ND	µg/m³	R17269
4-Ethyl Toluene	TO-15	9/5/2008	0.738	5	3.7	ND	µg/m³	R17269
4-Methyl-2-Pentanone (MIBK)	TO-15	9/5/2008	0.656	5	3.3	ND	µg/m³	R17269
Acetone	TO-15	9/5/2008	0.5712	5	2.9	60	µg/m³	R17269
Benzene	TO-15	9/5/2008	0.8932	5	4.5	ND	µg/m³	R17269
Bromodichloromethane	TO-15	9/5/2008	0.871	5	4.4	ND	µg/m³	R17269
Bromoform	TO-15	9/5/2008	1.7578	5	8.8	ND	µg/m³	R17269
Bromomethane	TO-15	9/5/2008	0.776	5	3.9	ND	µg/m³	R17269
Carbon Disulfide	TO-15	9/5/2008	0.4976	5	2.5	ND	µg/m³	R17269
Carbon Tetrachloride	TO-15	9/5/2008	0.9435	5	4.7	ND	µg/m³	R17269
Chlorobenzene	TO-15	9/5/2008	0.4232	5	2.1	ND	µg/m³	R17269
Chloroethane	TO-15	9/5/2008	0.396	5	2.0	ND	µg/m³	R17269
Chloroform	TO-15	9/5/2008	1.952	5	9.8	ND	µg/m³	R17269
Chloromethane	TO-15	9/5/2008	0.7245	5	3.6	ND	µg/m³	R17269
cis-1,2-dichloroethene	TO-15	9/5/2008	0.5544	5	2.8	ND	µg/m³	R17269
cis-1,3-Dichloropropene	TO-15	9/5/2008	0.3632	5	1.8	ND	µg/m³	R17269
Dibromochloromethane	TO-15	9/5/2008	0.9372	5	4.7	ND	µg/m³	R17269
Dichlorodifluoromethane	TO-15	9/5/2008	0.7425	5	3.7	ND	µg/m³	R17269

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

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

Date Received: 9/5/2008
Date Reported: 9/11/2008

Client Sample ID: Soma-4 EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/3/2008 10:00:00 AM

Lab Sample ID: 0809022-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Diisopropyl ether (DIPE)	TO-15	9/5/2008	0.6688	5	3.3	ND	µg/m³	R17269
Ethyl Acetate	TO-15	9/5/2008	0.4248	5	2.1	ND	µg/m³	R17269
Ethyl Benzene	TO-15	9/5/2008	0.31062	5	1.6	ND	µg/m³	R17269
Ethyl tert-butyl ether (ETBE)	TO-15	9/5/2008	0.6688	5	3.3	ND	µg/m³	R17269
Freon 113	TO-15	9/5/2008	0.9192	5	4.6	ND	µg/m³	R17269
Hexachlorobutadiene	TO-15	9/5/2008	1.8139	5	9.1	ND	µg/m³	R17269
Hexane	TO-15	9/5/2008	1.7952	5	9.0	ND	µg/m³	R17269
Isopropanol	TO-15	9/5/2008	1.6359	5	8.2	ND	µg/m³	R17269
m,p-Xylene	TO-15	9/5/2008	0.492	5	2.5	6.9 J	µg/m³	R17269
Methylene Chloride	TO-15	9/5/2008	0.6859	5	3.4	ND	µg/m³	R17269
MTBE	TO-15	9/5/2008	0.5054	5	2.5	ND	µg/m³	R17269
Naphthalene	TO-15	9/5/2008	2.62	5	13	ND	µg/m³	R17269
o-xylene	TO-15	9/5/2008	0.62062	5	3.1	ND	µg/m³	R17269
Styrene	TO-15	9/5/2008	0.639	5	3.2	ND	µg/m³	R17269
t-Butyl alcohol (t-Butanol)	TO-15	9/5/2008	0.4898	5	2.4	2.6 J	µg/m³	R17269
tert-Amyl methyl ether (TAME)	TO-15	9/5/2008	0.6688	5	3.3	ND	µg/m³	R17269
Tetrachloroethene	TO-15	9/5/2008	1.2882	5	6.4	ND	µg/m³	R17269
Toluene	TO-15	9/5/2008	0.5278	5	2.6	4.9 J	µg/m³	R17269
trans-1,2-Dichloroethene	TO-15	9/5/2008	0.5544	5	2.8	ND	µg/m³	R17269
Trichloroethene	TO-15	9/5/2008	0.52626	5	2.6	ND	µg/m³	R17269
Trichlorofluoromethane	TO-15	9/5/2008	0.693	5	3.5	ND	µg/m³	R17269
Vinyl Acetate	TO-15	9/5/2008	0.64064	5	3.2	ND	µg/m³	R17269
Vinyl Chloride	TO-15	9/5/2008	0.24832	5	1.2	ND	µg/m³	R17269
Surr: 4-Bromofluorobenzene	TO-15	9/5/2008	0	5	65-135	95.7	%REC	R17269

Note: The reporting limits are raised due to limited sample volume received (tedlar bag). Results reported to the MDL. Reported values betweenthe MDL and RL should be considered as estimated and are flagged with the appropriate "J" qualifier.

TPH as Stoddard Solvent	TO-3(MOD)	9/6/2008	352	10	3500	6500x	µg/m³	G17269

Note: x- Sample chromatogram does not resemble gasoline or stoddard pattern. Reported value due to presence of heavy end compounds (possibly aged fuel) within C5-C12 range and is quantitated as stoddard solvent (closest pattern match).

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

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

Date Received: 9/5/2008
Date Reported: 9/11/2008

Client Sample ID: Soma-4 INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/3/2008 10:10:00 AM

Lab Sample ID: 0809022-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/5/2008	0.794	50	40	ND	µg/m³	R17269
1,1,1,2-Tetrachloroethane	TO-15	9/10/2008	3.44	2000	6900	ND	µg/m³	N17248
1,1,1-Trichloroethane	TO-15	9/5/2008	0.819	50	41	ND	µg/m³	R17269
1,1,2,2-Tetrachloroethane	TO-15	9/5/2008	1.0305	50	52	ND	µg/m³	R17269
1,1,2-Trichloroethane	TO-15	9/5/2008	1.0374	50	52	ND	µg/m³	R17269
1,1-Dichloroethane	TO-15	9/5/2008	0.6885	50	34	78.9 J	µg/m³	R17269
1,2,4-Trichlorobenzene	TO-15	9/10/2008	3.56	2000	7100	ND	µg/m³	N17248
1,2,4-Trimethylbenzene	TO-15	9/10/2008	2.46	2000	4900	ND	µg/m³	N17248
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/5/2008	1.0752	50	54	ND	µg/m³	R17269
1,2-Dichlorobenzene	TO-15	9/10/2008	3.01	2000	6000	ND	µg/m³	N17248
1,2-Dichloroethane	TO-15	9/5/2008	0.648	50	32	ND	µg/m³	R17269
1,2-Dichloropropane	TO-15	9/5/2008	1.0164	50	51	ND	µg/m³	R17269
1,3,5-Trimethylbenzene	TO-15	9/10/2008	2.46	2000	4900	ND	µg/m³	N17248
1,3-Butadiene	TO-15	9/5/2008	0.5967	50	30	ND	µg/m³	R17269
1,3-Dichlorobenzene	TO-15	9/10/2008	3.01	2000	6000	ND	µg/m³	N17248
1,4-Dichlorobenzene	TO-15	9/10/2008	3.01	2000	6000	ND	µg/m³	N17248
1,4-Dioxane	TO-15	9/5/2008	0.504	50	25	ND	µg/m³	R17269
2-Butanone (MEK)	TO-15	9/5/2008	0.4425	50	22	ND	µg/m³	R17269
2-Hexanone	TO-15	9/5/2008	0.861	50	43	ND	µg/m³	R17269
4-Ethyl Toluene	TO-15	9/10/2008	2.46	2000	4900	ND	µg/m³	N17248
4-Methyl-2-Pentanone (MIBK)	TO-15	9/5/2008	0.656	50	33	ND	µg/m³	R17269
Acetone	TO-15	9/5/2008	0.5712	50	29	450 J	µg/m³	R17269
Benzene	TO-15	9/5/2008	0.8932	50	45	790	µg/m³	R17269
Bromodichloromethane	TO-15	9/5/2008	0.871	50	44	ND	µg/m³	R17269
Bromoform	TO-15	9/5/2008	1.7578	50	88	ND	µg/m³	R17269
Bromomethane	TO-15	9/5/2008	0.776	50	39	ND	µg/m³	R17269
Carbon Disulfide	TO-15	9/5/2008	0.4976	50	25	ND	µg/m³	R17269
Carbon Tetrachloride	TO-15	9/5/2008	0.9435	50	47	ND	µg/m³	R17269
Chlorobenzene	TO-15	9/5/2008	0.4232	50	21	ND	µg/m³	R17269
Chloroethane	TO-15	9/5/2008	0.396	50	20	ND	µg/m³	R17269
Chloroform	TO-15	9/5/2008	1.952	50	98	ND	µg/m³	R17269
Chloromethane	TO-15	9/5/2008	0.7245	50	36	ND	µg/m³	R17269
cis-1,2-dichloroethene	TO-15	9/10/2008	1.98	2000	4000	88000	µg/m³	N17248
cis-1,3-Dichloropropene	TO-15	9/5/2008	0.3632	50	18	ND	µg/m³	R17269
Dibromochloromethane	TO-15	9/5/2008	0.9372	50	47	ND	µg/m³	R17269
Dichlorodifluoromethane	TO-15	9/5/2008	0.7425	50	37	ND	µg/m³	R17269
Diisopropyl ether (DIPE)	TO-15	9/5/2008	0.6688	50	33	ND	µg/m³	R17269
Ethyl Acetate	TO-15	9/5/2008	0.4248	50	21	ND	µg/m³	R17269
Ethyl Benzene	TO-15	9/5/2008	0.31062	50	16	ND	µg/m³	R17269
Ethyl tert-butyl ether (ETBE)	TO-15	9/5/2008	0.6688	50	33	ND	µg/m³	R17269
Freon 113	TO-15	9/5/2008	0.9192	50	46	2700	µg/m³	R17269
Hexachlorobutadiene	TO-15	9/10/2008	5.34	2000	11000	ND	µg/m³	N17248
Hexane	TO-15	9/5/2008	1.7952	50	90	ND	µg/m³	R17269

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

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

Date Received: 9/5/2008
Date Reported: 9/11/2008

Client Sample ID: Soma-4 INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/3/2008 10:10:00 AM

Lab Sample ID: 0809022-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Isopropanol	TO-15	9/5/2008	1.6359	50	82	ND	µg/m³	R17269
m,p-Xylene	TO-15	9/5/2008	0.492	50	25	ND	µg/m³	R17269
Methylene Chloride	TO-15	9/5/2008	0.6859	50	34	ND	µg/m³	R17269
MTBE	TO-15	9/5/2008	0.5054	50	25	290	µg/m³	R17269
Naphthalene	TO-15	9/5/2008	2.62	50	130	ND	µg/m³	R17269
o-xylene	TO-15	9/5/2008	0.62062	50	31	ND	µg/m³	R17269
Styrene	TO-15	9/5/2008	0.639	50	32	ND	µg/m³	R17269
t-Butyl alcohol (t-Butanol)	TO-15	9/5/2008	0.4898	50	24	ND	µg/m³	R17269
tert-Amyl methyl ether (TAME)	TO-15	9/5/2008	0.6688	50	33	ND	µg/m³	R17269
Tetrachloroethene	TO-15	9/5/2008	1.2882	50	64	ND	µg/m³	R17269
Toluene	TO-15	9/5/2008	0.5278	50	26	ND	µg/m³	R17269
trans-1,2-Dichloroethene	TO-15	9/5/2008	0.5544	50	28	1600	µg/m³	R17269
Trichloroethene	TO-15	9/5/2008	0.52626	50	26	ND	µg/m³	R17269
Trichlorofluoromethane	TO-15	9/5/2008	0.693	50	35	ND	µg/m³	R17269
Vinyl Acetate	TO-15	9/5/2008	0.64064	50	32	ND	µg/m³	R17269
Vinyl Chloride	TO-15	9/5/2008	0.24832	50	12	420	µg/m³	R17269
Surr: 4-Bromofluorobenzene	TO-15	9/5/2008	0	50	65-135	0 S	%REC	R17269
Surr: 4-Bromofluorobenzene	TO-15	9/10/2008	0	2000	65-135	93.8	%REC	N17248

Note: S - Low surrogate recovery attributed to TPH interference (heavy end hydrocarbons) Resuts reported to tej MDL.Reported values betweenthe MDL and RL should be considered as estimated and are flagged with the appropriate "J" qualifier.

TPH as Stoddard Solvent	TO-3(MOD)	9/8/2008	352	2000	700000	15000000	µg/m³	G17248

Note: x - Hydrocarbons within range of C5-C12 quantified as Stoddard Solvent. No Gasoline present.

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

Definitions, legends and Notes

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

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: G17248

Sample ID: **MB-G17248**	SampType: **MBLK**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/8/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **G17248**	TestNo: **TO-3(MOD)**		Analysis Date: **9/8/2008**	SeqNo: **247111**

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

Sample ID: **LCS-G17248**	SampType: **LCS**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/8/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **G17248**	TestNo: **TO-3(MOD)**		Analysis Date: **9/8/2008**	SeqNo: **247116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	487.1	100	500	0	97.4	50	150				

Sample ID: **LCSD-G17248**	SampType: **LCSD**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/9/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **G17248**	TestNo: **TO-3(MOD)**		Analysis Date: **9/9/2008**	SeqNo: **247124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	484.1	100	500	0	96.8	50	150	487.1	0.609	30	

Qualifiers:

3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: G17269

Sample ID: **MB-G17269**	SampType: **MBLK**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/5/2008**	RunNo: **17269**
Client ID: **ZZZZZ**	Batch ID: **G17269**	TestNo: **TO-3(MOD)**		Analysis Date: **9/6/2008**	SeqNo: **247277**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50									

Sample ID: **LCS-G17269**	SampType: **LCS**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/6/2008**	RunNo: **17269**
Client ID: **ZZZZZ**	Batch ID: **G17269**	TestNo: **TO-3(MOD)**		Analysis Date: **9/5/2008**	SeqNo: **247278**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	483.9	100	500	0	96.8	50	150				

Sample ID: **LCSD-G17269**	SampType: **LCSD**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/6/2008**	RunNo: **17269**
Client ID: **ZZZZZ**	Batch ID: **G17269**	TestNo: **TO-3(MOD)**		Analysis Date: **9/6/2008**	SeqNo: **247280**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	490.0	100	500	0	98.0	50	150	483.9	1.25	30	

Qualifiers:

