R0173

Denis L. Brown

October 24, 2005

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Jerry Wickham
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1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Subsurface Investigation and Vapor Sampling Report
Shell-branded Service Station
2120 Montana Street
Oakland, California
SAP Code 135675
Incident No. 98995740

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Subsurface Investigation and Vapor Sampling Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Sr. Environmental Engineer

CAMBRIA

October 24, 2005

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Subsurface Investigation and Vapor Sampling Report**
Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident # 98995740
Cambria Project #247-0733-007
ACHCSA Case # RO-0173

Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent site investigation activities at the referenced site. The purpose of the investigation was to determine the source and extent of the separate phase hydrocarbon (SPH) plume beneath the site using cone penetration testing (CPT) and ultraviolet induced fluorescence (UVIF). To the extent possible, Cambria followed the scope of work presented in our January 18, 2005 *Interim Remediation Report* and approved in Alameda County Health Care Services Agency (ACHCSA) correspondences dated May 16, 2005 and June 10, 2005. Cambria performed the work in accordance with ACHCSA and San Francisco Regional Water Quality Control Board (SFRWQCB) guidelines. Presented below are a description of the site, a summary of previous work, current investigation procedures, investigation results, and conclusions.

SITE LOCATION AND DESCRIPTION

Site Location: This operating Shell-branded service station is located at the Montana Street and Fruitvale Avenue intersection in Oakland, California (Figures 1 and 2). Commercial properties lie to the north and east of the site, and residential properties lie to the west. Montana Street, a freeway on-ramp, and Highway 580 are located south of the site.

Site Lithology: The site is located within the East Bay Plain groundwater basin of Alameda County, west of the Hayward Fault. The East Bay Plain area is characterized by Quaternary age Bay Mud composed of unconsolidated plastic clay and silty clay, rich in organic material with some lenses of silt and sand. Beneath the Bay Mud deposits lay unconsolidated younger and older alluvial deposits (Hickenbottom and Muir, 1988).

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The site is underlain by interbedded sandy silt, silty sand, clayey sand, clay, and sand to the total explored depth of 28 feet below grade (fbg). A small sand lens is observed below 15 fbg (~underground storage tank [UST] complex bottom) in boring logs from wells MW-1, MW-2, and SB-3. The log for MW-4 shows this lens, but at a shallower depth. This sand lens may serve as the main groundwater transport pathway. Boring logs are included as Attachment A, and CPT data is included as Attachment B.

Hydrogeology: The Older Alluvium is the dominant aquifer in the East Bay Plain area west of the Hayward Fault. Regional groundwater flow is to the west-southwest toward San Francisco Bay.

The site elevation is approximately 150 feet above mean sea level. Historically, groundwater depth has ranged from approximately 10.1 to 14.3 fbg. Groundwater flow direction is predominantly to the south-southwest, but has varied to the northwest. A rose diagram of groundwater flow direction is included on Figure 3.

PREVIOUS INVESTIGATIONS

1997 Dispenser and Turbine Sump Upgrades: In November 1997, Paradiso Mechanical (Paradiso) of San Leandro, California upgraded fuel-related equipment at the service station. Secondary containment was added to the three existing dispensers and to the turbine sumps above the USTs. Soil samples D-1, D-2, and D-3 were collected from beneath the dispensers at a depth of approximately 5 fbg (Figure 2). Soil samples were not collected from beneath the associated piping since it was not exposed during upgrade activities. The maximum total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tertiary butyl ether (MTBE) (analyzed by EPA Method 8020) concentrations were reported in sample D-3 at 59 parts per million (ppm), 0.76 ppm, and 1.1 ppm, respectively. Table 1 summarizes historical soil analytical data. Cambria's February 3, 1998 *Dispenser Soil Sampling Report* summarizes these activities.

1999 Subsurface Investigation: In October 1999, Cambria advanced soil borings SB-1 through SB-3 (Figures 2). SB-1 was advanced to 16 fbg, and SB-2 and SB-3 were advanced to 20 fbg. The maximum detected hydrocarbon concentrations in soil were 54 ppm TPHg in boring SB-1 at 5 fbg, 0.019 ppm benzene in boring SB-2 at 15 fbg, and 0.24 ppm MTBE (by EPA Method 8260) in boring SB-2 at 10 fbg. The maximum reported hydrocarbon concentrations in groundwater were 2,380 parts per billion (ppb) TPHg in boring SB-3, 10.6 ppb benzene in SB-2, and 3,210 ppb MTBE (by EPA Method 8020) in SB-3. Table 2 summarizes historical groundwater analytical data. Cambria's June 7, 2000 *Subsurface Investigation Report and Work Plan for Installation of Groundwater Monitoring Wells* summarizes these activities.

2001 Monitoring Well Installation: In February 2001, Cambria installed three groundwater monitoring wells (MW-1 through MW-3). The maximum TPHg and MTBE concentrations were found in soil samples collected from monitoring well MW-2, located in Montana Street across from the site. TPHg was detected at 21 fbg at a concentration of 10 ppm, and MTBE was detected at 15.5 fbg at a concentration of 5.2 ppm. The maximum detected benzene concentration of 0.066 ppm was detected in the soil sample collected from monitoring well MW-1 at 10 fbg. Cambria's May 22, 2001 *Groundwater Monitoring Well Installation Report* summarizes these activities.

2001 Sensitive Receptor Survey, Well Survey, and Conduit Study: In August 2001, Cambria conducted a sensitive receptor survey, well survey, and conduit study. ACHCSA requested this work in a July 23, 2001 letter to Shell. The sensitive receptor survey indicated that no known water-producing wells are located within ½-mile radius of the site. The nearest surface water body is Sausal Creek, located approximately 240 feet west-northwest of the site. Sausal Creek is diverted into a 10-foot by 10-foot culvert, located approximately 420 feet west-northwest of the site, with a flow line depth shallower than the typical water table at the site. Sausal Creek resurfaces approximately 730 feet southwest of the site. The utility study indicated that utility conduits in the area do not typically encounter groundwater, and likely do not act as preferential pathways for contaminant migration. Based on this information, no known receptors are likely to be impacted by chemicals at the site. However, at the time of this survey, the potential for hydrocarbon vapor migration to the neighboring residences had not been investigated. Cambria's September 24, 2001 *Sensitive Receptor Survey, Well Survey, and Conduit Study Report* summarizes these activities.