3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **MB-N17248** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/8/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/8/2008** SeqNo: **247017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **MB-N17248**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/8/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **N17248**	TestNo: **TO-15**		Analysis Date: **9/8/2008**	SeqNo: **247017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	18.32	0	20	0	91.6	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **BLK1-N17248** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/9/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/9/2008** SeqNo: **247028**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **BLK1-N17248** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/9/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/9/2008** SeqNo: **247028**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	20.96	0	20	0	105	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **BLK2-N17248** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/10/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/10/2008** SeqNo: **247208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **BLK2-N17248**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/10/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **N17248**	TestNo: **TO-15**		Analysis Date: **9/10/2008**	SeqNo: **247208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	20.23	0	20	0	101	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **LCS-N17248** SampType: **LCS** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/8/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/8/2008** SeqNo: **247018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	20.47	0.50	20	0	102	65	135				
1,1,1,2-Tetrachloroethane	18.52	0.50	20	0	92.6	65	135				
1,1,1-Trichloroethane	20.51	0.50	20	0	103	65	135				
1,1,2,2-Tetrachloroethane	20.51	0.50	20	0	103	65	135				
1,1,2-Trichloroethane	19.98	0.50	20	0	99.9	65	135				
1,1-Dichloroethane	23.19	0.50	20	0	116	65	135				
1,2,4-Trichlorobenzene	17.46	0.50	20	0	87.3	65	135				
1,2,4-Trimethylbenzene	19.48	0.50	20	0	97.4	65	135				
1,2-Dibromoethane(Ethylene dibromide	20.04	0.50	20	0	100	65	135				
1,2-Dichlorobenzene	20.42	0.50	20	0	102	65	135				
1,2-Dichloroethane	20.57	0.50	20	0	103	65	135				
1,2-Dichloropropane	16.16	0.50	20	0	80.8	65	135				
1,3,5-Trimethylbenzene	19.18	0.50	20	0	95.9	65	135				
1,3-Butadiene	20.62	2.0	20	0	103	65	135				
1,3-Dichlorobenzene	20.05	0.50	20	0	100	65	135				
1,4-Dichlorobenzene	20.62	0.50	20	0	103	65	135				
1,4-Dioxane	19.93	0.50	20	0	99.7	65	135				
2-Butanone (MEK)	23.28	0.50	20	0	116	65	135				
2-Hexanone	20.79	0.50	20	0	104	65	135				
4-Ethyl Toluene	18.63	0.50	20	0	93.2	65	135				
4-Methyl-2-Pentanone (MIBK)	20.31	0.50	20	0	102	65	135				
Acetone	26.52	4.0	20	0	133	65	135				
Benzene	21.72	0.50	20	0	109	65	135				
Bromodichloromethane	19.93	0.50	20	0	99.7	65	135				
Bromoform	19.15	0.50	20	0	95.8	65	135				
Bromomethane	19.73	0.50	20	0	98.6	65	135				
Carbon Disulfide	20.56	0.50	20	0	103	65	135				
Carbon Tetrachloride	20.75	0.50	20	0	104	65	135				
Chlorobenzene	20.70	0.50	20	0	104	65	135				
Chloroethane	18.34	0.50	20	0	91.7	65	135				
Chloroform	22.56	0.50	20	0	113	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **LCS-N17248**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/8/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **N17248**	TestNo: **TO-15**		Analysis Date: **9/8/2008**	SeqNo: **247018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-dichloroethene	22.19	0.50	20	0	111	65	135				
cis-1,3-Dichloropropene	19.57	0.50	20	0	97.8	65	135				
Dibromochloromethane	20.11	0.50	20	0	101	65	135				
Diisopropyl ether (DIPE)	21.48	0.50	20	0	107	65	135				
Ethyl Acetate	21.47	0.50	20	0	107	65	135				
Ethyl Benzene	19.65	0.50	20	0	98.2	65	135				
Ethyl tert-butyl ether (ETBE)	21.80	0.50	20	0	109	65	135				
Freon 113	18.76	0.50	20	0	93.8	65	135				
Hexachlorobutadiene	17.13	0.50	20	0	85.7	65	135				
Hexane	19.43	2.0	20	0	97.2	65	135				
Isopropanol	23.09	4.0	20	0	115	65	135				
m,p-Xylene	39.65	0.50	40	0	99.1	65	135				
Methylene Chloride	20.38	1.0	20	0	102	65	135				
MTBE	21.07	0.50	20	0	105	65	135				
Naphthalene	17.20	5.0	20	0	86.0	65	135				
o-xylene	20.50	0.50	20	0	103	65	135				
Styrene	19.49	0.50	20	0	97.5	65	135				
t-Butyl alcohol (t-Butanol)	23.89	2.0	20	0	119	65	135				
tert-Amyl methyl ether (TAME)	19.76	0.50	20	0	98.8	65	135				
Tetrachloroethene	19.17	0.50	20	0	95.8	65	135				
Toluene	19.13	0.50	20	0	95.7	65	135				
trans-1,2-Dichloroethene	21.88	0.50	20	0	109	65	135				
Trichloroethene	19.53	0.50	20	0	97.6	65	135				
Trichlorofluoromethane	22.16	0.50	20	0	111	65	135				
Vinyl Acetate	24.35	0.50	20	0	122	65	135				
Vinyl Chloride	19.51	0.50	20	0	97.6	65	135				
Surr: 4-Bromofluorobenzene	18.04	0	20	0	90.2	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **LCSD-N17248** SampType: **LCSD** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/8/2008** RunNo: **17248**
Client ID: **ZZZZZ** Batch ID: **N17248** TestNo: **TO-15** Analysis Date: **9/8/2008** SeqNo: **247019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	20.95	0.50	20	0	105	65	135	20.47	2.32	30	
1,1,1,2-Tetrachloroethane	18.92	0.50	20	0	94.6	65	135	18.52	2.14	30	
1,1,1-Trichloroethane	20.81	0.50	20	0	104	65	135	20.51	1.45	30	
1,1,2,2-Tetrachloroethane	20.31	0.50	20	0	102	65	135	20.51	0.980	30	
1,1,2-Trichloroethane	20.66	0.50	20	0	103	65	135	19.98	3.35	30	
1,1-Dichloroethane	22.31	0.50	20	0	112	65	135	23.19	3.87	30	
1,2,4-Trichlorobenzene	16.77	0.50	20	0	83.8	65	135	17.46	4.03	30	
1,2,4-Trimethylbenzene	18.90	0.50	20	0	94.5	65	135	19.48	3.02	30	
1,2-Dibromoethane(Ethylene dibromide	20.86	0.50	20	0	104	65	135	20.04	4.01	30	
1,2-Dichlorobenzene	19.75	0.50	20	0	98.8	65	135	20.42	3.34	30	
1,2-Dichloroethane	19.77	0.50	20	0	98.8	65	135	20.57	3.97	30	
1,2-Dichloropropane	17.58	0.50	20	0	87.9	65	135	16.16	8.42	30	
1,3,5-Trimethylbenzene	18.58	0.50	20	0	92.9	65	135	19.18	3.18	30	
1,3-Butadiene	22.07	2.0	20	0	110	65	135	20.62	6.79	30	
1,3-Dichlorobenzene	19.26	0.50	20	0	96.3	65	135	20.05	4.02	30	
1,4-Dichlorobenzene	19.84	0.50	20	0	99.2	65	135	20.62	3.86	30	
1,4-Dioxane	19.66	0.50	20	0	98.3	65	135	19.93	1.36	30	
2-Butanone (MEK)	23.18	0.50	20	0	116	65	135	23.28	0.430	30	
2-Hexanone	20.86	0.50	20	0	104	65	135	20.79	0.336	30	
4-Ethyl Toluene	18.65	0.50	20	0	93.3	65	135	18.63	0.107	30	
4-Methyl-2-Pentanone (MIBK)	20.97	0.50	20	0	105	65	135	20.31	3.20	30	
Acetone	26.89	4.0	20	0	134	65	135	26.52	1.39	30	
Benzene	23.19	0.50	20	0	116	65	135	21.72	6.55	30	
Bromodichloromethane	19.68	0.50	20	0	98.4	65	135	19.93	1.26	30	
Bromoform	19.88	0.50	20	0	99.4	65	135	19.15	3.74	30	
Bromomethane	23.38	0.50	20	0	117	65	135	19.73	16.9	30	
Carbon Disulfide	22.62	0.50	20	0	113	65	135	20.56	9.54	30	
Carbon Tetrachloride	20.75	0.50	20	0	104	65	135	20.75	0	30	
Chlorobenzene	20.73	0.50	20	0	104	65	135	20.7	0.145	30	
Chloroethane	22.31	0.50	20	0	112	65	135	18.34	19.5	30	
Chloroform	21.16	0.50	20	0	106	65	135	22.56	6.40	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: N17248

Sample ID: **LCSD-N17248**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/8/2008**	RunNo: **17248**
Client ID: **ZZZZZ**	Batch ID: **N17248**	TestNo: **TO-15**		Analysis Date: **9/8/2008**	SeqNo: **247019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-dichloroethene	20.81	0.50	20	0	104	65	135	22.19	6.42	30	
cis-1,3-Dichloropropene	19.76	0.50	20	0	98.8	65	135	19.57	0.966	30	
Dibromochloromethane	20.98	0.50	20	0	105	65	135	20.11	4.23	30	
Diisopropyl ether (DIPE)	23.67	0.50	20	0	118	65	135	21.48	9.70	30	
Ethyl Acetate	21.76	0.50	20	0	109	65	135	21.47	1.34	30	
Ethyl Benzene	19.35	0.50	20	0	96.8	65	135	19.65	1.54	30	
Ethyl tert-butyl ether (ETBE)	22.91	0.50	20	0	115	65	135	21.8	4.97	30	
Freon 113	19.91	0.50	20	0	99.6	65	135	18.76	5.95	30	
Hexachlorobutadiene	16.88	0.50	20	0	84.4	65	135	17.13	1.47	30	
Hexane	21.54	2.0	20	0	108	65	135	19.43	10.3	30	
Isopropanol	21.81	4.0	20	0	109	65	135	23.09	5.70	30	
m,p-Xylene	39.28	0.50	40	0	98.2	65	135	39.65	0.938	30	
Methylene Chloride	21.54	1.0	20	0	108	65	135	20.38	5.53	30	
MTBE	21.93	0.50	20	0	110	65	135	21.07	4.00	30	
Naphthalene	16.90	5.0	20	0	84.5	65	135	17.2	1.76	30	
o-xylene	20.41	0.50	20	0	102	65	135	20.5	0.440	30	
Styrene	19.45	0.50	20	0	97.3	65	135	19.49	0.205	30	
t-Butyl alcohol (t-Butanol)	23.01	2.0	20	0	115	65	135	23.89	3.75	30	
tert-Amyl methyl ether (TAME)	20.86	0.50	20	0	104	65	135	19.76	5.42	30	
Tetrachloroethene	19.71	0.50	20	0	98.6	65	135	19.17	2.78	30	
Toluene	19.35	0.50	20	0	96.8	65	135	19.13	1.14	30	
trans-1,2-Dichloroethene	20.85	0.50	20	0	104	65	135	21.88	4.82	30	
Trichloroethene	19.93	0.50	20	0	99.7	65	135	19.53	2.03	30	
Trichlorofluoromethane	22.47	0.50	20	0	112	65	135	22.16	1.39	30	
Vinyl Acetate	25.34	0.50	20	0	127	65	135	24.35	3.98	30	
Vinyl Chloride	23.82	0.50	20	0	119	65	135	19.51	19.9	30	
Surr: 4-Bromofluorobenzene	17.78	0	20	0	88.9	65	135	0	0	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **MB-R17269** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/5/2008** RunNo: **17269**
Client ID: **ZZZZZ** Batch ID: **R17269** TestNo: **TO-15** Analysis Date: **9/5/2008** SeqNo: **247286**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **MB-R17269**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/5/2008**	RunNo: **17269**	
Client ID: **ZZZZZ**	Batch ID: **R17269**	TestNo: **TO-15**		Analysis Date: **9/5/2008**	SeqNo: **247286**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	ND	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	1.100	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	0.1900	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	18.76	0	20	0	93.8	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **LCS-R17269** SampType: **LCS** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/4/2008** RunNo: **17269**
Client ID: **ZZZZZ** Batch ID: **R17269** TestNo: **TO-15** Analysis Date: **9/4/2008** SeqNo: **247287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.79	0.50	20	0	119	65	135				
1,1,1,2-Tetrachloroethane	18.85	0.50	20	0	94.2	65	135				
1,1,1-Trichloroethane	21.74	0.50	20	0	109	65	135				
1,1,2,2-Tetrachloroethane	21.15	0.50	20	0	106	65	135				
1,1,2-Trichloroethane	22.08	0.50	20	0	110	65	135				
1,1-Dichloroethane	24.43	0.50	20	0	122	65	135				
1,2,4-Trichlorobenzene	17.15	0.50	20	0	85.8	65	135				
1,2,4-Trimethylbenzene	19.36	0.50	20	0	96.8	65	135				
1,2-Dibromoethane(Ethylene dibromide	20.94	0.50	20	0	105	65	135				
1,2-Dichlorobenzene	20.61	0.50	20	0	103	65	135				
1,2-Dichloroethane	21.26	0.50	20	0	106	65	135				
1,2-Dichloropropane	21.40	0.50	20	0	107	65	135				
1,3,5-Trimethylbenzene	19.45	0.50	20	0	97.3	65	135				
1,3-Butadiene	24.81	2.0	20	0	124	65	135				
1,3-Dichlorobenzene	20.73	0.50	20	0	104	65	135				
1,4-Dichlorobenzene	21.13	0.50	20	0	106	65	135				
1,4-Dioxane	21.10	0.50	20	0	106	65	135				
2-Butanone (MEK)	25.54	0.50	20	0	128	65	135				
2-Hexanone	21.30	0.50	20	0	106	65	135				
4-Ethyl Toluene	19.02	0.50	20	0	95.1	65	135				
4-Methyl-2-Pentanone (MIBK)	21.01	0.50	20	0	105	65	135				
Acetone	26.47	4.0	20	0	132	65	135				
Benzene	23.70	0.50	20	0	118	65	135				
Bromodichloromethane	20.52	0.50	20	0	103	65	135				
Bromoform	19.94	0.50	20	0	99.7	65	135				
Bromomethane	24.98	0.50	20	0	125	65	135				
Carbon Disulfide	24.18	0.50	20	0	121	65	135				
Carbon Tetrachloride	21.47	0.50	20	0	107	65	135				
Chlorobenzene	21.59	0.50	20	0	108	65	135				
Chloroethane	24.00	0.50	20	0	120	65	135				
Chloroform	24.40	0.50	20	0	122	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **LCS-R17269** SampType: **LCS** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/4/2008** RunNo: **17269**
Client ID: **ZZZZZ** Batch ID: **R17269** TestNo: **TO-15** Analysis Date: **9/4/2008** SeqNo: **247287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	20.01	0.50	20	0	100	65	135				
cis-1,2-dichloroethene	22.90	0.50	20	0	114	65	135				
cis-1,3-Dichloropropene	19.79	0.50	20	0	99.0	65	135				
Dibromochloromethane	21.09	0.50	20	0	105	65	135				
Dichlorodifluoromethane	16.22	0.50	20	0	81.1	65	135				
Diisopropyl ether (DIPE)	24.01	0.50	20	0	120	65	135				
Ethyl Acetate	24.96	0.50	20	0	125	65	135				
Ethyl Benzene	20.37	0.50	20	0	102	65	135				
Ethyl tert-butyl ether (ETBE)	23.99	0.50	20	0	120	65	135				
Freon 113	22.42	0.50	20	0	112	65	135				
Hexachlorobutadiene	17.47	0.50	20	0	87.4	65	135				
Hexane	22.88	2.0	20	1.1	109	65	135				
Isopropanol	25.59	4.0	20	0	128	65	135				
m,p-Xylene	42.00	0.50	40	0	105	65	135				
Methylene Chloride	23.17	1.0	20	0	116	65	135				
MTBE	23.49	0.50	20	0	117	65	135				
Naphthalene	16.78	5.0	20	0	83.9	65	135				
o-xylene	21.06	0.50	20	0	105	65	135				
Styrene	20.52	0.50	20	0	103	65	135				
t-Butyl alcohol (t-Butanol)	24.17	2.0	20	0	121	65	135				
tert-Amyl methyl ether (TAME)	21.01	0.50	20	0	105	65	135				
Tetrachloroethene	20.38	0.50	20	0	102	65	135				
Toluene	19.64	0.50	20	0	98.2	65	135				
trans-1,2-Dichloroethene	22.85	0.50	20	0	114	65	135				
Trichloroethene	21.12	0.50	20	0.19	105	65	135				
Trichlorofluoromethane	24.93	0.50	20	0	125	65	135				
Vinyl Acetate	26.48	0.50	20	0	132	65	135				
Vinyl Chloride	26.54	0.50	20	0	133	65	135				
Surr: 4-Bromofluorobenzene	18.33	0	20	0	91.7	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **LCSD-R17269** SampType: **LCSD** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/4/2008** RunNo: **17269**
Client ID: **ZZZZZ** Batch ID: **R17269** TestNo: **TO-15** Analysis Date: **9/4/2008** SeqNo: **247288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	25.41	0.50	20	0	127	65	135	23.79	6.59	30	
1,1,1,2-Tetrachloroethane	19.73	0.50	20	0	98.6	65	135	18.85	4.56	30	
1,1,1-Trichloroethane	21.70	0.50	20	0	108	65	135	21.74	0.184	30	
1,1,2,2-Tetrachloroethane	21.20	0.50	20	0	106	65	135	21.15	0.236	30	
1,1,2-Trichloroethane	22.83	0.50	20	0	114	65	135	22.08	3.34	30	
1,1-Dichloroethane	25.35	0.50	20	0	127	65	135	24.43	3.70	30	
1,2,4-Trichlorobenzene	17.43	0.50	20	0	87.2	65	135	17.15	1.62	30	
1,2,4-Trimethylbenzene	19.91	0.50	20	0	99.6	65	135	19.36	2.80	30	
1,2-Dibromoethane(Ethylene dibromide	21.28	0.50	20	0	106	65	135	20.94	1.61	30	
1,2-Dichlorobenzene	20.55	0.50	20	0	103	65	135	20.61	0.292	30	
1,2-Dichloroethane	23.04	0.50	20	0	115	65	135	21.26	8.04	30	
1,2-Dichloropropane	19.75	0.50	20	0	98.8	65	135	21.4	8.02	30	
1,3,5-Trimethylbenzene	20.23	0.50	20	0	101	65	135	19.45	3.93	30	
1,3-Butadiene	25.32	2.0	20	0	127	65	135	24.81	2.03	30	
1,3-Dichlorobenzene	20.89	0.50	20	0	104	65	135	20.73	0.769	30	
1,4-Dichlorobenzene	20.98	0.50	20	0	105	65	135	21.13	0.712	30	
1,4-Dioxane	23.06	0.50	20	0	115	65	135	21.1	8.88	30	
2-Butanone (MEK)	25.07	0.50	20	0	125	65	135	25.54	1.86	30	
2-Hexanone	22.11	0.50	20	0	111	65	135	21.3	3.73	30	
4-Ethyl Toluene	19.77	0.50	20	0	98.8	65	135	19.02	3.87	30	
4-Methyl-2-Pentanone (MIBK)	21.99	0.50	20	0	110	65	135	21.01	4.56	30	
Acetone	25.44	4.0	20	0	127	65	135	26.47	3.97	30	
Benzene	23.66	0.50	20	0	118	65	135	23.7	0.169	30	
Bromodichloromethane	21.30	0.50	20	0	106	65	135	20.52	3.73	30	
Bromoform	19.90	0.50	20	0	99.5	65	135	19.94	0.201	30	
Bromomethane	25.32	0.50	20	0	127	65	135	24.98	1.35	30	
Carbon Disulfide	24.57	0.50	20	0	123	65	135	24.18	1.60	30	
Carbon Tetrachloride	21.63	0.50	20	0	108	65	135	21.47	0.742	30	
Chlorobenzene	21.59	0.50	20	0	108	65	135	21.59	0	30	
Chloroethane	24.93	0.50	20	0	125	65	135	24	3.80	30	
Chloroform	24.79	0.50	20	0	124	65	135	24.4	1.59	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809022
Project: 3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17269

Sample ID: **LCSD-R17269** SampType: **LCSD** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/4/2008** RunNo: **17269**
Client ID: **ZZZZZ** Batch ID: **R17269** TestNo: **TO-15** Analysis Date: **9/4/2008** SeqNo: **247288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	21.13	0.50	20	0	106	65	135	20.01	5.44	30	
cis-1,2-dichloroethene	23.95	0.50	20	0	120	65	135	22.9	4.48	30	
cis-1,3-Dichloropropene	21.18	0.50	20	0	106	65	135	19.79	6.79	30	
Dibromochloromethane	21.46	0.50	20	0	107	65	135	21.09	1.74	30	
Dichlorodifluoromethane	15.61	0.50	20	0	78.0	65	135	16.22	3.83	30	
Diisopropyl ether (DIPE)	24.64	0.50	20	0	123	65	135	24.01	2.59	30	
Ethyl Acetate	24.83	0.50	20	0	124	65	135	24.96	0.522	30	
Ethyl Benzene	20.71	0.50	20	0	104	65	135	20.37	1.66	30	
Ethyl tert-butyl ether (ETBE)	24.68	0.50	20	0	123	65	135	23.99	2.84	30	
Freon 113	22.05	0.50	20	0	110	65	135	22.42	1.66	30	
Hexachlorobutadiene	18.22	0.50	20	0	91.1	65	135	17.47	4.20	30	
Hexane	22.89	2.0	20	1.1	109	65	135	22.88	0.0437	30	
Isopropanol	20.64	4.0	20	0	103	65	135	25.59	21.4	30	
m,p-Xylene	43.63	0.50	40	0	109	65	135	42	3.81	30	
Methylene Chloride	23.95	1.0	20	0	120	65	135	23.17	3.31	30	
MTBE	23.70	0.50	20	0	118	65	135	23.49	0.890	30	
Naphthalene	17.21	5.0	20	0	86.0	65	135	16.78	2.53	30	
o-xylene	21.67	0.50	20	0	108	65	135	21.06	2.86	30	
Styrene	20.78	0.50	20	0	104	65	135	20.52	1.26	30	
t-Butyl alcohol (t-Butanol)	26.04	2.0	20	0	130	65	135	24.17	7.45	30	
tert-Amyl methyl ether (TAME)	22.89	0.50	20	0	114	65	135	21.01	8.56	30	
Tetrachloroethene	20.66	0.50	20	0	103	65	135	20.38	1.36	30	
Toluene	21.11	0.50	20	0	106	65	135	19.64	7.21	30	
trans-1,2-Dichloroethene	24.20	0.50	20	0	121	65	135	22.85	5.74	30	
Trichloroethene	22.40	0.50	20	0.19	111	65	135	21.12	5.88	30	
Trichlorofluoromethane	26.25	0.50	20	0	131	65	135	24.93	5.16	30	
Vinyl Acetate	24.44	0.50	20	0	122	65	135	26.48	8.01	30	
Vinyl Chloride	26.01	0.50	20	0	130	65	135	26.54	2.02	30	
Surr: 4-Bromofluorobenzene	18.92	0	20	0	94.6	65	135	0	0	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

RESET

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 0809022

Company Name: **SOMA Environmental Engineering, Inc.**	Location of Sampling: 3815 Broadway, Oakland
Address: **6620 Owens Drive, Suite A**	Purpose: Soil vapor extraction pilot test
City: **Pleasanton** State: **CA** Zip Code: **94588**	Special Instructions / Comments: dry cleaning site
Telephone: **925-734-6400** FAX: **925-734-6401**	
REPORT TO: **Joyce Bobek** SAMPLER: **Jesse Acedillo**	P.O. #: 2514 EMAIL: **jbobek@somaenv.com**

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

SAMPLE TYPE:
- ☐ Storm Water ☐ Air
- ☐ Waste Water ☒ Other Soil Vapor
- ☐ Ground Water
- ☐ Soil

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

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-3 TPH-gas TPH-Stoddard solvent	TO-15 full list	REMARKS
001A	SOMA-4 EFF	9/3/8 @1000	AIR	1	TEDLAR	X	X	EDF Output Required
002A	SOMA-4 INF	9/3/8 @1010	↓	↓	↓	X	X	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Jesse Acedillo	Jesse Acedillo	9/5/8	12:05	C Moore	C Moore	9/5	12:05
2	C Moore	C Moore	9/5	1300	D. G. Ghodasara	NAVIN	9/5/08	1300

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

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

Page 1 of 1

Log In By: NDB Date: 9/8 Log In Reviewed By: Date:

Torrent
LABORATORY, INC.

September 22, 2008

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

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

RE: 3815 Broadway (2514)

Order No.: 0809081

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 samples on 9/12/2008 for the analyses presented in the following report.

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

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

Sincerely,

Laboratory Director

9/22/08
Date

TORRENT LABORATORY, INC.

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

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

Date Received: 9/12/2008
Date Reported: 9/22/2008

Summary Report

SOMA-2 EFF **Toxic Organics in Air by EPA TO-15** **Lab ID: 0809081-001A**

Parameter	Preped	Analyzed	Result	RL	Unit
Acetone	9/12/2008	9/12/2008	74	48	µg/m³
cis-1,2-dichloroethene	9/13/2008	9/13/2008	74000	990	µg/m³
MTBE	9/12/2008	9/12/2008	130	9.0	µg/m³
trans-1,2-Dichloroethene	9/12/2008	9/12/2008	940	9.9	µg/m³
Vinyl Chloride	9/12/2008	9/12/2008	410	6.4	µg/m³

SOMA-2 EFF **TO-3 (Mod)Air ug/m3** **Lab ID: 0809081-001A**

Parameter	Preped	Analyzed	Result	RL	Unit
Stoddard Solvent (C7-C12)	9/13/2008	9/13/2008	160000	35000	µg/m³

SOMA-2 INF **Toxic Organics in Air by EPA TO-15** **Lab ID: 0809081-002A**

Parameter	Preped	Analyzed	Result	RL	Unit
1,2,4-Trimethylbenzene	9/13/2008	9/13/2008	20000	4900	µg/m³
1,3,5-Trimethylbenzene	9/13/2008	9/13/2008	9500	4900	µg/m³
4-Ethyl Toluene	9/13/2008	9/13/2008	19000	4900	µg/m³
Benzene	9/12/2008	9/12/2008	470	80	µg/m³
Carbon Disulfide	9/12/2008	9/12/2008	1200	78	µg/m³
cis-1,2-dichloroethene	9/13/2008	9/13/2008	440000	4000	µg/m³
Freon 113	9/12/2008	9/12/2008	770	190	µg/m³
Tetrachloroethene	9/13/2008	9/13/2008	500000	6800	µg/m³
trans-1,2-Dichloroethene	9/12/2008	9/12/2008	2800	99	µg/m³
Trichloroethene	9/13/2008	9/13/2008	190000	5400	µg/m³

SOMA-2 INF **TO-3 (Mod)Air ug/m3** **Lab ID: 0809081-002A**

Parameter	Preped	Analyzed	Result	RL	Unit
Stoddard Solvent (C7-C12)	9/13/2008	9/13/2008	14000000	700000	µg/m³

TORRENT LABORATORY, INC.

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

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

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

Date Received: 9/12/2008
Date Reported: 9/22/2008

Client Sample ID: SOMA-2 EFF
Sample Location: 3815 Broadway (2514)
Sample Matrix: AIR
Date/Time Sampled 9/11/2008 12:10:00 PM

Lab Sample ID: 0809081-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/12/2008	1.99	5	10	ND	µg/m³	R17298
1,1,1,2-Tetrachloroethane	TO-15	9/12/2008	3.44	5	17	ND	µg/m³	R17298
1,1,1-Trichloroethane	TO-15	9/12/2008	2.73	5	14	ND	µg/m³	R17298
1,1,2,2-Tetrachloroethane	TO-15	9/12/2008	3.44	5	17	ND	µg/m³	R17298
1,1,2-Trichloroethane	TO-15	9/12/2008	2.73	5	14	ND	µg/m³	R17298
1,1-Dichloroethane	TO-15	9/12/2008	2.03	5	10	ND	µg/m³	R17298
1,2,4-Trichlorobenzene	TO-15	9/12/2008	3.56	5	18	ND	µg/m³	R17298
1,2,4-Trimethylbenzene	TO-15	9/12/2008	2.46	5	12	ND	µg/m³	R17298
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/12/2008	3.84	5	19	ND	µg/m³	R17298
1,2-Dichlorobenzene	TO-15	9/12/2008	3.01	5	15	ND	µg/m³	R17298
1,2-Dichloroethane	TO-15	9/12/2008	2.03	5	10	ND	µg/m³	R17298
1,2-Dichloropropane	TO-15	9/12/2008	2.31	5	12	ND	µg/m³	R17298
1,3,5-Trimethylbenzene	TO-15	9/12/2008	2.46	5	12	ND	µg/m³	R17298
1,3-Butadiene	TO-15	9/12/2008	4.44	5	22	ND	µg/m³	R17298
1,3-Dichlorobenzene	TO-15	9/12/2008	3.01	5	15	ND	µg/m³	R17298
1,4-Dichlorobenzene	TO-15	9/12/2008	3.01	5	15	ND	µg/m³	R17298
1,4-Dioxane	TO-15	9/12/2008	1.8	5	9.0	ND	µg/m³	R17298
2-Butanone (MEK)	TO-15	9/12/2008	1.48	5	7.4	ND	µg/m³	R17298
2-Hexanone	TO-15	9/12/2008	2.05	5	10	ND	µg/m³	R17298
4-Ethyl Toluene	TO-15	9/12/2008	2.46	5	12	ND	µg/m³	R17298
4-Methyl-2-Pentanone (MIBK)	TO-15	9/12/2008	2.05	5	10	ND	µg/m³	R17298
Acetone	TO-15	9/12/2008	9.52	5	48	74	µg/m³	R17298
Benzene	TO-15	9/12/2008	1.6	5	8.0	ND	µg/m³	R17298
Bromodichloromethane	TO-15	9/12/2008	3.35	5	17	ND	µg/m³	R17298
Bromoform	TO-15	9/12/2008	5.17	5	26	ND	µg/m³	R17298
Bromomethane	TO-15	9/12/2008	1.94	5	9.7	ND	µg/m³	R17298
Carbon Disulfide	TO-15	9/12/2008	1.56	5	7.8	ND	µg/m³	R17298
Carbon Tetrachloride	TO-15	9/12/2008	3.15	5	16	ND	µg/m³	R17298
Chlorobenzene	TO-15	9/12/2008	2.3	5	12	ND	µg/m³	R17298
Chloroethane	TO-15	9/12/2008	1.32	5	6.6	ND	µg/m³	R17298
Chloroform	TO-15	9/12/2008	2.44	5	12	ND	µg/m³	R17298
Chloromethane	TO-15	9/12/2008	1.04	5	5.2	ND	µg/m³	R17298
cis-1,2-dichloroethene	TO-15	9/13/2008	1.98	500	990	74000	µg/m³	R17298
cis-1,3-Dichloropropene	TO-15	9/12/2008	2.27	5	11	ND	µg/m³	R17298
Dibromochloromethane	TO-15	9/12/2008	4.26	5	21	ND	µg/m³	R17298
Dichlorodifluoromethane	TO-15	9/12/2008	2.48	5	12	ND	µg/m³	R17298

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

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

Date Received: 9/12/2008
Date Reported: 9/22/2008

Client Sample ID: SOMA-2 EFF
Sample Location: 3815 Broadway (2514)
Sample Matrix: AIR
Date/Time Sampled 9/11/2008 12:10:00 PM

Lab Sample ID: 0809081-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Diisopropyl ether (DIPE)	TO-15	9/12/2008	2.09	5	10	ND	µg/m³	R17298
Ethyl Acetate	TO-15	9/12/2008	1.8	5	9.0	ND	µg/m³	R17298
Ethyl Benzene	TO-15	9/12/2008	2.17	5	11	ND	µg/m³	R17298
Ethyl tert-butyl ether (ETBE)	TO-15	9/12/2008	2.09	5	10	ND	µg/m³	R17298
Freon 113	TO-15	9/12/2008	3.83	5	19	ND	µg/m³	R17298
Hexachlorobutadiene	TO-15	9/12/2008	5.34	5	27	ND	µg/m³	R17298
Hexane	TO-15	9/12/2008	14.1	5	70	ND	µg/m³	R17298
Isopropanol	TO-15	9/12/2008	16.4	5	82	ND	µg/m³	R17298
m,p-Xylene	TO-15	9/12/2008	2.05	5	10	ND	µg/m³	R17298
Methylene Chloride	TO-15	9/12/2008	3.61	5	18	ND	µg/m³	R17298
MTBE	TO-15	9/12/2008	1.81	5	9.0	130	µg/m³	R17298
Naphthalene	TO-15	9/12/2008	2.62	5	13	ND	µg/m³	R17298
o-xylene	TO-15	9/12/2008	2.17	5	11	ND	µg/m³	R17298
Styrene	TO-15	9/12/2008	2.13	5	11	ND	µg/m³	R17298
t-Butyl alcohol (t-Butanol)	TO-15	9/12/2008	6.06	5	30	ND	µg/m³	R17298
tert-Amyl methyl ether (TAME)	TO-15	9/12/2008	2.09	5	10	ND	µg/m³	R17298
Tetrachloroethene	TO-15	9/12/2008	3.39	5	17	ND	µg/m³	R17298
Toluene	TO-15	9/12/2008	1.89	5	9.4	ND	µg/m³	R17298
trans-1,2-Dichloroethene	TO-15	9/12/2008	1.98	5	9.9	940	µg/m³	R17298
Trichloroethene	TO-15	9/12/2008	2.69	5	13	ND	µg/m³	R17298
Trichlorofluoromethane	TO-15	9/12/2008	2.48	5	12	ND	µg/m³	R17298
Vinyl Acetate	TO-15	9/12/2008	1.76	5	8.8	ND	µg/m³	R17298
Vinyl Chloride	TO-15	9/12/2008	1.28	5	6.4	410	µg/m³	R17298
Surr: 4-Bromofluorobenzene	TO-15	9/12/2008	0	5	65-135	113	%REC	R17298
Surr: 4-Bromofluorobenzene	TO-15	9/13/2008	0	500	65-135	91.0	%REC	R17298
Gasoline	TO-3(MOD)	9/13/2008	352	100	35000	ND	µg/m³	G17298
Stoddard Solvent (C7-C12)	TO-3(MOD)	9/13/2008	352	100	35000	160000	µg/m³	GS17298

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

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

Date Received: 9/12/2008
Date Reported: 9/22/2008

Client Sample ID: SOMA-2 INF
Sample Location: 3815 Broadway (2514)
Sample Matrix: AIR
Date/Time Sampled 9/11/2008 12:30:00 PM