2001-2003 Mobile Groundwater Extraction (GWE): In August 2001, mobile GWE from wells MW-1 and TBW-N, using a vacuum truck, began at the site. Mobile GWE was conducted on a weekly basis through November 2001, on a bi-weekly basis through December 2001, on a monthly basis through March 2003, and then again on a weekly basis between August 19, 2003 and January 6, 2004. The cumulative estimated mass of TPHg and MTBE GWE removed at the site is 25.27 pounds and 8.13 pounds, respectively. Additionally, approximately 2.68 pounds of SPH were removed from wells MW-1 and TBW-N through manual bailing and mobile GWE.

2002 Soil Vapor Extraction (SVE) Test: In June 2002, Cambria performed a 5-day SVE test from tank backfill well TBW-E to remove petroleum hydrocarbon mass and to determine if extracted vapor concentrations would be sustained over a long period of time. High initial vapor concentrations indicated the presence of source material available for recovery within the UST facility. Operation of the internal combustion engine over the 5-day test period resulted in an order of magnitude decrease in TPHg and MTBE vapor concentrations. Based on operating parameters and vapor sample analytical results collected throughout the test period, the TPHg, benzene, and MTBE vapor-phase mass removal over the test period is estimated at 176, 0.998,

and 1.92 pounds, respectively. Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* summarizes these activities.

2002 Monitoring Well Installation: In June 2002, Cambria installed groundwater monitoring wells MW-4 and MW-5 (Figure 2). TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in soil samples collected from MW-4. TPHg was detected in samples collected from MW-5 from 9 fbg and 19 fbg at concentrations of 1.3 ppm and 18 ppm, respectively. Benzene was detected in samples collected from MW-5 from 9 fbg and 19 fbg at concentrations of 0.0083 ppm and 0.0071 ppm, respectively. MTBE was not detected in any soil samples collected during this investigation. Table 1 summarizes historical soil analytical data. Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* summarizes these activities.

2003 GWE System: Cambria's September 4, 2002 *Subsurface Investigation, Soil Vapor Extraction Pilot Test Report, and Interim Remediation Work Plan* proposed GWE as interim remediation. Construction of a GWE system began in early February 2003, and start-up occurred on April 2, 2003. The GWE system is designed to extract groundwater from monitoring well MW-1 and tank backfill well TBW-N. Due to the presence of SPH, Cambria did not operate the GWE system between July 18, 2003 and April 21, 2004. Cambria re-designed the GWE system to include an oil/water separator. Modifications to the GWE system were completed on March 31, 2004. An oil/water separator, two particle filters in parallel, and a series of three 1,000-pound aqueous-phase carbon vessels treat the groundwater stream. Treated groundwater is discharged to the sanitary sewer under the authorization of an East Bay Municipal Utilities District (EBMUD) wastewater discharge permit.

Table 3 summarizes GWE system analytical data. Table 4 summarizes the GWE system operation and mass removal data. As of August 23, 2005, a total of approximately 386,830 gallons of groundwater has been extracted. A total of approximately 16.7 pounds of TPHg, 0.654 pounds of benzene, and 4.04 pounds of MTBE has been recovered.

2003 Tank Repair: In November 2003, Able Maintenance of Santa Rosa, California exposed the regular grade UST for inspection by the tank manufacturer (Xerxes Company). Xerxes Company found a small crack on the bottom of the tank. The crack was investigated, repaired with fiberglass resin, and air tested for the City of Oakland Fire department by the Xerxes Company. After the Xerxes Company completed their air test, Able Maintenance called in a third-party tank tester to precision test the tank. Afford-a-Test completed that test, and the tank was certified as tight. Able Maintenance monitored the tank through Shell's Veeder-Root monitoring system since the repair, and it passed the associated pressure tests.

2004 Fuel System Upgrades: In May 2004, Paradiso upgraded the station's fuel dispensers and UST sumps. Cambria collected soil samples D-1-4.0, D-2-4.0, and D-3-4.0 from underneath the dispensers (Figure 2). TPHg was detected in D-2-4.0 and D-3-4.0 at concentrations of 1,900 and 110 ppm, respectively. Benzene was detected in D-2-4.0 at a concentration of 1.7 ppm. Ethylbenzene was detected in D-2-4.0 and D-3-4.0 at concentrations of 21 and 3.1 ppm, respectively. Xylenes were detected in D-1-4.0 and D-2-4.0 at concentrations of 0.17 and 57 ppm, respectively. MTBE was detected in all three samples at concentrations ranging from 0.65 ppm in D-3-4.0 to 5.8 ppm in D-2-4.0. Lead was detected in all three samples at concentrations ranging from 7.3 ppm in D-2-4.0 to 8.7 ppm in D-3-4.0. Cambria's November 1, 2004 *Dispenser Upgrade Sampling Report* summarizes these activities.

2004 SVE Test: In July 2004, Cambria performed a 5-day SVE test from monitoring well MW-1 to evaluate enhanced removal of petroleum hydrocarbons and MTBE from the source area. Cambria initially used the GWE system's submersible pneumatic pump in MW-1 to dewater the soils, but switched to an electric pump to achieve greater drawdown. Data from MW-1 suggests that SVE was effective as interim remediation. An average flow rate of 30.3 standard cubic feet per minute was obtained with a measured wellhead vacuum ranging from 249.8 to 382.9 inches water column. High TPHg, BTEX and MTBE vapor concentrations (up to 10,240 parts per million by volume total volatile organic compounds [VOCs]) were sustained over the duration of SVE. Cambria measured up to 0.8 feet (9.6 inches) of SPH in off-site monitoring well MW-2 during dewatering and SVE from on-site well MW-1. Based on operating parameters and vapor sample analytical results collected throughout the test period, the TPHg, benzene, and MTBE vapor-phase mass removal over the test period is estimated at 257, 0.822, and 1.22 pounds, respectively. Cambria's January 18, 2005 *Interim Remediation Report* summarizes these activities. Groundwater drawdown data collected during the SVE test is tabulated below as requested in ACHCSA's May 16, 2005 letter to Shell.

Date	Time	DTW, MW-1 (fbTOC)	DTW, MW-2 (fbTOC)	DTSPH, MW-2 (fbTOC)	DTW, MW-3 (fbTOC)	DTW, MW-4 (fbTOC)	DTW, MW-5 (fbTOC)	Flow Rate (gpm, MW-1)
7/26/04 (initial)	13:15	24.87	NM	NA	12.22	14.73	NM	4.0
7/27/04	12:00	25.5	18.52	NA	12.67	17.67	12.25	4.0
7/27/04	14:00	26.5	18.60	NA	12.69	17.70	12.29	4.0
7/28/04	7:00	26.1	19.20	NA	12.87	18.15	12.56	4.0
7/28/04	11:00	26.2	19.25	NA	12.90	18.17	12.57	4.0
7/28/04	13:30	NM	19.29	NA	NM	18.20	12.58	4.0
7/29/04	7:00	17.0	15.22	NA	12.92	16.38	12.52	4.5
7/29/04	12:00	25.1	16.78	NA	12.90	16.88	12.56	4.5
7/29/04	14:00	25.4	17.09	16.96	12.91	16.90	12.57	4.0
7/30/04	7:00	25.2	19.20	19.18	13.50	18.20	12.78	4.0
7/30/04	11:00	26.1	19.23	19.20	13.52	18.25	12.80	4.0
7/30/04	15:00	26.0	19.70	18.90	13.12	18.37	12.72	4.0

DTW = Depth to water. DTSPH = Depth to separate phase hydrocarbons. fbTOC = Feet below top of casing. gpm = Gallons per minute. NM = Not measured. NA = Not applicable. Note: Pump was off at arrival on 7/29/04. MW-1 DTW measured from 1.2 feet above TOC, due to pump configuration.

Groundwater Monitoring: Quarterly groundwater monitoring has been conducted at the site since well installation in 2001. Tank backfill well TBW-N, one of four tank backfill wells at the site and the only tank backfill well which encounters groundwater, was added to the quarterly monitoring program in September 2001. Since June 2001, SPH have been detected intermittently in monitoring well MW-1 as well as in tank backfill well TBW-N. SPH were observed in well MW-2 near the end of SVE testing in July 2004. Figure 3 presents data from the third quarter 2005 groundwater monitoring event.

During the third quarter 2005, TPHg was detected in groundwater from wells MW-2, MW-4, MW-5 and TBW-N at concentrations ranging from 1,900 ppb (MW-5) to 140,000 ppb (MW-2).

Benzene was detected in groundwater from wells MW-1, MW-2 and MW-5 at concentrations ranging from 5.3 ppb (MW-5) to 490 ppb (MW-2). MTBE was detected in all monitoring wells except MW-5 at concentrations ranging from 0.54 ppb (MW-3) to 2,400 ppb (MW-1). Tert butyl alcohol (TBA) was detected in groundwater samples from wells MW-1, MW-2, and TBW-N at concentrations ranging from 1,700 ppb (TBW-N) to 13,000 ppb (MW-1). Analytical results for additional oxygenates di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and tert-amyl methyl ether (TAME) were below laboratory reporting limits. Historical groundwater monitoring data is presented as Attachment C.

INVESTIGATION SUMMARY

Cambria oversaw the attempted advancement of five CPT soil borings (SB-4 through SB-8) and five soil vapor probe pairs (SV-A through SV-E) at the locations shown on Figure 2. Only four of the CPT borings (SB-4, SB-5, SB-6, and SB-8) were completed. Subsurface utilities and refusal prevented SB-7 from being advanced. Only two of the five soil vapor probe pairs (SV-D and SV-E) were completed. The presence of subsurface debris prevented field staff from hand clearing the SV-A through SV-C boring locations. Due to utility conflicts in the planter, the soil vapor probe pairs that were completed are located farther from the western property line than originally proposed. Figure 2 shows all attempted and completed soil boring and vapor probe locations. At each CPT location, a UVIF module was used to identify hydrocarbons in the subsurface. The UVIF module is described in Gregg In Situ, Inc.'s Ultraviolet Induced Fluorescence Information Sheet and in Cambria's standard field procedures for Geoprobe® and CPT with UVIF (Attachment D).

Cambria Personnel Present: Stewart A. Dalie, IV.

Permit: Cambria obtained permit # W05-0516 from the Alameda County Public Works Agency (Attachment E).

Drilling Company: Gregg Drilling, Inc. (Gregg) of Martinez, California (C57 License # 656-407).

Drilling Dates: June 14, 15, and 16, 2005.

Drilling Methods: CPT and hand auger.

Number of Borings: Four CPT soil borings (SB-4, SB-5, SB-6, and SB-8) and two soil vapor probe pairs (SV-D and SV-E). Boring logs are included as Attachment A, and CPT test data is included in Attachment B.

Boring Depths: CPT borings SB-4, SB-5, SB-6, and SB-8 were advanced to 28 fbg, and soil vapor probe pairs SV-D and SV-E were advanced to 10 fbg.