Lab Sample ID: 0809081-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/12/2008	1.99	50	100	ND	µg/m³	R17298
1,1,1,2-Tetrachloroethane	TO-15	9/12/2008	3.44	50	170	ND	µg/m³	R17298
1,1,1-Trichloroethane	TO-15	9/12/2008	2.73	50	140	ND	µg/m³	R17298
1,1,2,2-Tetrachloroethane	TO-15	9/13/2008	3.44	2000	6900	ND	µg/m³	R17298
1,1,2-Trichloroethane	TO-15	9/12/2008	2.73	50	140	ND	µg/m³	R17298
1,1-Dichloroethane	TO-15	9/12/2008	2.03	50	100	ND	µg/m³	R17298
1,2,4-Trichlorobenzene	TO-15	9/12/2008	3.56	50	180	ND	µg/m³	R17298
1,2,4-Trimethylbenzene	TO-15	9/13/2008	2.46	2000	4900	20000	µg/m³	R17298
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/12/2008	3.84	50	190	ND	µg/m³	R17298
1,2-Dichlorobenzene	TO-15	9/13/2008	3.01	2000	6000	ND	µg/m³	R17298
1,2-Dichloroethane	TO-15	9/12/2008	2.03	50	100	ND	µg/m³	R17298
1,2-Dichloropropane	TO-15	9/12/2008	2.31	50	120	ND	µg/m³	R17298
1,3,5-Trimethylbenzene	TO-15	9/13/2008	2.46	2000	4900	9500	µg/m³	R17298
1,3-Butadiene	TO-15	9/12/2008	4.44	50	220	ND	µg/m³	R17298
1,3-Dichlorobenzene	TO-15	9/13/2008	3.01	2000	6000	ND	µg/m³	R17298
1,4-Dichlorobenzene	TO-15	9/13/2008	3.01	2000	6000	ND	µg/m³	R17298
1,4-Dioxane	TO-15	9/12/2008	1.8	50	90	ND	µg/m³	R17298
2-Butanone (MEK)	TO-15	9/12/2008	1.48	50	74	ND	µg/m³	R17298
2-Hexanone	TO-15	9/12/2008	2.05	50	100	ND	µg/m³	R17298
4-Ethyl Toluene	TO-15	9/13/2008	2.46	2000	4900	19000	µg/m³	R17298
4-Methyl-2-Pentanone (MIBK)	TO-15	9/12/2008	2.05	50	100	ND	µg/m³	R17298
Acetone	TO-15	9/12/2008	9.52	50	480	ND	µg/m³	R17298
Benzene	TO-15	9/12/2008	1.6	50	80	470	µg/m³	R17298
Bromodichloromethane	TO-15	9/12/2008	3.35	50	170	ND	µg/m³	R17298
Bromoform	TO-15	9/12/2008	5.17	50	260	ND	µg/m³	R17298
Bromomethane	TO-15	9/12/2008	1.94	50	97	ND	µg/m³	R17298
Carbon Disulfide	TO-15	9/12/2008	1.56	50	78	1200	µg/m³	R17298
Carbon Tetrachloride	TO-15	9/12/2008	3.15	50	160	ND	µg/m³	R17298
Chlorobenzene	TO-15	9/12/2008	2.3	50	120	ND	µg/m³	R17298
Chloroethane	TO-15	9/12/2008	1.32	50	66	ND	µg/m³	R17298
Chloroform	TO-15	9/12/2008	2.44	50	120	ND	µg/m³	R17298
Chloromethane	TO-15	9/12/2008	1.04	50	52	ND	µg/m³	R17298
cis-1,2-dichloroethene	TO-15	9/13/2008	1.98	2000	4000	440000	µg/m³	R17298
cis-1,3-Dichloropropene	TO-15	9/12/2008	2.27	50	110	ND	µg/m³	R17298
Dibromochloromethane	TO-15	9/12/2008	4.26	50	210	ND	µg/m³	R17298
Dichlorodifluoromethane	TO-15	9/12/2008	2.48	50	120	ND	µg/m³	R17298
Diisopropyl ether (DIPE)	TO-15	9/12/2008	2.09	50	100	ND	µg/m³	R17298
Ethyl Acetate	TO-15	9/12/2008	1.8	50	90	ND	µg/m³	R17298
Ethyl Benzene	TO-15	9/12/2008	2.17	50	110	ND	µg/m³	R17298
Ethyl tert-butyl ether (ETBE)	TO-15	9/12/2008	2.09	50	100	ND	µg/m³	R17298
Freon 113	TO-15	9/12/2008	3.83	50	190	770	µg/m³	R17298
Hexachlorobutadiene	TO-15	9/12/2008	5.34	50	270	ND	µg/m³	R17298
Hexane	TO-15	9/12/2008	14.1	50	700	ND	µg/m³	R17298

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

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

Date Received: 9/12/2008
Date Reported: 9/22/2008

Client Sample ID: SOMA-2 INF
Sample Location: 3815 Broadway (2514)
Sample Matrix: AIR
Date/Time Sampled 9/11/2008 12:30:00 PM

Lab Sample ID: 0809081-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Isopropanol	TO-15	9/12/2008	16.4	50	820	ND	µg/m³	R17298
m,p-Xylene	TO-15	9/12/2008	2.05	50	100	ND	µg/m³	R17298
Methylene Chloride	TO-15	9/12/2008	3.61	50	180	ND	µg/m³	R17298
MTBE	TO-15	9/12/2008	1.81	50	90	ND	µg/m³	R17298
Naphthalene	TO-15	9/12/2008	2.62	50	130	ND	µg/m³	R17298
o-xylene	TO-15	9/12/2008	2.17	50	110	ND	µg/m³	R17298
Styrene	TO-15	9/12/2008	2.13	50	110	ND	µg/m³	R17298
t-Butyl alcohol (t-Butanol)	TO-15	9/12/2008	6.06	50	300	ND	µg/m³	R17298
tert-Amyl methyl ether (TAME)	TO-15	9/12/2008	2.09	50	100	ND	µg/m³	R17298
Tetrachloroethene	TO-15	9/13/2008	3.39	2000	6800	500000	µg/m³	R17298
Toluene	TO-15	9/12/2008	1.89	50	94	ND	µg/m³	R17298
trans-1,2-Dichloroethene	TO-15	9/12/2008	1.98	50	99	2800	µg/m³	R17298
Trichloroethene	TO-15	9/13/2008	2.69	2000	5400	190000	µg/m³	R17298
Trichlorofluoromethane	TO-15	9/12/2008	2.48	50	120	ND	µg/m³	R17298
Vinyl Acetate	TO-15	9/12/2008	1.76	50	88	ND	µg/m³	R17298
Vinyl Chloride	TO-15	9/12/2008	1.28	50	64	ND	µg/m³	R17298
Surr: 4-Bromofluorobenzene	TO-15	9/13/2008	0	2000	65-135	0 S	%REC	R17298
Surr: 4-Bromofluorobenzene	TO-15	9/12/2008	0	50	65-135	0 S	%REC	R17298

Note: S - Outlying surrogate recovery attributed to TPH interference (heavy end hydrocarbons). Note: S - Outlying surrogate recovery attributed to TPH interference (heavy end hydrocarbons).

Gasoline	TO-3(MOD)	9/13/2008	352	2000	700000	ND	µg/m³	G17298
Stoddard Solvent (C7-C12)	TO-3(MOD)	9/13/2008	352	2000	700000	14000000	µg/m³	GS17298

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

Definitions, legends and Notes

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

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: G17298

Sample ID: **MB-G17298**	SampType: **MBLK**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/11/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **G17298**	TestNo: **TO-3(MOD)**		Analysis Date: **9/11/2008**	SeqNo: **247741**

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

Sample ID: **LCS-G17298**	SampType: **LCS**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/11/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **G17298**	TestNo: **TO-3(MOD)**		Analysis Date: **9/11/2008**	SeqNo: **247742**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	485.0	100	500	0	97.0	50	150				

Sample ID: **LCSD-G17298**	SampType: **LCSD**	TestCode: **TO-3Gas (MO**	Units: **ppbv**	Prep Date: **9/11/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **G17298**	TestNo: **TO-3(MOD)**		Analysis Date: **9/12/2008**	SeqNo: **247743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	485.4	100	500	0	97.1	50	150	485	0.0986	30	

Qualifiers:

3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: GS17298

Sample ID: **MBLK** SampType: **MBLK** TestCode: **TO-3SS (MOD** Units: **µg/m³** Prep Date: **9/13/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **GS17298** TestNo: **TO-3(MOD)** Analysis Date: **9/11/2008** SeqNo: **249129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Stoddard Solvent (C7-C12)	ND	350									

Qualifiers:

3	Recovery of the MS and/or MSD was out of control due t	4	The MS/MSD RPD was out of control due to matrix inter	Q	Spike recovery and RPD control limits do not apply result
R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits		

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK-R17298** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/12/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **R17298** TestNo: **TO-15** Analysis Date: **9/12/2008** SeqNo: **247746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK-R17298**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/12/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **R17298**	TestNo: **TO-15**		Analysis Date: **9/12/2008**	SeqNo: **247746**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	ND	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	ND	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	ND	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	20.26	0	20	0	101	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK1-R17298** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/12/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **R17298** TestNo: **TO-15** Analysis Date: **9/12/2008** SeqNo: **248147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK1-R17298**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/12/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **R17298**	TestNo: **TO-15**		Analysis Date: **9/12/2008**	SeqNo: **248147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	0.2300	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	ND	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	ND	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	20.29	0	20	0	101	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK2-R17298** SampType: **MBLK** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/13/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **R17298** TestNo: **TO-15** Analysis Date: **9/13/2008** SeqNo: **248164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **BLK2-R17298**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/13/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **R17298**	TestNo: **TO-15**		Analysis Date: **9/13/2008**	SeqNo: **248164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	ND	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	ND	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	ND	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	18.10	0	20	0	90.5	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **LCS-R17298**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/12/2008**	RunNo: **17298**		
Client ID: **ZZZZZ**	Batch ID: **R17298**	TestNo: **TO-15**		Analysis Date: **9/12/2008**	SeqNo: **247757**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.40	0.20	20	0	117	65	135				
1,1,1,2-Tetrachloroethane	21.35	0.10	20	0	107	65	135				
1,1,1-Trichloroethane	21.07	0.15	20	0	105	65	135				
1,1,2,2-Tetrachloroethane	23.59	0.15	20	0	118	65	135				
1,1,2-Trichloroethane	22.39	0.19	20	0	112	65	135				
1,1-Dichloroethane	23.36	0.17	20	0	117	65	135				
1,2,4-Trichlorobenzene	20.09	0.070	20	0	100	65	135				
1,2,4-Trimethylbenzene	22.16	0.18	20	0	111	65	135				
1,2-Dibromoethane(Ethylene dibromide	21.18	0.14	20	0	106	65	135				
1,2-Dichlorobenzene	22.94	0.10	20	0	115	65	135				
1,2-Dichloroethane	20.95	0.16	20	0	105	65	135				
1,2-Dichloropropane	20.98	0.22	20	0	105	65	135				
1,3,5-Trimethylbenzene	22.46	0.14	20	0	112	65	135				
1,3-Butadiene	23.43	0.27	20	0	117	65	135				
1,3-Dichlorobenzene	23.01	0.060	20	0	115	65	135				
1,4-Dichlorobenzene	23.32	0.11	20	0	117	65	135				
1,4-Dioxane	20.79	0.14	20	0	104	65	135				
2-Butanone (MEK)	22.43	0.15	20	0	112	65	135				
2-Hexanone	22.31	0.21	20	0	112	65	135				
4-Ethyl Toluene	22.00	0.15	20	0	110	65	135				
4-Methyl-2-Pentanone (MIBK)	20.88	0.16	20	0	104	65	135				
Acetone	23.14	0.24	20	0	116	65	135				
Benzene	22.56	0.28	20	0	113	65	135				
Bromodichloromethane	20.59	0.13	20	0	103	65	135				
Bromoform	21.17	0.17	20	0	106	65	135				
Bromomethane	23.24	0.20	20	0	116	65	135				
Carbon Disulfide	22.38	0.16	20	0	112	65	135				
Carbon Tetrachloride	21.06	0.15	20	0	105	65	135				
Chlorobenzene	23.13	0.092	20	0	116	65	135				
Chloroethane	22.06	0.15	20	0	110	65	135				
Chloroform	22.55	0.40	20	0	113	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **LCS-R17298** SampType: **LCS** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/12/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **R17298** TestNo: **TO-15** Analysis Date: **9/12/2008** SeqNo: **247757**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	18.03	0.35	20	0	90.2	65	135				
cis-1,2-dichloroethene	23.16	0.14	20	0	116	65	135				
cis-1,3-Dichloropropene	21.17	0.080	20	0	106	65	135				
Dibromochloromethane	22.26	0.11	20	0	111	65	135				
Ethyl Acetate	21.30	0.12	20	0	106	65	135				
Ethyl Benzene	22.43	0.093	20	0	112	65	135				
Ethyl tert-butyl ether (ETBE)	22.62	0.16	20	0	113	65	135				
Freon 113	20.61	0.12	20	0	103	65	135				
Hexachlorobutadiene	19.78	0.17	20	0	98.9	65	135				
Hexane	21.13	0.51	20	0	106	65	135				
Isopropanol	19.71	0.40	20	0	98.6	65	135				
m,p-Xylene	44.66	0.12	40	0	112	65	135				
Methylene Chloride	22.72	0.19	20	0	114	65	135				
MTBE	22.60	0.14	20	0	113	65	135				
Naphthalene	21.25	0.50	20	0	106	65	135				
o-xylene	22.10	0.14	20	0	110	65	135				
Styrene	21.48	0.15	20	0	107	65	135				
t-Butyl alcohol (t-Butanol)	22.67	0.16	20	0	113	65	135				
tert-Amyl methyl ether (TAME)	20.31	0.16	20	0	102	65	135				
Tetrachloroethene	21.37	0.19	20	0	107	65	135				
Toluene	20.90	0.14	20	0	104	65	135				
trans-1,2-Dichloroethene	23.53	0.14	20	0	118	65	135				
Trichloroethene	21.32	0.098	20	0	107	65	135				
Trichlorofluoromethane	21.39	0.14	20	0	107	65	135				
Vinyl Acetate	21.28	0.18	20	0	106	65	135				
Vinyl Chloride	25.53	0.097	20	0	128	65	135				
Surr: 4-Bromofluorobenzene	21.32	0	20	0	107	65	135				

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **LCSD-R17298**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/13/2008**	RunNo: **17298**
Client ID: **ZZZZZ**	Batch ID: **R17298**	TestNo: **TO-15**		Analysis Date: **9/13/2008**	SeqNo: **247759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	25.24	0.20	20	0	126	65	135	23.4	7.57	30	
1,1,1,2-Tetrachloroethane	20.36	0.10	20	0	102	65	135	21.35	4.75	30	
1,1,1-Trichloroethane	24.57	0.15	20	0	123	65	135	21.07	15.3	30	
1,1,2,2-Tetrachloroethane	22.56	0.15	20	0	113	65	135	23.59	4.46	30	
1,1,2-Trichloroethane	21.60	0.19	20	0	108	65	135	22.39	3.59	30	
1,1-Dichloroethane	25.38	0.17	20	0	127	65	135	23.36	8.29	30	
1,2,4-Trichlorobenzene	19.06	0.070	20	0	95.3	65	135	20.09	5.26	30	
1,2,4-Trimethylbenzene	21.55	0.18	20	0	108	65	135	22.16	2.79	30	
1,2-Dibromoethane(Ethylene dibromide	20.99	0.14	20	0	105	65	135	21.18	0.901	30	
1,2-Dichlorobenzene	22.43	0.10	20	0	112	65	135	22.94	2.25	30	
1,2-Dichloroethane	21.83	0.16	20	0	109	65	135	20.95	4.11	30	
1,2-Dichloropropane	20.50	0.22	20	0	103	65	135	20.98	2.31	30	
1,3,5-Trimethylbenzene	21.35	0.14	20	0	107	65	135	22.46	5.07	30	
1,3-Butadiene	24.68	0.27	20	0	123	65	135	23.43	5.20	30	
1,3-Dichlorobenzene	22.65	0.060	20	0	113	65	135	23.01	1.58	30	
1,4-Dichlorobenzene	22.80	0.11	20	0	114	65	135	23.32	2.25	30	
1,4-Dioxane	22.41	0.14	20	0	112	65	135	20.79	7.50	30	
2-Butanone (MEK)	24.59	0.15	20	0	123	65	135	22.43	9.19	30	
2-Hexanone	21.47	0.21	20	0	107	65	135	22.31	3.84	30	
4-Ethyl Toluene	21.29	0.15	20	0	106	65	135	22	3.28	30	
4-Methyl-2-Pentanone (MIBK)	21.30	0.16	20	0	106	65	135	20.88	1.99	30	
Acetone	25.87	0.24	20	0	129	65	135	23.14	11.1	30	
Benzene	24.94	0.28	20	0	125	65	135	22.56	10.0	30	
Bromodichloromethane	22.39	0.13	20	0	112	65	135	20.59	8.38	30	
Bromoform	20.43	0.17	20	0	102	65	135	21.17	3.56	30	
Bromomethane	24.53	0.20	20	0	123	65	135	23.24	5.40	30	
Carbon Disulfide	24.49	0.16	20	0	122	65	135	22.38	9.00	30	
Carbon Tetrachloride	23.67	0.15	20	0	118	65	135	21.06	11.7	30	
Chlorobenzene	23.03	0.092	20	0	115	65	135	23.13	0.433	30	
Chloroethane	18.37	0.15	20	0	91.8	65	135	22.06	18.3	30	
Chloroform	24.68	0.40	20	0	123	65	135	22.55	9.02	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809081
Project: 3815 Broadway (2514)