Soil Sampling Methods: Cambria logged soil types continuously in borings SB-4, SB-5, SB-6, and SB-8 using CPT equipment. Cambria collected selected soil samples for headspace analysis and potential laboratory analysis. Encountered soils are described on the CPT plots presented in Attachment B. Cambria logged soil types continuously in soil vapor probe borings SV-D and SV-E. Cambria collected soil samples from SV-D and SV-E at 5 and 10 fbg for laboratory analysis of physical characteristics. Cambria screened soil samples from the soil vapor probes for the presence of organic vapors using a photo-ionization detector (PID) in the field and recorded the PID measurements on the boring logs. Boring logs for the soil vapor probes SV-D and SV-E are presented in Attachment A.

Soil Classification: Cambria observed silty gravel, silty sand, and well graded sand between 2 and 4.5 fbg in SV-D and SV-E, underlain by clay (CL) to 10 fbg (Attachment A). Soil classifications logged using CPT equipment indicated clay, clayey silt, and silty clay in SB-4, SB-5, SB-6 and SB-8. A thin sand lens was observed in SB-4 and SB-5 at 24 and 27 fbg, respectively. Silty sand/sand layers were observed in SB-4 and SB-5 at 17 fbg, and in SB-8 between 18 and 20 fbg, at 21 fbg, and between 24 fbg and the total explored depth of 28 fbg.

Backfill Method: All borings were backfilled using a tremie pipe with neat cement grout to match the existing grade.

Soil Chemical Analyses: Selected soil samples from the CPT borings were analyzed for TPHg, BTEX, MTBE, TBA, DIPE, TAME, and ETBE by EPA Method 8260B. Selected soil samples from the soil vapor probe locations were analyzed for total porosity, moisture content, and soil bulk density. For soil disposal classification, four brass tubes of soil were collected, composited at the laboratory, and analyzed for TPHg, BTEX, total lead, and organic lead.

UVIF Results: The CPT and UVIF plots do not indicate the presence of SPH or significant hydrocarbon impacts beneath the site. Refer to CPT and UVIF plots presented in Attachment B.

Groundwater Depths: A pore pressure dissipation test was performed during the advancement of the CPT borings. The tests indicated groundwater depths ranging from 9 to 13.6 fbg. Depth to groundwater was manually gauged at each location after completing the borings; depth to groundwater ranged from 12.5 to 17.0 fbg.

Groundwater Sampling: Grab groundwater samples were collected in each completed CPT boring (SB-4-W, SB-5-W, SB-6-W and SB-8-W). Groundwater analytical data is summarized in Table 2.

Vapor Probe Materials: Vapor probe pairs SV-D and SV-E were constructed using 1/4-inch-diameter, Teflon® tubing, #1C fine Monterey sand, neat Portland cement Type I/II grout, bentonite pellets and powder, and Quickcrete concrete.

Vapor Probe Screened Intervals: Two vapor probes with different screened intervals were installed at each boring location. SV-D and SV-E each consist of a shallow-zone probe (screened from approximately 4.85 to 5.15 fbg) and a deep-zone probe (screened from approximately 9.85 to 10.15 fbg). The boring logs and well construction diagrams are included in Attachment A.

Soil Vapor Sampling: As specified in our work plan, Cambria allowed a minimum of three weeks between installing and sampling the soil vapor probes for the subsurface conditions to equilibrate. Cambria also coordinated sampling with the station manager to ensure that no irrigation took place in the nearby planter for three days prior to sampling. There were no rain events in the area for at least three days prior to vapor sample collection.

On August 24, 2005, Cambria collected soil vapor samples from both probes at each screened interval (SV-D-5.0, SV-D-10.0, SV-E-5.0, and SV-E-10.0). A 30-minute flow meter and a 6-liter Summa™ canister were connected at each vapor probe sampling point. A battery-powered air pump, with an attached vacuum-chamber and Tedlar bag, was used to purge an appropriate volume (equivalent to three tubing volumes) from the Teflon® tubing of the target vapor probe. A closed circuit system was created by attaching the Summa™ canister in succession with the vacuum pump before connecting to the vapor probe.

After purging, the valve between the Summa™ canister and the purge pump was closed, and the Summa™ canister valve was opened. The vacuum of the Summa™ canister was used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg was observed on the canister's vacuum gauge. The soil-vapor samples were labeled and stored at ambient temperature until delivery to the analytical laboratory.

In accordance with the *Department of Toxic Substances Control Advisory - Active Soil Gas Investigations* guidance document, dated January 28, 2003, leak testing was performed during sampling. In order to detect any leaks of ambient air into the sample stream, paper towels wetted with isopropyl alcohol were placed at each fitting connection. The presence of the tracer compound (isopropanol) in the vapor sample results was intended to indicate whether the sample included ambient air.

Soil Vapor Analyses: The soil vapor samples were analyzed for TPHg (vapor) by EPA method TO-3, for VOCs by EPA method TO-14A, and for oxygen, carbon dioxide, and methane by ASTM method D1940.

Soil Disposal: Less than 1 cubic yard of soil was generated during field activities and temporarily stored on site. Cambria sampled the soil and profiled it for disposal. The certified analytical laboratory report is included in Attachment F. On July 30, 2005, Manley and Sons Trucking Inc., of Sacramento, California transported the soil to Allied Waste Industries Inc.'s Forward Landfill facility in Manteca, California for disposal as non-hazardous waste. A disposal confirmation report is included as Attachment G.

INVESTIGATION RESULTS

Lithology: Soil lithology observed during this investigation was consistent with previous investigations. Upon completing the borings and removing the down hole equipment, the depths to groundwater were measured in several of the open boreholes. Static groundwater depths were determined to be between approximately 12.5 and 16.95 fbg. This is consistent with the results

of the dissipation tests performed during CPT advancement as well as with depth to water measurements collected during the most recent quarterly groundwater monitoring event.

Hydrocarbon Distribution in Soil: PID measurements indicated the presence of organic vapors at concentrations up to 410 ppm in soil collected from boring SV-E in the sample collected at approximately 10 fbg for physical soil characteristics.

TPHg was detected in samples from borings SB-4 and SB-5 at concentrations ranging from 2.0 ppm (SB-4-10) to 23 ppm (SB-4-20). Benzene was detected only in sample SB-4-5 at a concentration of 0.0072 ppm. Ethylbenzene was detected in samples from borings SB-4 and SB-5 at concentrations ranging from 0.030 ppm (SB-5-13) to 0.20 ppm (SB-5-15). Total xylenes were detected in samples from borings SB-4, SB-5 and SB-6 at concentrations ranging from 0.0064 ppm (SB-6-10) to 0.10 ppm (SB-4-20). MTBE was detected in samples from borings SB-4, SB-5, SB-6, and SB-8 at concentrations ranging from 0.0050 ppm (SB-8-5) to 0.23 ppm (SB-8-15). TBA was detected in samples from borings SB-4, SB-5, SB-6, and SB-8 at concentrations ranging from 0.011 ppm (SB-8-5) to 9.3 ppm (SB-6-15). Toluene, DIPE, ETBE, and TAME were not detected in any soil samples collected during this investigation. Soil analytical data is presented in Table 1 and Appendix F. Soil physical parameter data is presented in Table 5.

UVIF Results: UVIF works on the principle that hydrocarbons will fluoresce in the presence of ultra violet light, absorbing the ultra violet energy and releasing it at a longer wavelength. The magnitude of this difference can be used to verify the presence of hydrocarbons in the soil and groundwater as well as to identify specific compounds. UVIF responds at greater magnitude when heavier hydrocarbons, such as diesel or motor oil, are present. Lighter hydrocarbons, such as gasoline, will have a smaller response and, thus, the magnitude of the voltages reported will also be smaller.

The UVIF readings were at or below approximately 0.1 volts, with the exception of the readings from 0 to 1 fbg in SB-8, which are likely due to instrument noise. Small local peaks of approximately 0.01 volts were observed in SB-4 at approximately 22 fbg and in SB-5 at 13.5 and 15.5 fbg. The soil analytical data confirms the presence of low, but detectable TPHg concentrations (all less than 25 ppm) at these locations. Because voltage response is a function of concentration as well as type of hydrocarbon present, greater voltage response would be expected where SPH is encountered. The UVIF data collected during this investigation indicates minimal hydrocarbon impacts to soil and no SPH presence at the CPT boring locations. Analytical data for soil samples collected from the CPT borings at selected depths confirm the UVIF results.

Hydrocarbon Distribution in Groundwater: TPHg was detected in groundwater samples from borings SB-4 and SB-5 at concentrations of 6,200 and 28,000 ppb, respectively. Benzene was detected in groundwater samples from borings SB-4 and SB-5 at concentrations of 34 and 100 ppb, respectively. Toluene was detected in SB-4-W at 140 ppb. Ethylbenzene was detected

in groundwater samples collected from borings SB-4 and SB-5 at concentrations of 130 and 890 ppb, respectively. Total xylenes were detected in groundwater samples collected from borings SB-4 and SB-5 at concentrations of 520 and 2,400 ppb, respectively. MTBE was detected in groundwater samples collected from SB-4, SB-5, SB-6 and SB-8 at concentrations ranging from 59 ppb (SB-8-W) to 1,100 ppb (SB-6-W). TBA was detected in groundwater samples collected from SB-6 and SB-8 at concentrations of 15,000 and 66 ppb, respectively. DIPE, ETBE, and TAME were not detected in any groundwater samples collected during this investigation. Groundwater analytical data is presented in Table 2 and Appendix F.

Hydrocarbon Distribution in Soil Vapor: Two soil vapor samples were collected from each probe pair (SV-D and SV-E), at 5 and 10 fbg. Sample SV-D-5.0 contained 22,000 micrograms per cubic meter ($\mu g/m^3$) TPHg, <130 $\mu g/m^3$ benzene, and 52,000 $\mu g/m^3$ isopropanol. Sample SV-E-5.0 contained 25,000 $\mu g/m^3$ TPHg, <6.4 $\mu g/m^3$ benzene, and 140 $\mu g/m^3$ isopropanol. Sample SV-D-10.0 contained 16,000,000 $\mu g/m^3$ TPHg, 480 $\mu g/m^3$ benzene, and 3,700 $\mu g/m^3$ isopropanol. Sample SV-E-10.0 contained 78,000,000 $\mu g/m^3$ TPHg, 46,000 $\mu g/m^3$ benzene, and <25,000 $\mu g/m^3$ isopropanol. The presence of the tracer compound, isopropanol, suggests some leakage of ambient air into the soil vapor samples collected from SV-D-5.0, SV-E-5.0 and SV-D-10.0. The elevated reporting limit for isopropanol in SV-E-10.0, due to the presence of high hydrocarbon concentrations, precludes assessment of whether ambient air leakage occurred during sample collection. The results of the duplicate sample collected from SV-E at 5 fbg (SV-E-5.0 DUP) were almost identical to the results for the original sample collected from this location.

Carbon dioxide concentrations in all four samples ranged from 130,000 to 260,000 $\mu g/m^3$, methane ranged from <2,700 to 40,000,000 $\mu g/m^3$, and oxygen ranged from 36,000,000 to 140,000,000 $\mu g/m^3$.

The results indicate that higher concentrations of hydrocarbons, carbon dioxide, and methane in vapor are present at 10 fbg than 5 fbg. Higher concentrations of oxygen are present in the 5 fbg samples. These results suggest that biological attenuation of hydrocarbons is occurring.

Soil vapor analytical results for TPHg, BTEX, atmospheric gases, and any constituents that were detected in one or more samples are summarized in Table 6. The complete analytical report is included in Appendix F.

DOOR TO DOOR SURVEY

On August 10, 2005, Cambria staff conducted a survey of businesses and residences within approximately 200 feet of the subject site to determine the building foundation type and whether

any wells (existing or abandoned), sump pumps, basements or crawl spaces are present on the surrounding properties. If the property owner or tenant was not available and able to provide the requested information, a survey form was left on the property and/or mailed to the corresponding address. Out of the nine properties within the survey area, a response was received for four. No wells (existing or abandoned), or sump pumps were identified in any of the responses. 3401, 3407, 3409 and 3411 Fruitvale Avenue are all located in the same building, so it can be assumed that the responses for 3401 and 3407 Fruitvale Avenue apply to the other properties within that building. These responses indicated that the building was of slab-on-grade foundation construction with no basement or crawl spaces. Based on external building features, 3400 Fruitvale Avenue, located across Fruitvale Avenue from the site, appears to be of slab-on-grade construction with no basements or crawl spaces. As reported by the tenant and/or owner, the property west of and adjacent to the subject site, 2110 Montana Street, contains a concrete basement approximately ¼ the size of the total structure, and an earthen crawl space. The property four doors down in the west direction, 2026 Montana Street, contains an earthen crawl space but no basement, as reported by the property owner. Although we did not receive a response regarding the two other properties on this street (2106 and 2102 Montana Street), the buildings appear to be similarly constructed, and may contain basements and/or crawl spaces. Door-to-door survey information is summarized in Table 7.

SCREENING LEVEL RISK EVALUATION

To evaluate the potential health risks posed by subsurface site conditions, Cambria compared soil, water, and soil vapor data to the SFRWQCB environmental screening levels (ESLs). Since the nearest surface water body is located approximately 730 feet southwest of the site and groundwater beneath the site is not likely to be used as drinking water, the primary potential exposure pathway of concern for this site is vapor intrusion to indoor air. The site's land use is expected to remain commercial. However, the adjacent property is residential. To be conservative, Cambria compared the soil, groundwater, and soil vapor data using residential land use ESLs.

Based on soil data from the recent CPT borings, benzene, toluene, ethylbenzene, total xylenes, and MTBE concentrations on site are below the SFRWQCB ESLs for vapor intrusion from soil in a residential setting. SFRWQCB does not provide ESLs for vapor intrusion of TPHg or TBA from soil; they recommend the use of soil gas data to evaluate these constituents.

Based on recent groundwater analytical data from the recent CPT borings and the most recent quarterly monitoring event, benzene, toluene, ethylbenzene, total xylenes, and MTBE concentrations are below the SFRWQCB ESLs for vapor intrusion from groundwater in a

residential setting. SFRWQCB does not provide ESLs for vapor intrusion of TPHg or TBA from groundwater; they recommend the use of soil gas data to evaluate these constituents.

Based on soil vapor samples collected from 5 fbg from SV-D and SV-E, TPHg concentrations are below the SFRWQCB ESL of 26,000 µg/m^3 for shallow soil gas in a residential setting (22,000 and 25,000 µg/m^3 in SV-D-5.0 and SV-E-5.0, respectively). TPHg concentrations in 10 fbg samples from both soil vapor probes exceeded the applicable ESL (16,000,000 and 78,000,000 µg/m^3 in SV-D-10.0 and SV-E-10.0, respectively). Benzene was not detected in samples collected from the soil vapor probes at 5 fbg, although the reporting limit for SV-D-5.0 was greater than the SFRWQCB ESL of 85 µg/m^3. Benzene concentrations in samples collected from both soil vapor probes at 10 fbg exceeded the applicable ESL (480 and 46,000 µg/m^3 in SV-D-10.0 and SV-E-10.0, respectively). Toluene, ethylbenzene and total xylenes levels in samples collected from both soil vapor probes at 5 and 10 fbg are below the SFRWQCB ESLs of 63,000, 420,000 and 150,000 µg/m^3, respectively, for shallow soil gas in a residential setting. Soil vapor samples were not analyzed for MTBE or TBA.

CONCLUSIONS AND RECOMMENDATIONS

No evidence of an SPH plume was found during this investigation. Hydrocarbon impacts to unsaturated soils in the study area appear minimal. In groundwater, MTBE impacts appear greatest near the USTs, while TPHg and benzene impacts appear greatest downgradient of the USTs.

Based on recent groundwater monitoring and GWE system data, the existing GWE system may not be providing adequate hydraulic control of MTBE in groundwater beneath the site. Therefore, Shell recommends installing two 4-inch-diameter GWE wells near the southern boundary of the site and connecting them to the existing GWE system. Cambria will submit a work plan for GWE system expansion under separate cover.

Soil vapor results indicate that TPHg and benzene in soil vapor exceed the applicable SFRWQCB ESLs at 10 fbg, but attenuate below the ESLs at 5 fbg. Since the proposed on-site soil vapor investigation could not be completed, Shell believes that the lateral extent of soil vapor impact or attenuation has not been fully investigated. Shell recommends additional sampling of the existing soil vapor probes, including MTBE and TBA analysis, and off-site soil vapor investigation to determine the lateral extent of soil vapor impacts west of the site. With the additional data, Cambria may recommend re-evaluating the health risks from soil, groundwater, and soil vapor to potential on-site commercial and off-site residential receptors. A work plan detailing the proposed additional soil vapor investigation will be submitted under separate cover. Off-site investigation will be contingent upon obtaining a property access agreement.

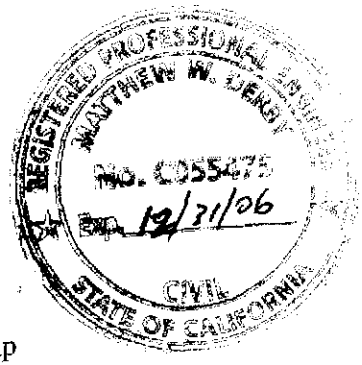
CLOSING

If you have any questions regarding the contents of this document, please call Cynthia Vasko at (510) 420-3344.

Sincerely,
Cambria Environmental Technology, Inc.