ANALYTICAL QC SUMMARY REPORT

BatchID: R17298

Sample ID: **LCSD-R17298** SampType: **LCSD** TestCode: **TO-15** Units: **ppbv** Prep Date: **9/13/2008** RunNo: **17298**
Client ID: **ZZZZZ** Batch ID: **R17298** TestNo: **TO-15** Analysis Date: **9/13/2008** SeqNo: **247759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	14.34	0.35	20	0	71.7	65	135	18.03	22.8	30	
cis-1,2-dichloroethene	24.76	0.14	20	0	124	65	135	23.16	6.68	30	
cis-1,3-Dichloropropene	21.93	0.080	20	0	110	65	135	21.17	3.53	30	
Dibromochloromethane	21.29	0.11	20	0	106	65	135	22.26	4.45	30	
Ethyl Acetate	24.36	0.12	20	0	122	65	135	21.3	13.4	30	
Ethyl Benzene	21.65	0.093	20	0	108	65	135	22.43	3.54	30	
Ethyl tert-butyl ether (ETBE)	24.48	0.16	20	0	122	65	135	22.62	7.90	30	
Freon 113	23.87	0.12	20	0	119	65	135	20.61	14.7	30	
Hexachlorobutadiene	19.38	0.17	20	0	96.9	65	135	19.78	2.04	30	
Hexane	22.19	0.51	20	0	111	65	135	21.13	4.89	30	
Isopropanol	19.93	0.40	20	0	99.7	65	135	19.71	1.11	30	
m,p-Xylene	43.71	0.12	40	0	109	65	135	44.66	2.15	30	
Methylene Chloride	22.58	0.19	20	0	113	65	135	22.72	0.618	30	
MTBE	24.90	0.14	20	0	125	65	135	22.6	9.68	30	
Naphthalene	21.10	0.50	20	0	106	65	135	21.25	0.708	30	
o-xylene	21.09	0.14	20	0	105	65	135	22.1	4.68	30	
Styrene	21.24	0.15	20	0	106	65	135	21.48	1.12	30	
t-Butyl alcohol (t-Butanol)	23.68	0.16	20	0	118	65	135	22.67	4.36	30	
tert-Amyl methyl ether (TAME)	20.24	0.16	20	0	101	65	135	20.31	0.345	30	
Tetrachloroethene	20.59	0.19	20	0	103	65	135	21.37	3.72	30	
Toluene	21.37	0.14	20	0	107	65	135	20.9	2.22	30	
trans-1,2-Dichloroethene	24.98	0.14	20	0	125	65	135	23.53	5.98	30	
Trichloroethene	21.60	0.098	20	0	108	65	135	21.32	1.30	30	
Trichlorofluoromethane	24.99	0.14	20	0	125	65	135	21.39	15.5	30	
Vinyl Acetate	22.52	0.18	20	0	113	65	135	21.28	5.66	30	
Vinyl Chloride	24.83	0.097	20	0	124	65	135	25.53	2.78	30	
Surr: 4-Bromofluorobenzene	20.00	0	20	0	100	65	135	0	0	30	

Qualifiers:
3 Recovery of the MS and/or MSD was out of control due t
4 The MS/MSD RPD was out of control due to matrix inter
Q Spike recovery and RPD control limits do not apply result
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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

RESET

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 0809081

Company Name: **SOMA Environmental Engineering, Inc.**	Location of Sampling: 3815 Broadway, Oakland
Address: **6620 Owens Drive, Suite A**	Purpose: Soil Vapor Extraction pilot test
City: **Pleasanton** State: **CA** Zip Code: **94588**	Special Instructions / Comments: dry cleaning site
Telephone: **925-734-6400** FAX: **925-734-6401**	
REPORT TO: **Joyce Bobek** SAMPLER: **Jesse Acedillo**	P.O. #: 2514 EMAIL: **jbobek@somaenv.com**

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

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

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

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-3 TPH-gas TPH-Standard Sweet	TO-15 Full List	REMARKS
		~~9/11/8 0800~~	Air	1	TEDLAR			EDF Output Required
001A	SOMA-2 EFF	9/11/8 @1240	"	"	"	X	X	
002A	SOMA-2 INF	9/11/8 @1230	"	"	"	X	X	

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		Jesse Acedillo	9/12/8	1350		Raj Kaur	9-12-08	1:50 pm
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

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

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

Page 1 of 1

Log In By: NDO Date: 9/15 Log In Reviewed By: Date:

Torrent
LABORATORY, INC.

September 29, 2008

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

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

RE: 2514/3815 Broadway,Oakland

Order No.: 0809149

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 samples on 9/19/2008 for the analyses presented in the following report.

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

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

Sincerely,

Laboratory Director

9/24/08
Date

TORRENT LABORATORY, INC.

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

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

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

Date Received: 9/19/2008
Date Reported: 9/29/2008

Client Sample ID: B-8 EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/17/2008 10:15:00 AM

Lab Sample ID: 0809149-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/19/2008	0.794	5	4.0	ND	µg/m³	R17390
1,1,1,2-Tetrachloroethane	TO-15	9/19/2008	0.687	5	3.4	ND	µg/m³	R17390
1,1,1-Trichloroethane	TO-15	9/19/2008	0.819	5	4.1	ND	µg/m³	R17390
1,1,2,2-Tetrachloroethane	TO-15	9/19/2008	1.0305	5	5.2	ND	µg/m³	R17390
1,1,2-Trichloroethane	TO-15	9/19/2008	1.0374	5	5.2	ND	µg/m³	R17390
1,1-Dichloroethane	TO-15	9/19/2008	0.6885	5	3.4	ND	µg/m³	R17390
1,2,4-Trichlorobenzene	TO-15	9/19/2008	0.4984	5	2.5	ND	µg/m³	R17390
1,2,4-Trimethylbenzene	TO-15	9/19/2008	0.8856	5	4.4	ND	µg/m³	R17390
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/19/2008	1.0752	5	5.4	ND	µg/m³	R17390
1,2-Dichlorobenzene	TO-15	9/19/2008	0.601	5	3.0	ND	µg/m³	R17390
1,2-Dichloroethane	TO-15	9/19/2008	0.648	5	3.2	ND	µg/m³	R17390
1,2-Dichloropropane	TO-15	9/19/2008	1.0164	5	5.1	ND	µg/m³	R17390
1,3,5-Trimethylbenzene	TO-15	9/19/2008	0.6888	5	3.4	ND	µg/m³	R17390
1,3-Butadiene	TO-15	9/19/2008	0.5967	5	3.0	ND	µg/m³	R17390
1,3-Dichlorobenzene	TO-15	9/19/2008	0.3606	5	1.8	ND	µg/m³	R17390
1,4-Dichlorobenzene	TO-15	9/19/2008	0.6611	5	3.3	ND	µg/m³	R17390
1,4-Dioxane	TO-15	9/19/2008	0.504	5	2.5	ND	µg/m³	R17390
2-Butanone (MEK)	TO-15	9/19/2008	0.4425	5	2.2	ND	µg/m³	R17390
2-Hexanone	TO-15	9/19/2008	0.861	5	4.3	ND	µg/m³	R17390
4-Ethyl Toluene	TO-15	9/19/2008	0.738	5	3.7	ND	µg/m³	R17390
4-Methyl-2-Pentanone (MIBK)	TO-15	9/19/2008	0.656	5	3.3	ND	µg/m³	R17390
Acetone	TO-15	9/19/2008	0.5712	5	2.9	19.6 J	µg/m³	R17390
Benzene	TO-15	9/19/2008	0.8932	5	4.5	ND	µg/m³	R17390
Bromodichloromethane	TO-15	9/19/2008	0.871	5	4.4	ND	µg/m³	R17390
Bromoform	TO-15	9/19/2008	1.7578	5	8.8	ND	µg/m³	R17390
Bromomethane	TO-15	9/19/2008	0.776	5	3.9	ND	µg/m³	R17390
Carbon Disulfide	TO-15	9/19/2008	0.4976	5	2.5	ND	µg/m³	R17390
Carbon Tetrachloride	TO-15	9/19/2008	0.9435	5	4.7	ND	µg/m³	R17390
Chlorobenzene	TO-15	9/19/2008	0.4232	5	2.1	ND	µg/m³	R17390
Chloroethane	TO-15	9/19/2008	0.396	5	2.0	ND	µg/m³	R17390
Chloroform	TO-15	9/19/2008	1.952	5	9.8	ND	µg/m³	R17390
Chloromethane	TO-15	9/19/2008	0.7245	5	3.6	ND	µg/m³	R17390
cis-1,2-dichloroethene	TO-15	9/19/2008	0.5544	5	2.8	ND	µg/m³	R17390
cis-1,3-Dichloropropene	TO-15	9/19/2008	0.3632	5	1.8	ND	µg/m³	R17390
Dibromochloromethane	TO-15	9/19/2008	0.9372	5	4.7	ND	µg/m³	R17390
Dichlorodifluoromethane	TO-15	9/19/2008	0.7425	5	3.7	ND	µg/m³	R17390

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

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

Date Received: 9/19/2008
Date Reported: 9/29/2008

Client Sample ID: B-8 EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/17/2008 10:15:00 AM

Lab Sample ID: 0809149-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Diisopropyl ether (DIPE)	TO-15	9/19/2008	0.6688	5	3.3	ND	µg/m³	R17390
Ethyl Acetate	TO-15	9/19/2008	0.4248	5	2.1	ND	µg/m³	R17390
Ethyl Benzene	TO-15	9/19/2008	0.31062	5	1.6	ND	µg/m³	R17390
Ethyl tert-butyl ether (ETBE)	TO-15	9/19/2008	0.6688	5	3.3	ND	µg/m³	R17390
Freon 113	TO-15	9/19/2008	0.9192	5	4.6	ND	µg/m³	R17390
Hexachlorobutadiene	TO-15	9/19/2008	1.8139	5	9.1	ND	µg/m³	R17390
Hexane	TO-15	9/19/2008	1.7952	5	9.0	ND	µg/m³	R17390
Isopropanol	TO-15	9/19/2008	1.6359	5	8.2	ND	µg/m³	R17390
m,p-Xylene	TO-15	9/19/2008	0.492	5	2.5	ND	µg/m³	R17390
Methylene Chloride	TO-15	9/19/2008	0.6859	5	3.4	ND	µg/m³	R17390
MTBE	TO-15	9/19/2008	0.5054	5	2.5	ND	µg/m³	R17390
Naphthalene	TO-15	9/19/2008	2.62	5	13	ND	µg/m³	R17390
o-xylene	TO-15	9/19/2008	0.62062	5	3.1	ND	µg/m³	R17390
Styrene	TO-15	9/19/2008	0.639	5	3.2	ND	µg/m³	R17390
t-Butyl alcohol (t-Butanol)	TO-15	9/19/2008	0.4898	5	2.4	ND	µg/m³	R17390
tert-Amyl methyl ether (TAME)	TO-15	9/19/2008	0.6688	5	3.3	ND	µg/m³	R17390
Tetrachloroethene	TO-15	9/19/2008	1.2882	5	6.4	9.2 J	µg/m³	R17390
Toluene	TO-15	9/19/2008	0.5278	5	2.6	ND	µg/m³	R17390
trans-1,2-Dichloroethene	TO-15	9/19/2008	0.5544	5	2.8	ND	µg/m³	R17390
Trichloroethene	TO-15	9/19/2008	0.52626	5	2.6	ND	µg/m³	R17390
Trichlorofluoromethane	TO-15	9/19/2008	0.693	5	3.5	ND	µg/m³	R17390
Vinyl Acetate	TO-15	9/19/2008	0.64064	5	3.2	ND	µg/m³	R17390
Vinyl Chloride	TO-15	9/19/2008	0.24832	5	1.2	ND	µg/m³	R17390
Surr: 4-Bromofluorobenzene	TO-15	9/19/2008	0	5	65-135	90.0	%REC	R17390

Note: The reporting limits were raised due to limited sample was received (tedlar bag). Results reported to the MDL. Values reported between the MDL and RL should be considered as estimated and are flagged with the appropriate "J" qualifier.

Gasoline	TO-3(MOD)	9/21/2008	176	10	1800	ND	µg/m³	G17408
Stoddard Solvent (C7-C12)	TO-3(MOD)	9/21/2008	176	10	1800	2420	µg/m³	G17408

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

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

Date Received: 9/19/2008
Date Reported: 9/29/2008

Client Sample ID: B-8 INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/17/2008 10:30:00 AM

Lab Sample ID: 0809149-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	9/19/2008	0.794	2000	1600	ND	µg/m³	R17390
1,1,1,2-Tetrachloroethane	TO-15	9/19/2008	0.687	2000	1400	ND	µg/m³	R17390
1,1,1-Trichloroethane	TO-15	9/19/2008	0.819	2000	1600	ND	µg/m³	R17390
1,1,2,2-Tetrachloroethane	TO-15	9/19/2008	1.0305	2000	2100	ND	µg/m³	R17390
1,1,2-Trichloroethane	TO-15	9/19/2008	1.0374	2000	2100	ND	µg/m³	R17390
1,1-Dichloroethane	TO-15	9/19/2008	0.6885	2000	1400	ND	µg/m³	R17390
1,1-Difluoroethane	TO-15	9/19/2008	27	2000	54000	ND	µg/m³	R17390
1,2,4-Trichlorobenzene	TO-15	9/19/2008	0.4984	2000	1000	ND	µg/m³	R17390
1,2,4-Trimethylbenzene	TO-15	9/19/2008	0.8856	2000	1800	ND	µg/m³	R17390
1,2-Dibromoethane(Ethylene dibromide)	TO-15	9/19/2008	1.0752	2000	2200	ND	µg/m³	R17390
1,2-Dichlorobenzene	TO-15	9/19/2008	0.601	2000	1200	ND	µg/m³	R17390
1,2-Dichloroethane	TO-15	9/19/2008	0.648	2000	1300	ND	µg/m³	R17390
1,2-Dichloropropane	TO-15	9/19/2008	1.0164	2000	2000	ND	µg/m³	R17390
1,3,5-Trimethylbenzene	TO-15	9/19/2008	0.6888	2000	1400	ND	µg/m³	R17390
1,3-Butadiene	TO-15	9/19/2008	0.5967	2000	1200	ND	µg/m³	R17390
1,3-Dichlorobenzene	TO-15	9/19/2008	0.3606	2000	720	ND	µg/m³	R17390
1,4-Dichlorobenzene	TO-15	9/19/2008	0.6611	2000	1300	ND	µg/m³	R17390
1,4-Dioxane	TO-15	9/19/2008	0.504	2000	1000	ND	µg/m³	R17390
2-Butanone (MEK)	TO-15	9/19/2008	0.4425	2000	880	ND	µg/m³	R17390
2-Hexanone	TO-15	9/19/2008	0.861	2000	1700	ND	µg/m³	R17390
4-Ethyl Toluene	TO-15	9/19/2008	0.738	2000	1500	ND	µg/m³	R17390
4-Methyl-2-Pentanone (MIBK)	TO-15	9/19/2008	0.656	2000	1300	ND	µg/m³	R17390
Acetone	TO-15	9/19/2008	0.5712	2000	1100	ND	µg/m³	R17390
Benzene	TO-15	9/19/2008	0.8932	2000	1800	ND	µg/m³	R17390
Bromodichloromethane	TO-15	9/19/2008	0.871	2000	1700	ND	µg/m³	R17390
Bromoform	TO-15	9/19/2008	1.7578	2000	3500	ND	µg/m³	R17390
Bromomethane	TO-15	9/19/2008	0.776	2000	1600	ND	µg/m³	R17390
Carbon Disulfide	TO-15	9/19/2008	0.4976	2000	1000	ND	µg/m³	R17390
Carbon Tetrachloride	TO-15	9/19/2008	0.9435	2000	1900	ND	µg/m³	R17390
Chlorobenzene	TO-15	9/19/2008	0.4232	2000	850	ND	µg/m³	R17390
Chloroethane	TO-15	9/19/2008	0.396	2000	790	ND	µg/m³	R17390
Chloroform	TO-15	9/19/2008	1.952	2000	3900	ND	µg/m³	R17390
Chloromethane	TO-15	9/19/2008	0.7245	2000	1400	ND	µg/m³	R17390
cis-1,2-dichloroethene	TO-15	9/19/2008	0.5544	2000	1100	ND	µg/m³	R17390
cis-1,3-Dichloropropene	TO-15	9/19/2008	0.3632	2000	730	ND	µg/m³	R17390
Dibromochloromethane	TO-15	9/19/2008	0.9372	2000	1900	ND	µg/m³	R17390
Dichlorodifluoromethane	TO-15	9/19/2008	0.7425	2000	1500	ND	µg/m³	R17390
Diisopropyl ether (DIPE)	TO-15	9/19/2008	0.6688	2000	1300	ND	µg/m³	R17390
Ethyl Acetate	TO-15	9/19/2008	0.4248	2000	850	ND	µg/m³	R17390
Ethyl Benzene	TO-15	9/19/2008	0.31062	2000	620	ND	µg/m³	R17390
Ethyl tert-butyl ether (ETBE)	TO-15	9/19/2008	0.6688	2000	1300	ND	µg/m³	R17390
Freon 113	TO-15	9/19/2008	0.9192	2000	1800	ND	µg/m³	R17390
Hexachlorobutadiene	TO-15	9/19/2008	1.8139	2000	3600	ND	µg/m³	R17390

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

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

Date Received: 9/19/2008
Date Reported: 9/29/2008

Client Sample ID: B-8 INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 9/17/2008 10:30:00 AM

Lab Sample ID: 0809149-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	9/19/2008	1.7952	2000	3600	ND	µg/m³	R17390
Isopropanol	TO-15	9/19/2008	1.6359	2000	3300	ND	µg/m³	R17390
m,p-Xylene	TO-15	9/19/2008	0.492	2000	980	ND	µg/m³	R17390
Methylene Chloride	TO-15	9/19/2008	0.6859	2000	1400	ND	µg/m³	R17390
MTBE	TO-15	9/19/2008	0.5054	2000	1000	ND	µg/m³	R17390
Naphthalene	TO-15	9/19/2008	2.62	2000	5200	ND	µg/m³	R17390
o-xylene	TO-15	9/19/2008	0.62062	2000	1200	ND	µg/m³	R17390
Styrene	TO-15	9/19/2008	0.639	2000	1300	ND	µg/m³	R17390
t-Butyl alcohol (t-Butanol)	TO-15	9/19/2008	0.4898	2000	980	ND	µg/m³	R17390
tert-Amyl methyl ether (TAME)	TO-15	9/19/2008	0.6688	2000	1300	ND	µg/m³	R17390
Tetrachloroethene	TO-15	9/19/2008	1.2882	2000	2600	6900	µg/m³	R17390
Toluene	TO-15	9/19/2008	0.5278	2000	1100	ND	µg/m³	R17390
trans-1,2-Dichloroethene	TO-15	9/19/2008	0.5544	2000	1100	ND	µg/m³	R17390
Trichloroethene	TO-15	9/19/2008	0.52626	2000	1100	ND	µg/m³	R17390
Trichlorofluoromethane	TO-15	9/19/2008	0.693	2000	1400	ND	µg/m³	R17390
Vinyl Acetate	TO-15	9/19/2008	0.64064	2000	1300	ND	µg/m³	R17390
Vinyl Chloride	TO-15	9/19/2008	0.24832	2000	500	ND	µg/m³	R17390
Surr: 4-Bromofluorobenzene	TO-15	9/19/2008	0	2000	65-135	92.4	%REC	R17390

Note: Sample required dilution due to high concentrations of non-target compounds (heavy end-see TO3 data).

Gasoline	TO-3(MOD)	9/21/2008	176	2000	350000	ND	µg/m³	G17408
Stoddard Solvent (C7-C12)	TO-3(MOD)	9/21/2008	176	2000	350000	6400000	µg/m³	G17408

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

Definitions, legends and Notes

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

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: G17408

Sample ID	**MB-G17408**	SampType:	**MBLK**	TestCode:	**TO-3Gas (MO**	Units:	**ppbv**	Prep Date:	**9/21/2008**	RunNo:	**17408**
Client ID:	**ZZZZZ**	Batch ID:	**G17408**	TestNo:	**TO-3(MOD)**			Analysis Date:	**9/21/2008**	SeqNo:	**249743**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50									

Sample ID	**LCS-G17408**	SampType:	**LCS**	TestCode:	**TO-3Gas (MO**	Units:	**ppbv**	Prep Date:	**9/21/2008**	RunNo:	**17408**
Client ID:	**ZZZZZ**	Batch ID:	**G17408**	TestNo:	**TO-3(MOD)**			Analysis Date:	**9/21/2008**	SeqNo:	**249744**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	482.0	100	500	0	96.4	50	150				

Sample ID	**LCSD-G17408**	SampType:	**LCSD**	TestCode:	**TO-3Gas (MO**	Units:	**ppbv**	Prep Date:	**9/21/2008**	RunNo:	**17408**
Client ID:	**ZZZZZ**	Batch ID:	**G17408**	TestNo:	**TO-3(MOD)**			Analysis Date:	**9/21/2008**	SeqNo:	**249745**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	525.7	100	500	0	105	50	150	482	8.67	30	

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/18/2008**	RunNo: **17390**				
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/18/2008**	SeqNo: **248992**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/18/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/18/2008**	SeqNo: **248992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	ND	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	ND	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	ND	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	17.69	0	20	0	88.4	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/19/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/19/2008**	SeqNo: **249005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/19/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/19/2008**	SeqNo: **249005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	17.62	0	20	0	88.1	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/21/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/21/2008**	SeqNo: **249017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.20									
1,1,1,2-Tetrachloroethane	ND	0.10									
1,1,1-Trichloroethane	ND	0.15									
1,1,2,2-Tetrachloroethane	ND	0.15									
1,1,2-Trichloroethane	ND	0.19									
1,1-Dichloroethane	ND	0.17									
1,2,4-Trichlorobenzene	ND	0.070									
1,2,4-Trimethylbenzene	ND	0.18									
1,2-Dibromoethane(Ethylene dibromide	ND	0.14									
1,2-Dichlorobenzene	ND	0.10									
1,2-Dichloroethane	ND	0.16									
1,2-Dichloropropane	ND	0.22									
1,3,5-Trimethylbenzene	ND	0.14									
1,3-Butadiene	ND	0.27									
1,3-Dichlorobenzene	ND	0.060									
1,4-Dichlorobenzene	ND	0.11									
1,4-Dioxane	ND	0.14									
2-Butanone (MEK)	ND	0.15									
2-Hexanone	ND	0.21									
4-Ethyl Toluene	ND	0.15									
4-Methyl-2-Pentanone (MIBK)	ND	0.16									
Acetone	ND	0.24									
Benzene	ND	0.28									
Bromodichloromethane	ND	0.13									
Bromoform	ND	0.17									
Bromomethane	ND	0.20									
Carbon Disulfide	ND	0.16									
Carbon Tetrachloride	ND	0.15									
Chlorobenzene	ND	0.092									
Chloroethane	ND	0.15									
Chloroform	ND	0.40									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/21/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/21/2008**	SeqNo: **249017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.35									
cis-1,2-dichloroethene	ND	0.14									
cis-1,3-Dichloropropene	ND	0.080									
Dibromochloromethane	ND	0.11									
Dichlorodifluoromethane	ND	0.15									
Diisopropyl ether (DIPE)	ND	0.16									
Ethyl Acetate	ND	0.12									
Ethyl Benzene	ND	0.093									
Ethyl tert-butyl ether (ETBE)	ND	0.16									
Freon 113	ND	0.12									
Hexachlorobutadiene	ND	0.17									
Hexane	ND	0.51									
Isopropanol	ND	0.40									
m,p-Xylene	ND	0.12									
Methylene Chloride	ND	0.19									
MTBE	ND	0.14									
Naphthalene	ND	0.50									
o-xylene	ND	0.14									
Styrene	ND	0.15									
t-Butyl alcohol (t-Butanol)	ND	0.16									
tert-Amyl methyl ether (TAME)	ND	0.16									
Tetrachloroethene	ND	0.19									
Toluene	ND	0.14									
trans-1,2-Dichloroethene	ND	0.14									
Trichloroethene	ND	0.098									
Trichlorofluoromethane	ND	0.14									
Vinyl Acetate	ND	0.18									
Vinyl Chloride	ND	0.097									
Surr: 4-Bromofluorobenzene	18.74	0	20	0	93.7	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **LCS**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/18/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/18/2008**	SeqNo: **248993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.14	0.50	20	0	116	65	135				
1,1,1,2-Tetrachloroethane	18.04	0.50	20	0	90.2	65	135				
1,1,1-Trichloroethane	21.81	0.50	20	0	109	65	135				
1,1,2,2-Tetrachloroethane	20.23	0.50	20	0	101	65	135				
1,1,2-Trichloroethane	19.52	0.50	20	0	97.6	65	135				
1,1-Dichloroethane	22.59	0.50	20	0	113	65	135				
1,2,4-Trichlorobenzene	16.48	0.50	20	0	82.4	65	135				
1,2,4-Trimethylbenzene	18.98	0.50	20	0	94.9	65	135				
1,2-Dibromoethane(Ethylene dibromide	19.05	0.50	20	0	95.2	65	135				
1,2-Dichlorobenzene	19.78	0.50	20	0	98.9	65	135				
1,2-Dichloroethane	19.14	0.50	20	0	95.7	65	135				
1,2-Dichloropropane	19.34	0.50	20	0	96.7	65	135				
1,3,5-Trimethylbenzene	19.29	0.50	20	0	96.5	65	135				
1,3-Butadiene	21.69	2.0	20	0	108	65	135				
1,3-Dichlorobenzene	19.94	0.50	20	0	99.7	65	135				
1,4-Dichlorobenzene	20.16	0.50	20	0	101	65	135				
1,4-Dioxane	19.32	0.50	20	0	96.6	65	135				
2-Butanone (MEK)	20.32	0.50	20	0	102	65	135				
2-Hexanone	18.58	0.50	20	0	92.9	65	135				
4-Ethyl Toluene	19.01	0.50	20	0	95.0	65	135				
4-Methyl-2-Pentanone (MIBK)	19.18	0.50	20	0	95.9	65	135				
Acetone	24.28	4.0	20	0	121	65	135				
Benzene	23.23	0.50	20	0	116	65	135				
Bromodichloromethane	19.82	0.50	20	0	99.1	65	135				
Bromoform	18.39	0.50	20	0	92.0	65	135				
Bromomethane	22.08	0.50	20	0	110	65	135				
Carbon Disulfide	22.34	0.50	20	0	112	65	135				
Carbon Tetrachloride	22.03	0.50	20	0	110	65	135				
Chlorobenzene	21.07	0.50	20	0	105	65	135				
Chloroethane	16.26	0.50	20	0	81.3	65	135				
Chloroform	23.97	0.50	20	0	120	65	135				

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **LCS**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/18/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/18/2008**	SeqNo: **248993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	12.94	0.50	20	0	64.7	65	135				
cis-1,2-dichloroethene	23.11	0.50	20	0	116	65	135				
cis-1,3-Dichloropropene	19.70	0.50	20	0	98.5	65	135				
Dibromochloromethane	19.81	0.50	20	0	99.0	65	135				
Diisopropyl ether (DIPE)	20.31	0.50	20	0	102	65	135				
Ethyl Acetate	19.86	0.50	20	0	99.3	65	135				
Ethyl Benzene	19.62	0.50	20	0	98.1	65	135				
Ethyl tert-butyl ether (ETBE)	21.58	0.50	20	0	108	65	135				
Freon 113	20.37	0.50	20	0	102	65	135				
Hexachlorobutadiene	17.46	0.50	20	0	87.3	65	135				
Hexane	19.53	2.0	20	0	97.6	65	135				
Isopropanol	19.42	4.0	20	0	97.1	65	135				
m,p-Xylene	39.06	0.50	40	0	97.6	65	135				
Methylene Chloride	19.87	1.0	20	0	99.4	65	135				
MTBE	21.13	0.50	20	0	106	65	135				
Naphthalene	18.04	5.0	20	0	90.2	65	135				
o-xylene	19.36	0.50	20	0	96.8	65	135				
Styrene	19.18	0.50	20	0	95.9	65	135				
t-Butyl alcohol (t-Butanol)	19.96	2.0	20	0	99.8	65	135				
tert-Amyl methyl ether (TAME)	17.35	0.50	20	0	86.8	65	135				
Tetrachloroethene	18.62	0.50	20	0	93.1	65	135				
Toluene	19.32	0.50	20	0	96.6	65	135				
trans-1,2-Dichloroethene	22.92	0.50	20	0	115	65	135				
Trichloroethene	19.48	0.50	20	0	97.4	65	135				
Trichlorofluoromethane	23.68	0.50	20	0	118	65	135				
Vinyl Acetate	22.36	0.50	20	0	112	65	135				
Vinyl Chloride	21.73	0.50	20	0	109	65	135				
Surr: 4-Bromofluorobenzene	18.40	0	20	0	92.0	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/19/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/19/2008**	SeqNo: **248994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.85	0.50	20	0	119	65	135	23.14	3.02	30	
1,1,1,2-Tetrachloroethane	19.99	0.50	20	0	100	65	135	18.04	10.3	30	
1,1,1-Trichloroethane	21.83	0.50	20	0	109	65	135	21.81	0.0917	30	
1,1,2,2-Tetrachloroethane	22.23	0.50	20	0	111	65	135	20.23	9.42	30	
1,1,2-Trichloroethane	22.04	0.50	20	0	110	65	135	19.52	12.1	30	
1,1-Dichloroethane	23.64	0.50	20	0	118	65	135	22.59	4.54	30	
1,2,4-Trichlorobenzene	17.49	0.50	20	0	87.5	65	135	16.48	5.95	30	
1,2,4-Trimethylbenzene	20.23	0.50	20	0	101	65	135	18.98	6.38	30	
1,2-Dibromoethane(Ethylene dibromide	20.62	0.50	20	0	103	65	135	19.05	7.92	30	
1,2-Dichlorobenzene	20.82	0.50	20	0	104	65	135	19.78	5.12	30	
1,2-Dichloroethane	21.07	0.50	20	0	105	65	135	19.14	9.60	30	
1,2-Dichloropropane	21.41	0.50	20	0	107	65	135	19.34	10.2	30	
1,3,5-Trimethylbenzene	20.40	0.50	20	0	102	65	135	19.29	5.59	30	
1,3-Butadiene	25.13	2.0	20	0	126	65	135	21.69	14.7	30	
1,3-Dichlorobenzene	21.05	0.50	20	0	105	65	135	19.94	5.42	30	
1,4-Dichlorobenzene	21.06	0.50	20	0	105	65	135	20.16	4.37	30	
1,4-Dioxane	22.09	0.50	20	0	110	65	135	19.32	13.4	30	
2-Butanone (MEK)	22.14	0.50	20	0	111	65	135	20.32	8.57	30	
2-Hexanone	21.46	0.50	20	0	107	65	135	18.58	14.4	30	
4-Ethyl Toluene	20.21	0.50	20	0	101	65	135	19.01	6.12	30	
4-Methyl-2-Pentanone (MIBK)	21.06	0.50	20	0	105	65	135	19.18	9.34	30	
Acetone	24.99	4.0	20	0	125	65	135	24.28	2.88	30	
Benzene	22.96	0.50	20	0	115	65	135	23.23	1.17	30	
Bromodichloromethane	21.36	0.50	20	0	107	65	135	19.82	7.48	30	
Bromoform	19.53	0.50	20	0	97.6	65	135	18.39	6.01	30	
Bromomethane	23.76	0.50	20	0	119	65	135	22.08	7.33	30	
Carbon Disulfide	23.09	0.50	20	0	115	65	135	22.34	3.30	30	
Carbon Tetrachloride	21.99	0.50	20	0	110	65	135	22.03	0.182	30	
Chlorobenzene	21.81	0.50	20	0	109	65	135	21.07	3.45	30	
Chloroethane	19.22	0.50	20	0	96.1	65	135	16.26	16.7	30	
Chloroform	23.48	0.50	20	0	117	65	135	23.97	2.07	30	

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0809149
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17390

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **9/19/2008**	RunNo: **17390**
Client ID: **ZZZZZ**	Batch ID: **R17390**	TestNo: **TO-15**		Analysis Date: **9/19/2008**	SeqNo: **248994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	15.21	0.50	20	0	76.0	65	135	12.94	16.1	30	
cis-1,2-dichloroethene	23.69	0.50	20	0	118	65	135	23.11	2.48	30	
cis-1,3-Dichloropropene	21.49	0.50	20	0	107	65	135	19.7	8.69	30	
Dibromochloromethane	21.07	0.50	20	0	105	65	135	19.81	6.16	30	
Diisopropyl ether (DIPE)	21.33	0.50	20	0	107	65	135	20.31	4.90	30	
Ethyl Acetate	22.00	0.50	20	0	110	65	135	19.86	10.2	30	
Ethyl Benzene	20.26	0.50	20	0	101	65	135	19.62	3.21	30	
Ethyl tert-butyl ether (ETBE)	23.28	0.50	20	0	116	65	135	21.58	7.58	30	
Freon 113	20.66	0.50	20	0	103	65	135	20.37	1.41	30	
Hexachlorobutadiene	17.89	0.50	20	0	89.4	65	135	17.46	2.43	30	
Hexane	21.20	2.0	20	0	106	65	135	19.53	8.20	30	
Isopropanol	21.83	4.0	20	0	109	65	135	19.42	11.7	30	
m,p-Xylene	41.40	0.50	40	0	104	65	135	39.06	5.82	30	
Methylene Chloride	21.90	1.0	20	0	110	65	135	19.87	9.72	30	
MTBE	23.23	0.50	20	0	116	65	135	21.13	9.47	30	
Naphthalene	18.43	5.0	20	0	92.2	65	135	18.04	2.14	30	
o-xylene	20.44	0.50	20	0	102	65	135	19.36	5.43	30	
Styrene	20.20	0.50	20	0	101	65	135	19.18	5.18	30	
t-Butyl alcohol (t-Butanol)	23.89	2.0	20	0	119	65	135	19.96	17.9	30	
tert-Amyl methyl ether (TAME)	21.00	0.50	20	0	105	65	135	17.35	19.0	30	
Tetrachloroethene	20.70	0.50	20	0	104	65	135	18.62	10.6	30	
Toluene	20.07	0.50	20	0	100	65	135	19.32	3.81	30	
trans-1,2-Dichloroethene	23.76	0.50	20	0	119	65	135	22.92	3.60	30	
Trichloroethene	20.70	0.50	20	0	104	65	135	19.48	6.07	30	
Trichlorofluoromethane	25.46	0.50	20	0	127	65	135	23.68	7.24	30	
Vinyl Acetate	23.36	0.50	20	0	117	65	135	22.36	4.37	30	
Vinyl Chloride	26.01	0.50	20	0	130	65	135	21.73	17.9	30	
Surr: 4-Bromofluorobenzene	19.98	0	20	0	99.9	65	135	0	0	30	

Qualifiers:

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

Torrent Laboratory, Inc.

WORK ORDER Summary

22-Sep-08

Work Order 0809149

Client ID: SOMA ENVIRRONMENTAL

Project: 2514/3815 Broadway,Oakland **QC Level:**

Comments: 5 day TAT!Needs EDF!! Received 2 tedlars. TO3 for Gas and Stoddard Solvent, TO-15 full list! Report to Joyce!