Cynthia Vasko
Project Engineer

Matthew W. Derby, P.E.
Senior Project Engineer



Figures:
1 - Vicinity/Area Well Survey Map
2 - Soil Boring Location Map with Soil and Groundwater Data
3 - Groundwater Elevation Contour Map

Tables:
1 - Soil Analytical Data
2 - Groundwater Analytical Data
3 - Groundwater Extraction – System Analytical Data
4 - Groundwater Extraction – Operation and Mass Removal Data
5 - Soil Physical Parameter Data
6 - Soil Vapor Analytical Data
7 - Door to Door Survey Results

Attachments:
A - Boring Logs
B - CPT Test Data
C - Historical Groundwater Data
D - UVIF Information
E - Soil Boring Permit
F - Certified Laboratory Analytical Reports
G - Soil Disposal Confirmation

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

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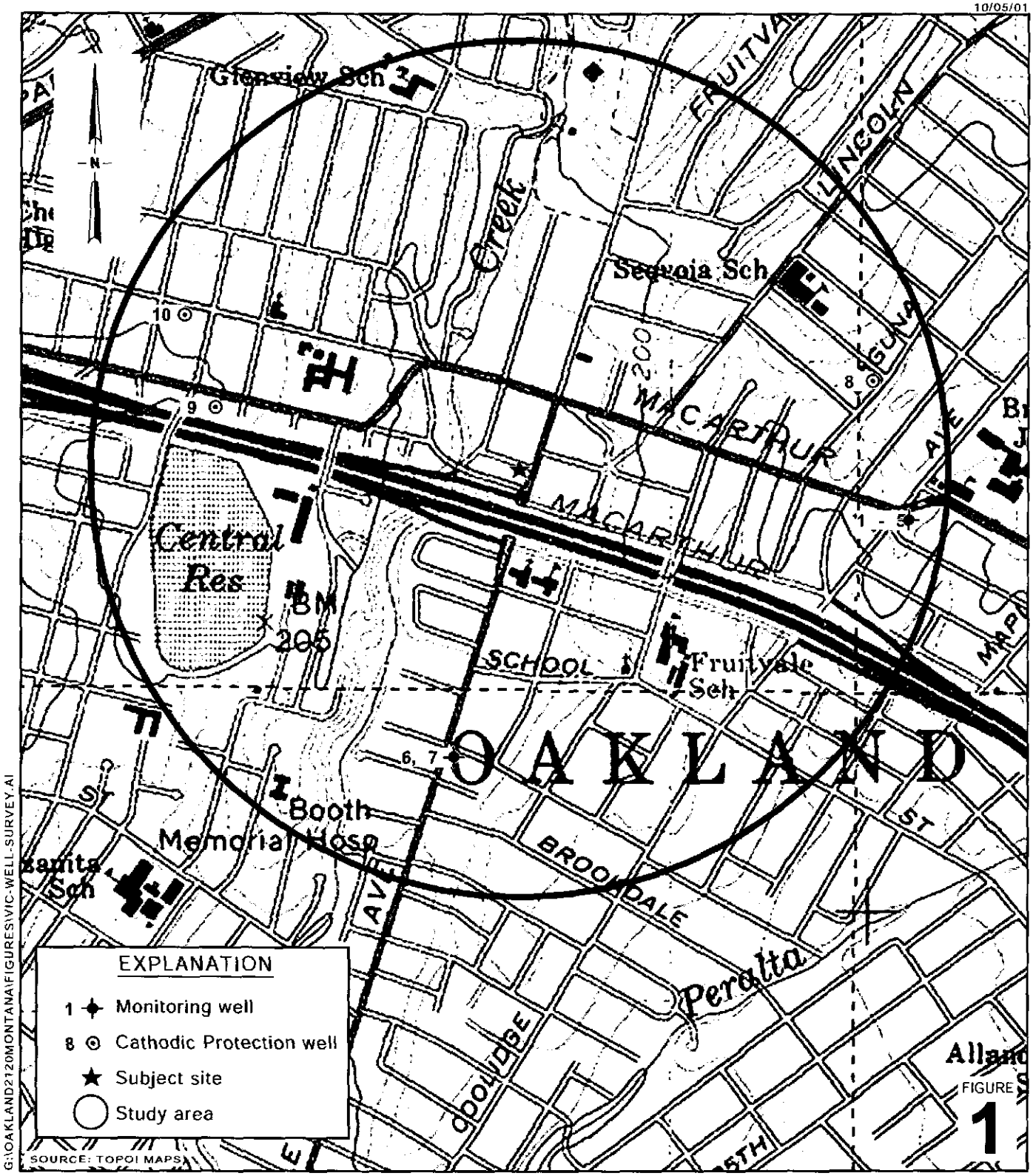
10/05/01



G:\OAKLAND2120MONTANA\FIGURES\VIC-WELL-SURVEY.AI

FIGURE 1

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740

CAMBRIA

Vicinity / Area Well Survey Map
(1/2-Mile Radius)

10/14/05

Soil Boring Location Map with Soil and Groundwater Data

EXPLANATION

- SB-4 ◉ Soil boring location (06/14-16/05)
- SV-D ■ Soil vapor sampling location (06/14-16/05)
- SB-7 ▪ Attempted soil boring location (6/15/05)
- SV-A ✳ Attempted soil vapor sampling location (6/14/05)
- MW-1 ⊕ Well used for groundwater extraction
- MW-2 ⊕ Monitoring well location
- TBW-N ▲ Tank backfill well location
- D-1-4.0 · Cambria soil sampling location (5/04)
- SB-1 ◉ Cambria soil boring location (10/99)
- D-1 ● Cambria soil sampling location (11/97)
- INF ● GWE system sampling location
- ---------- Electrical and overhead electric line (E, OE)
- — — — — Sanitary sewer (SS)
- ——— Water line (W)
- ····· Telecommunications line (T)
- - - - - - - Remediation piping (R)
- - - - - - - Discharge line (D)
- ● Product dispenser number