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Hld	MS	SEL	Sub	Storage
0809149-001A	B-8 EFF	9/17/2008 10:15:00 AM	9/19/2008	9/25/2008	Air	EDF	☐	☐	☐	☐	SR
				9/25/2008		TO-15 UG/M3	☐	☐	☐	☐	SR
				9/25/2008		TO-3GAS (MOD) UG/M3	☐	☐	☐	☐	SR
				9/25/2008		TO-3SS (MOD) UG/M3	☐	☐	☐	☐	SR
0809149-002A	B-8 INF	9/17/2008 10:30:00 AM		9/25/2008		TO-15 UG/M3	☐	☐	☐	☐	SR
				9/25/2008		TO-3GAS (MOD) UG/M3	☐	☐	☐	☐	SR
				9/25/2008		TO-3SS (MOD) UG/M3	☐	☐	☐	☐	SR

Torrent LABORATORY, INC.

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

RESET

CHAIN OF CUSTODY

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY

LAB WORK ORDER NO: 0809149

Company Name: **SOMA Environmental Engineering**	Location of Sampling: **3815 Broadway, Oakland**
Address: **6620 Owens Dr., Suite A**	Purpose: **soil vapor extraction pilot test**
City: **Pleasanton** State: **CA** Zip Code: **94588**	Special Instructions / Comments:
Telephone: **925.734.6400** FAX: **925.734.6401**	**dry cleaning site**
REPORT TO: Joyce Bobek **SAMPLER: Jesse Acedillo**	**P.O. #: 2514** **EMAIL: jbobek@somaenv.com**

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

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

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

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-3 - TPH-g, TPH standard cutoff	TO-15 - full list								REMARKS
001A	B-8 EFF	9/17/8 @ 1015	air	1	tedlar	✓	✓								
002A	B-8 INF	9/17/8 @ 1030	air	1	tedlar	✓	✓								

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Jesse Acedillo	Jesse Acedillo	9/18/8	1600	Joyce Bobek	Joyce Bobek	9-18-08	1600
2	Joyce Bobek	Joyce Bobek	9/19/08	12:15	C. Moore	C. Moore	9/19	12:15

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

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

Page _____ of _____

Log In By: C. Moore Date: 9/19 Log In Reviewed By: C Moore Date: 12:45

Torrent
LABORATORY, INC.

October 29, 2008

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

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

RE: 2514/3815 Broadway,Oakland

Order No.: 0810162

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 samples on 10/22/2008 for the analyses presented in the following report.

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

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

Sincerely,

Laboratory Director 10/29/08 Date

TORRENT LABORATORY, INC.

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

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

Date Received: 10/22/2008
Date Reported: 10/29/2008

Summary Report

Composite-EFF **Toxic Organics in Air by EPA TO-15** **Lab ID: 0810162-001A**

Parameter	Preped	Analyzed	Result	RL	Unit
2-Butanone (MEK)	10/22/2008	10/22/2008	6.9	3.0	µg/m³
Carbon Disulfide	10/22/2008	10/22/2008	9.2	3.1	µg/m³
Toluene	10/22/2008	10/22/2008	11	3.8	µg/m³

Composite-EFF **TO-3 (Mod)Air ug/m3** **Lab ID: 0810162-001A**

Parameter	Preped	Analyzed	Result	RL	Unit
Stoddard Solvent (C7-C12)	10/23/2008	10/23/2008	4000	1800	µg/m³

Composite- INF **Toxic Organics in Air by EPA TO-15** **Lab ID: 0810162-002A**

Parameter	Preped	Analyzed	Result	RL	Unit
cis-1,2-dichloroethene	10/23/2008	10/23/2008	15000	990	µg/m³
Tetrachloroethene	10/23/2008	10/23/2008	87000	1700	µg/m³
Trichloroethene	10/23/2008	10/23/2008	6800	1300	µg/m³

Composite- INF **TO-3 (Mod)Air ug/m3** **Lab ID: 0810162-002A**

Parameter	Preped	Analyzed	Result	RL	Unit
Stoddard Solvent (C7-C12)	10/23/2008	10/23/2008	2300000	1800000	µg/m³

TORRENT LABORATORY, INC.

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

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

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

Date Received: 10/22/2008
Date Reported: 10/29/2008

Client Sample ID: Composite-EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 10/20/2008 9:45:00 AM

Lab Sample ID: 0810162-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	10/22/2008	1.99	2	4.0	ND	µg/m³	R17681
1,1,1,2-Tetrachloroethane	TO-15	10/22/2008	3.44	2	6.9	ND	µg/m³	R17681
1,1,1-Trichloroethane	TO-15	10/22/2008	2.73	2	5.5	ND	µg/m³	R17681
1,1,2,2-Tetrachloroethane	TO-15	10/22/2008	3.44	2	6.9	ND	µg/m³	R17681
1,1,2-Trichloroethane	TO-15	10/22/2008	2.73	2	5.5	ND	µg/m³	R17681
1,1-Dichloroethane	TO-15	10/22/2008	2.03	2	4.1	ND	µg/m³	R17681
1,1-Difluoroethane	TO-15	10/22/2008	27	2	54	ND	µg/m³	R17681
1,2,4-Trichlorobenzene	TO-15	10/22/2008	3.56	2	7.1	ND	µg/m³	R17681
1,2,4-Trimethylbenzene	TO-15	10/22/2008	2.46	2	4.9	ND	µg/m³	R17681
1,2-Dibromoethane(Ethylene dibromide)	TO-15	10/22/2008	3.84	2	7.7	ND	µg/m³	R17681
1,2-Dichlorobenzene	TO-15	10/22/2008	3.01	2	6.0	ND	µg/m³	R17681
1,2-Dichloroethane	TO-15	10/22/2008	2.03	2	4.1	ND	µg/m³	R17681
1,2-Dichloropropane	TO-15	10/22/2008	2.31	2	4.6	ND	µg/m³	R17681
1,3,5-Trimethylbenzene	TO-15	10/22/2008	2.46	2	4.9	ND	µg/m³	R17681
1,3-Butadiene	TO-15	10/22/2008	4.44	2	8.9	ND	µg/m³	R17681
1,3-Dichlorobenzene	TO-15	10/22/2008	3.01	2	6.0	ND	µg/m³	R17681
1,4-Dichlorobenzene	TO-15	10/22/2008	3.01	2	6.0	ND	µg/m³	R17681
1,4-Dioxane	TO-15	10/22/2008	1.8	2	3.6	ND	µg/m³	R17681
2-Butanone (MEK)	TO-15	10/22/2008	1.48	2	3.0	6.9	µg/m³	R17681
2-Hexanone	TO-15	10/22/2008	2.05	2	4.1	ND	µg/m³	R17681
4-Ethyl Toluene	TO-15	10/22/2008	2.46	2	4.9	ND	µg/m³	R17681
4-Methyl-2-Pentanone (MIBK)	TO-15	10/22/2008	2.05	2	4.1	ND	µg/m³	R17681
Acetone	TO-15	10/22/2008	9.52	2	19	ND	µg/m³	R17681
Benzene	TO-15	10/22/2008	1.6	2	3.2	ND	µg/m³	R17681
Bromodichloromethane	TO-15	10/22/2008	3.35	2	6.7	ND	µg/m³	R17681
Bromoform	TO-15	10/22/2008	5.17	2	10	ND	µg/m³	R17681
Bromomethane	TO-15	10/22/2008	1.94	2	3.9	ND	µg/m³	R17681
Carbon Disulfide	TO-15	10/22/2008	1.56	2	3.1	9.2	µg/m³	R17681
Carbon Tetrachloride	TO-15	10/22/2008	3.15	2	6.3	ND	µg/m³	R17681
Chlorobenzene	TO-15	10/22/2008	2.3	2	4.6	ND	µg/m³	R17681
Chloroethane	TO-15	10/22/2008	1.32	2	2.6	ND	µg/m³	R17681
Chloroform	TO-15	10/22/2008	2.44	2	4.9	ND	µg/m³	R17681
Chloromethane	TO-15	10/22/2008	1.04	2	2.1	ND	µg/m³	R17681
cis-1,2-dichloroethene	TO-15	10/22/2008	1.98	2	4.0	ND	µg/m³	R17681
cis-1,3-Dichloropropene	TO-15	10/22/2008	2.27	2	4.5	ND	µg/m³	R17681
Dibromochloromethane	TO-15	10/22/2008	4.26	2	8.5	ND	µg/m³	R17681

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

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

Date Received: 10/22/2008
Date Reported: 10/29/2008

Client Sample ID: Composite-EFF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 10/20/2008 9:45:00 AM

Lab Sample ID: 0810162-001
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Dichlorodifluoromethane	TO-15	10/22/2008	2.48	2	5.0	ND	µg/m³	R17681
Diisopropyl ether (DIPE)	TO-15	10/22/2008	2.09	2	4.2	ND	µg/m³	R17681
Ethyl Acetate	TO-15	10/22/2008	1.8	2	3.6	ND	µg/m³	R17681
Ethyl Benzene	TO-15	10/22/2008	2.17	2	4.3	ND	µg/m³	R17681
Ethyl tert-butyl ether (ETBE)	TO-15	10/22/2008	2.09	2	4.2	ND	µg/m³	R17681
Freon 113	TO-15	10/22/2008	3.83	2	7.7	ND	µg/m³	R17681
Hexachlorobutadiene	TO-15	10/22/2008	5.34	2	11	ND	µg/m³	R17681
Hexane	TO-15	10/22/2008	14.1	2	28	ND	µg/m³	R17681
Isopropanol	TO-15	10/22/2008	16.4	2	33	ND	µg/m³	R17681
m,p-Xylene	TO-15	10/22/2008	2.05	2	4.1	ND	µg/m³	R17681
Methylene Chloride	TO-15	10/22/2008	3.61	2	7.2	ND	µg/m³	R17681
MTBE	TO-15	10/22/2008	1.81	2	3.6	ND	µg/m³	R17681
Naphthalene	TO-15	10/22/2008	2.62	2	5.2	ND	µg/m³	R17681
o-xylene	TO-15	10/22/2008	2.17	2	4.3	ND	µg/m³	R17681
Styrene	TO-15	10/22/2008	2.13	2	4.3	ND	µg/m³	R17681
t-Butyl alcohol (t-Butanol)	TO-15	10/22/2008	6.06	2	12	ND	µg/m³	R17681
tert-Amyl methyl ether (TAME)	TO-15	10/22/2008	2.09	2	4.2	ND	µg/m³	R17681
Tetrachloroethene	TO-15	10/22/2008	3.39	2	6.8	ND	µg/m³	R17681
Toluene	TO-15	10/22/2008	1.89	2	3.8	11	µg/m³	R17681
trans-1,2-Dichloroethene	TO-15	10/22/2008	1.98	2	4.0	ND	µg/m³	R17681
Trichloroethene	TO-15	10/22/2008	2.69	2	5.4	ND	µg/m³	R17681
Trichlorofluoromethane	TO-15	10/22/2008	2.48	2	5.0	ND	µg/m³	R17681
Vinyl Acetate	TO-15	10/22/2008	1.76	2	3.5	ND	µg/m³	R17681
Vinyl Chloride	TO-15	10/22/2008	1.28	2	2.6	ND	µg/m³	R17681
Surr: 4-Bromofluorobenzene	TO-15	10/22/2008	0	2	65-135	90.0	%REC	R17681
Gasoline	TO-3(MOD)	10/23/2008	352	5	1800	ND	µg/m³	G17681
Stoddard Solvent (C7-C12)	TO-3(MOD)	10/23/2008	352	5	1800	4000x	µg/m³	G17681

Note: x - Result reported as Stoddard Solvent but sample chromatogram does not match requested fuel standard pattern.

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

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

Date Received: 10/22/2008
Date Reported: 10/29/2008

Client Sample ID: Composite- INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 10/20/2008 10:00:00 AM

Lab Sample ID: 0810162-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
1,1 - Dichloroethene	TO-15	10/23/2008	1.99	500	1000	ND	µg/m³	R17681
1,1,1,2-Tetrachloroethane	TO-15	10/23/2008	3.44	500	1700	ND	µg/m³	R17681
1,1,1-Trichloroethane	TO-15	10/23/2008	2.73	500	1400	ND	µg/m³	R17681
1,1,2,2-Tetrachloroethane	TO-15	10/23/2008	3.44	500	1700	ND	µg/m³	R17681
1,1,2-Trichloroethane	TO-15	10/23/2008	2.73	500	1400	ND	µg/m³	R17681
1,1-Dichloroethane	TO-15	10/23/2008	2.03	500	1000	ND	µg/m³	R17681
1,1-Difluoroethane	TO-15	10/23/2008	27	500	14000	ND	µg/m³	R17681
1,2,4-Trichlorobenzene	TO-15	10/23/2008	3.56	500	1800	ND	µg/m³	R17681
1,2,4-Trimethylbenzene	TO-15	10/23/2008	2.46	500	1200	ND	µg/m³	R17681
1,2-Dibromoethane(Ethylene dibromide)	TO-15	10/23/2008	3.84	500	1900	ND	µg/m³	R17681
1,2-Dichlorobenzene	TO-15	10/23/2008	3.01	500	1500	ND	µg/m³	R17681
1,2-Dichloroethane	TO-15	10/23/2008	2.03	500	1000	ND	µg/m³	R17681
1,2-Dichloropropane	TO-15	10/23/2008	2.31	500	1200	ND	µg/m³	R17681
1,3,5-Trimethylbenzene	TO-15	10/23/2008	2.46	500	1200	ND	µg/m³	R17681
1,3-Butadiene	TO-15	10/23/2008	4.44	500	2200	ND	µg/m³	R17681
1,3-Dichlorobenzene	TO-15	10/23/2008	3.01	500	1500	ND	µg/m³	R17681
1,4-Dichlorobenzene	TO-15	10/23/2008	3.01	500	1500	ND	µg/m³	R17681
1,4-Dioxane	TO-15	10/23/2008	1.8	500	900	ND	µg/m³	R17681
2-Butanone (MEK)	TO-15	10/23/2008	1.48	500	740	ND	µg/m³	R17681
2-Hexanone	TO-15	10/23/2008	2.05	500	1000	ND	µg/m³	R17681
4-Ethyl Toluene	TO-15	10/23/2008	2.46	500	1200	ND	µg/m³	R17681
4-Methyl-2-Pentanone (MIBK)	TO-15	10/23/2008	2.05	500	1000	ND	µg/m³	R17681
Acetone	TO-15	10/23/2008	9.52	500	4800	ND	µg/m³	R17681
Benzene	TO-15	10/23/2008	1.6	500	800	ND	µg/m³	R17681
Bromodichloromethane	TO-15	10/23/2008	3.35	500	1700	ND	µg/m³	R17681
Bromoform	TO-15	10/23/2008	5.17	500	2600	ND	µg/m³	R17681
Bromomethane	TO-15	10/23/2008	1.94	500	970	ND	µg/m³	R17681
Carbon Disulfide	TO-15	10/23/2008	1.56	500	780	ND	µg/m³	R17681
Carbon Tetrachloride	TO-15	10/23/2008	3.15	500	1600	ND	µg/m³	R17681
Chlorobenzene	TO-15	10/23/2008	2.3	500	1200	ND	µg/m³	R17681
Chloroethane	TO-15	10/23/2008	1.32	500	660	ND	µg/m³	R17681
Chloroform	TO-15	10/23/2008	2.44	500	1200	ND	µg/m³	R17681
Chloromethane	TO-15	10/23/2008	1.04	500	520	ND	µg/m³	R17681
cis-1,2-dichloroethene	TO-15	10/23/2008	1.98	500	990	15000	µg/m³	R17681
cis-1,3-Dichloropropene	TO-15	10/23/2008	2.27	500	1100	ND	µg/m³	R17681
Dibromochloromethane	TO-15	10/23/2008	4.26	500	2100	ND	µg/m³	R17681
Dichlorodifluoromethane	TO-15	10/23/2008	2.48	500	1200	ND	µg/m³	R17681
Diisopropyl ether (DIPE)	TO-15	10/23/2008	2.09	500	1000	ND	µg/m³	R17681
Ethyl Acetate	TO-15	10/23/2008	1.8	500	900	ND	µg/m³	R17681
Ethyl Benzene	TO-15	10/23/2008	2.17	500	1100	ND	µg/m³	R17681
Ethyl tert-butyl ether (ETBE)	TO-15	10/23/2008	2.09	500	1000	ND	µg/m³	R17681
Freon 113	TO-15	10/23/2008	3.83	500	1900	ND	µg/m³	R17681
Hexachlorobutadiene	TO-15	10/23/2008	5.34	500	2700	ND	µg/m³	R17681

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

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

Date Received: 10/22/2008
Date Reported: 10/29/2008

Client Sample ID: Composite- INF
Sample Location: 3815 Broadway,Oakland
Sample Matrix: AIR
Date/Time Sampled 10/20/2008 10:00:00 AM

Lab Sample ID: 0810162-002
Date Prepared:

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Hexane	TO-15	10/23/2008	14.1	500	7000	ND	µg/m³	R17681
Isopropanol	TO-15	10/23/2008	16.4	500	8200	ND	µg/m³	R17681
m,p-Xylene	TO-15	10/23/2008	2.05	500	1000	ND	µg/m³	R17681
Methylene Chloride	TO-15	10/23/2008	3.61	500	1800	ND	µg/m³	R17681
MTBE	TO-15	10/23/2008	1.81	500	900	ND	µg/m³	R17681
Naphthalene	TO-15	10/23/2008	2.62	500	1300	ND	µg/m³	R17681
o-xylene	TO-15	10/23/2008	2.17	500	1100	ND	µg/m³	R17681
Styrene	TO-15	10/23/2008	2.13	500	1100	ND	µg/m³	R17681
t-Butyl alcohol (t-Butanol)	TO-15	10/23/2008	6.06	500	3000	ND	µg/m³	R17681
tert-Amyl methyl ether (TAME)	TO-15	10/23/2008	2.09	500	1000	ND	µg/m³	R17681
Tetrachloroethene	TO-15	10/23/2008	3.39	500	1700	87000	µg/m³	R17681
Toluene	TO-15	10/23/2008	1.89	500	940	ND	µg/m³	R17681
trans-1,2-Dichloroethene	TO-15	10/23/2008	1.98	500	990	ND	µg/m³	R17681
Trichloroethene	TO-15	10/23/2008	2.69	500	1300	6800	µg/m³	R17681
Trichlorofluoromethane	TO-15	10/23/2008	2.48	500	1200	ND	µg/m³	R17681
Vinyl Acetate	TO-15	10/23/2008	1.76	500	880	ND	µg/m³	R17681
Vinyl Chloride	TO-15	10/23/2008	1.28	500	640	ND	µg/m³	R17681
Surr: 4-Bromofluorobenzene	TO-15	10/23/2008	0	500	65-135	0 S	%REC	R17681

Note: S - Low surrogate recovery attributed to TPH interference (heavy end hydrocarbons).