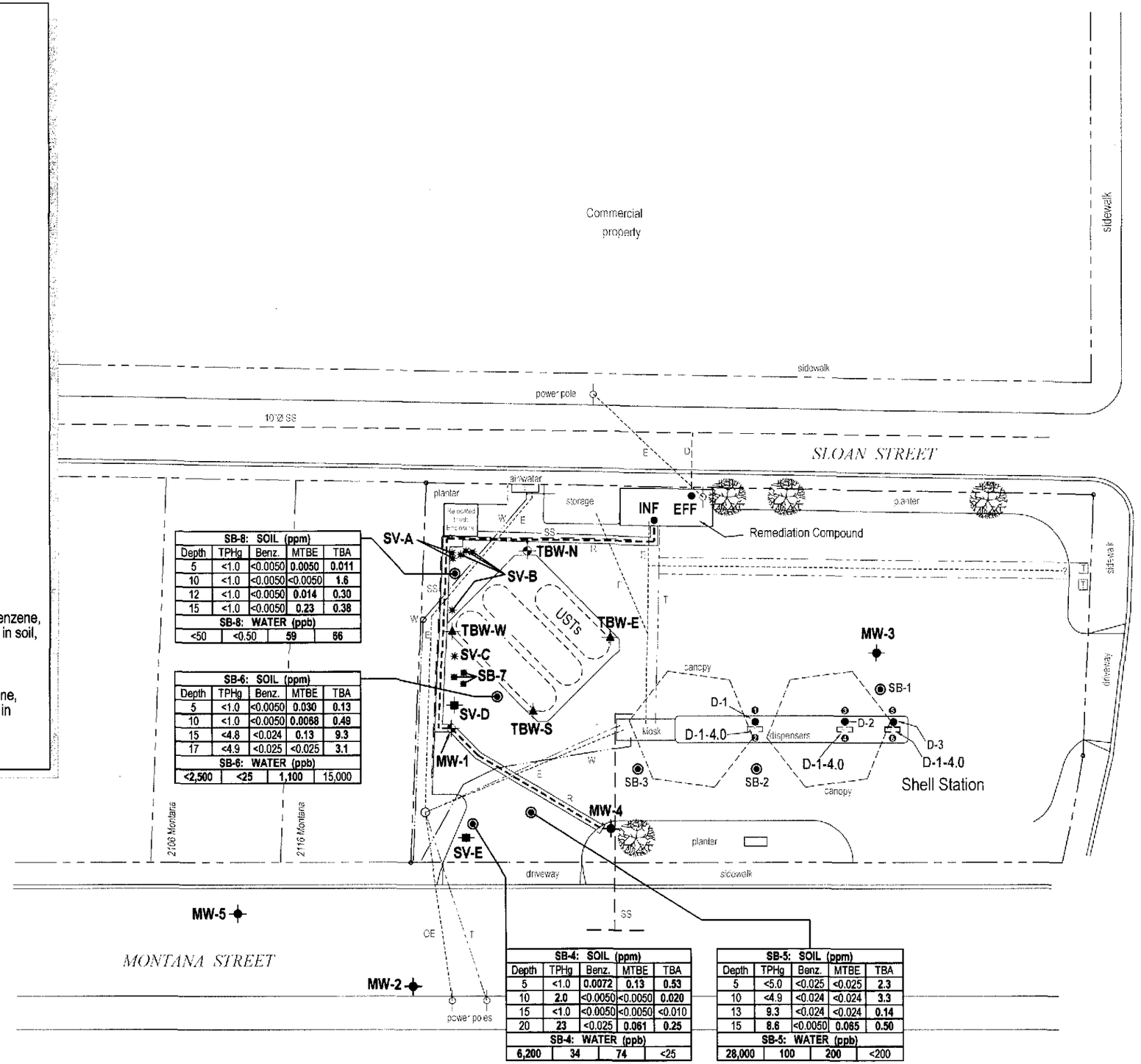
SB-2: SOIL (ppm)				
Depth	TPHg	Benz.	MTBE	TBA
SB-2: WATER (ppb)				
TPHg	Benz.	MTBE	TBA	

— Soil Sample ID

— Soil sample depth and TPHg, benzene, MTBE, and TBA concentrations in soil, in ppm

— Grab Groundwater Sample ID

— Grab groundwater TPHg, benzene, MTBE, and TBA concentrations in groundwater, in ppb



N

0 15 30 60

Scale (ft)

G:\OAKLAND 2120 MONTANA\FIGURES\S| Map 10-05.DWG

FIGURE

2

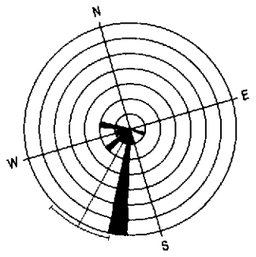
Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident No.98995740

CAMBRIA

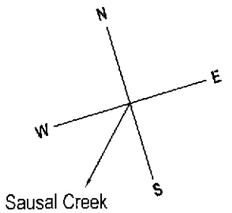
09/23/05

EXPLANATION

- SB-4 ◉ Soil boring location (6/14-16/05)
- SV-D ✚ Soil vapor sampling location (6/14-16/05)
- SB-7 ▪ Attempted soil boring location (6/15/05)
- SV-A ✶ Attempted soil vapor sampling location (6/14/05)
- MW-1 ✚ Well used for groundwater extraction
- MW-2 ✚ Monitoring well location
- TBW-N ✚ Tank backfill well location
- D-1-4.0 · Cambria soil sampling location (5/04)
- SB-1 ◉ Cambria soil boring location (10/99)
- D-1 ● Cambria soil sampling location (11/97)
- INF ● GWE system sampling location
- → Groundwater flow direction
- XX.XX Groundwater elevation contour, in feet above mean sea level (msl), dashed where inferred
- Well / ELEV / Benzene / MTBE — Well designation; Groundwater elevation, in feet above msl; Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.
- Electrical and overhead electric line (E, OE)
- Sanitary sewer (SS)
- Water line (W)
- Telecommunications line (T)
- Remediation piping (R)
- Discharge line (D)
- ❶ Product dispenser number