Gasoline	TO-3(MOD)	10/23/2008	352	5000	1800000	ND	µg/m³	G17681
Stoddard Solvent (C7-C12)	TO-3(MOD)	10/23/2008	352	5000	1800000	2300000	µg/m³	G17681

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

Definitions, legends and Notes

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

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB-R17681**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB-R17681**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	17.72	0	20	0	88.6	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/22/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/22/2008**	SeqNo: **253808**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/22/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/22/2008**	SeqNo: **253808**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	17.25	0	20	0	86.2	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/23/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/23/2008**	SeqNo: **253828**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/23/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/23/2008**	SeqNo: **253828**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	5.0									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	18.04	0	20	0	90.2	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/24/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/24/2008**	SeqNo: **254227**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromoethane(Ethylene dibromide	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Butadiene	ND	2.0									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
1,4-Dioxane	ND	0.50									
2-Butanone (MEK)	ND	0.50									
2-Hexanone	ND	0.50									
4-Ethyl Toluene	ND	0.50									
4-Methyl-2-Pentanone (MIBK)	ND	0.50									
Acetone	ND	4.0									
Benzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon Disulfide	ND	0.50									
Carbon Tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **MB**	SampType: **MBLK**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/24/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/24/2008**	SeqNo: **254227**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl Acetate	ND	0.50									
Ethyl Benzene	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Freon 113	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Hexane	ND	2.0									
Isopropanol	ND	4.0									
m,p-Xylene	ND	0.50									
Methylene Chloride	ND	1.0									
MTBE	ND	0.50									
Naphthalene	ND	0.50									
o-xylene	ND	0.50									
Styrene	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	2.0									
tert-Amyl methyl ether (TAME)	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl Acetate	ND	0.50									
Vinyl Chloride	ND	0.50									
Surr: 4-Bromofluorobenzene	18.93	0	20	0	94.6	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **LCS-R17681**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253470**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.48	0.50	20	0	117	65	135				
1,1,1,2-Tetrachloroethane	19.46	0.50	20	0	97.3	65	135				
1,1,1-Trichloroethane	24.10	0.50	20	0	120	65	135				
1,1,2,2-Tetrachloroethane	20.57	0.50	20	0	103	65	135				
1,1,2-Trichloroethane	20.34	0.50	20	0	102	65	135				
1,1-Dichloroethane	23.78	0.50	20	0	119	65	135				
1,2,4-Trichlorobenzene	14.84	0.50	20	0	74.2	65	135				
1,2,4-Trimethylbenzene	19.11	0.50	20	0	95.6	65	135				
1,2-Dibromoethane(Ethylene dibromide	20.70	0.50	20	0	104	65	135				
1,2-Dichlorobenzene	18.09	0.50	20	0	90.4	65	135				
1,2-Dichloroethane	20.95	0.50	20	0	105	65	135				
1,2-Dichloropropane	20.19	0.50	20	0	101	65	135				
1,3,5-Trimethylbenzene	19.64	0.50	20	0	98.2	65	135				
1,3-Butadiene	24.34	2.0	20	0	122	65	135				
1,3-Dichlorobenzene	18.75	0.50	20	0	93.8	65	135				
1,4-Dichlorobenzene	18.86	0.50	20	0	94.3	65	135				
1,4-Dioxane	21.22	0.50	20	0	106	65	135				
2-Butanone (MEK)	21.83	0.50	20	0	109	65	135				
2-Hexanone	20.47	0.50	20	0	102	65	135				
4-Ethyl Toluene	18.95	0.50	20	0	94.8	65	135				
4-Methyl-2-Pentanone (MIBK)	20.25	0.50	20	0	101	65	135				
Acetone	20.96	4.0	20	0	105	65	135				
Benzene	25.19	0.50	20	0	126	65	135				
Bromodichloromethane	21.23	0.50	20	0	106	65	135				
Bromoform	20.11	0.50	20	0	101	65	135				
Bromomethane	25.53	0.50	20	0	128	65	135				
Carbon Disulfide	25.56	0.50	20	0	128	65	135				
Carbon Tetrachloride	24.65	0.50	20	0	123	65	135				
Chlorobenzene	21.13	0.50	20	0	106	65	135				
Chloroethane	20.45	0.50	20	0	102	65	135				
Chloroform	18.04	0.50	20	0	90.2	65	135				

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **LCS-R17681**	SampType: **LCS**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253470**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	19.57	0.50	20	0	97.8	65	135				
cis-1,2-dichloroethene	23.06	0.50	20	0	115	65	135				
cis-1,3-Dichloropropene	19.68	0.50	20	0	98.4	65	135				
Dibromochloromethane	20.90	0.50	20	0	104	65	135				
Diisopropyl ether (DIPE)	22.47	0.50	20	0	112	65	135				
Ethyl Acetate	23.69	0.50	20	0	118	65	135				
Ethyl Benzene	20.59	0.50	20	0	103	65	135				
Ethyl tert-butyl ether (ETBE)	24.44	0.50	20	0	122	65	135				
Freon 113	24.00	0.50	20	0	120	65	135				
Hexachlorobutadiene	14.93	0.50	20	0	74.7	65	135				
Hexane	24.30	2.0	20	0	122	65	135				
Isopropanol	23.48	4.0	20	1.83	108	65	135				
m,p-Xylene	40.78	0.50	40	0	102	65	135				
Methylene Chloride	21.46	1.0	20	0	107	65	135				
MTBE	24.66	0.50	20	0	123	65	135				
Naphthalene	15.47	5.0	20	0	77.4	65	135				
o-xylene	19.54	0.50	20	0	97.7	65	135				
Styrene	19.94	0.50	20	0	99.7	65	135				
t-Butyl alcohol (t-Butanol)	17.07	2.0	20	0	85.4	65	135				
tert-Amyl methyl ether (TAME)	20.40	0.50	20	0	102	65	135				
Tetrachloroethene	20.46	0.50	20	0.472	99.9	65	135				
Toluene	20.25	0.50	20	0	101	65	135				
trans-1,2-Dichloroethene	24.03	0.50	20	0	120	65	135				
Trichloroethene	19.52	0.50	20	0	97.6	65	135				
Trichlorofluoromethane	26.73	0.50	20	0	134	65	135				
Vinyl Acetate	18.92	0.50	20	0	94.6	65	135				
Vinyl Chloride	26.47	0.50	20	0	132	65	135				
Surr: 4-Bromofluorobenzene	19.41	0	20	0	97.0	65	135				

Qualifiers:

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **LCSD-R17681**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1 - Dichloroethene	23.80	0.50	20	0	119	65	135	23.48	1.35	30	
1,1,1,2-Tetrachloroethane	18.40	0.50	20	0	92.0	65	135	19.46	5.60	30	
1,1,1-Trichloroethane	24.48	0.50	20	0	122	65	135	24.1	1.56	30	
1,1,2,2-Tetrachloroethane	20.10	0.50	20	0	100	65	135	20.57	2.31	30	
1,1,2-Trichloroethane	20.22	0.50	20	0	101	65	135	20.34	0.592	30	
1,1-Dichloroethane	24.01	0.50	20	0	120	65	135	23.78	0.963	30	
1,2,4-Trichlorobenzene	14.81	0.50	20	0	74.0	65	135	14.84	0.202	30	
1,2,4-Trimethylbenzene	19.08	0.50	20	0	95.4	65	135	19.11	0.157	30	
1,2-Dibromoethane(Ethylene dibromide	20.29	0.50	20	0	101	65	135	20.7	2.00	30	
1,2-Dichlorobenzene	18.13	0.50	20	0	90.7	65	135	18.09	0.221	30	
1,2-Dichloroethane	20.33	0.50	20	0	102	65	135	20.95	3.00	30	
1,2-Dichloropropane	19.92	0.50	20	0	99.6	65	135	20.19	1.35	30	
1,3,5-Trimethylbenzene	19.26	0.50	20	0	96.3	65	135	19.64	1.95	30	
1,3-Butadiene	24.55	2.0	20	0	123	65	135	24.34	0.859	30	
1,3-Dichlorobenzene	18.80	0.50	20	0	94.0	65	135	18.75	0.266	30	
1,4-Dichlorobenzene	18.49	0.50	20	0	92.5	65	135	18.86	1.98	30	
1,4-Dioxane	20.00	0.50	20	0	100	65	135	21.22	5.92	30	
2-Butanone (MEK)	22.52	0.50	20	0	113	65	135	21.83	3.11	30	
2-Hexanone	19.98	0.50	20	0	99.9	65	135	20.47	2.42	30	
4-Ethyl Toluene	18.29	0.50	20	0	91.4	65	135	18.95	3.54	30	
4-Methyl-2-Pentanone (MIBK)	20.17	0.50	20	0	101	65	135	20.25	0.396	30	
Acetone	20.67	4.0	20	0	103	65	135	20.96	1.39	30	
Benzene	25.29	0.50	20	0	126	65	135	25.19	0.396	30	
Bromodichloromethane	21.11	0.50	20	0	106	65	135	21.23	0.567	30	
Bromoform	20.04	0.50	20	0	100	65	135	20.11	0.349	30	
Bromomethane	25.51	0.50	20	0	128	65	135	25.53	0.0784	30	
Carbon Disulfide	24.86	0.50	20	0	124	65	135	25.56	2.78	30	
Carbon Tetrachloride	24.40	0.50	20	0	122	65	135	24.65	1.02	30	
Chlorobenzene	20.79	0.50	20	0	104	65	135	21.13	1.62	30	
Chloroethane	16.06	0.50	20	0	80.3	65	135	20.45	24.0	30	
Chloroform	17.00	0.50	20	0	85.0	65	135	18.04	5.94	30	

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: R17681

Sample ID **LCSD-R17681**	SampType: **LCSD**	TestCode: **TO-15**	Units: **ppbv**	Prep Date: **10/20/2008**	RunNo: **17681**
Client ID: **ZZZZZ**	Batch ID: **R17681**	TestNo: **TO-15**		Analysis Date: **10/20/2008**	SeqNo: **253471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	19.70	0.50	20	0	98.5	65	135	19.57	0.662	30	
cis-1,2-dichloroethene	23.01	0.50	20	0	115	65	135	23.06	0.217	30	
cis-1,3-Dichloropropene	20.00	0.50	20	0	100	65	135	19.68	1.61	30	
Dibromochloromethane	20.29	0.50	20	0	101	65	135	20.9	2.96	30	
Diisopropyl ether (DIPE)	21.32	0.50	20	0	107	65	135	22.47	5.25	30	
Ethyl Acetate	20.48	0.50	20	0	102	65	135	23.69	14.5	30	
Ethyl Benzene	20.06	0.50	20	0	100	65	135	20.59	2.61	30	
Ethyl tert-butyl ether (ETBE)	24.31	0.50	20	0	122	65	135	24.44	0.533	30	
Freon 113	22.60	0.50	20	0	113	65	135	24	6.01	30	
Hexachlorobutadiene	14.75	0.50	20	0	73.8	65	135	14.93	1.21	30	
Hexane	24.74	2.0	20	0	124	65	135	24.3	1.79	30	
Isopropanol	23.46	4.0	20	1.83	108	65	135	23.48	0.0852	30	
m,p-Xylene	39.82	0.50	40	0	99.6	65	135	40.78	2.38	30	
Methylene Chloride	21.54	1.0	20	0	108	65	135	21.46	0.372	30	
MTBE	25.24	0.50	20	0	126	65	135	24.66	2.32	30	
Naphthalene	14.44	5.0	20	0	72.2	65	135	15.47	6.89	30	
o-xylene	18.84	0.50	20	0	94.2	65	135	19.54	3.65	30	
Styrene	19.45	0.50	20	0	97.3	65	135	19.94	2.49	30	
t-Butyl alcohol (t-Butanol)	21.89	2.0	20	0	109	65	135	17.07	24.7	30	
tert-Amyl methyl ether (TAME)	19.90	0.50	20	0	99.5	65	135	20.4	2.48	30	
Tetrachloroethene	20.24	0.50	20	0.472	98.8	65	135	20.46	1.08	30	
Toluene	19.79	0.50	20	0	99.0	65	135	20.25	2.30	30	
trans-1,2-Dichloroethene	23.68	0.50	20	0	118	65	135	24.03	1.47	30	
Trichloroethene	19.33	0.50	20	0	96.7	65	135	19.52	0.978	30	
Trichlorofluoromethane	26.82	0.50	20	0	134	65	135	26.73	0.336	30	
Vinyl Acetate	19.71	0.50	20	0	98.6	65	135	18.92	4.09	30	
Vinyl Chloride	21.41	0.50	20	0	107	65	135	26.47	21.1	30	
Surr: 4-Bromofluorobenzene	18.22	0	20	0	91.1	65	135	0	0	30	

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

CLIENT: Soma Environmnental Engineering, Inc.
Work Order: 0810162
Project: 2514/3815 Broadway,Oakland

ANALYTICAL QC SUMMARY REPORT

BatchID: S17681

Sample ID	LCS-G17681	SampType:	LCS	TestCode:	TO-3Gas (MO	Units:	ppbv	Prep Date:	10/20/2008	RunNo:	17681
Client ID:	ZZZZZ	Batch ID:	S17681	TestNo:	TO-3(MOD)			Analysis Date:	10/21/2008	SeqNo:	253444

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	483.0	100	500	0	96.6	50	150				

Sample ID	LCSD-G17681	SampType:	LCSD	TestCode:	TO-3Gas (MO	Units:	ppbv	Prep Date:	10/20/2008	RunNo:	17681
Client ID:	ZZZZZ	Batch ID:	S17681	TestNo:	TO-3(MOD)			Analysis Date:	10/21/2008	SeqNo:	253445

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	483.6	100	500	0	96.7	50	150	483	0.122	30	

Sample ID	MBLK	SampType:	MBLK	TestCode:	TO-3SS (MO	Units:	ppbv	Prep Date:	10/24/2008	RunNo:	17681
Client ID:	ZZZZZ	Batch ID:	S17681	TestNo:	TO-3(MOD)			Analysis Date:	10/20/2008	SeqNo:	254363

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									
Stoddard Solvent (C7-C12)	ND	100									

Qualifiers:

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

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

RESET

CHAIN OF CUSTODY

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY

LAB WORK ORDER NO: 0810162

Company Name: **SOMA Environmental Engineering, Inc.**	Location of Sampling: **3815 Broadway, Oakland**
Address: **6620 Owens Drive, Suite A**	Purpose: **soil vapor extraction pilot test**
City: **Pleasanton** State: **CA** Zip Code: **94588**	Special Instructions / Comments:
Telephone: **925-734-6400** FAX: **925-734-6401**	**dry cleaning site**
REPORT TO: Joyce Bobek SAMPLER: **Jesse Acedillo**	**P.O. #: 2514** EMAIL: **jbobek@somaenv.com**

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

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

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

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-3, TPH-gas, ss	TO-15 - full list								REMARKS
001A	COMPOSITE - EFF	10/20/8 @ 0945	AIR	1	tedlar	✓	✓								
002A	COMPOSITE - INF	10/20/8 @ 1000	AIR	1	tedlar	✓	✓								

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	Jesse Acedillo	Jesse Acedillo	10/22/8	0830	Joyce Bobek	Joyce Bobek	10/22/08	8:30
2	C Moore	C Moore	10/22	1400	C Moore	C Moore	10/22	1453

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

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

Log In By: Date: Log In Reviewed By: Date: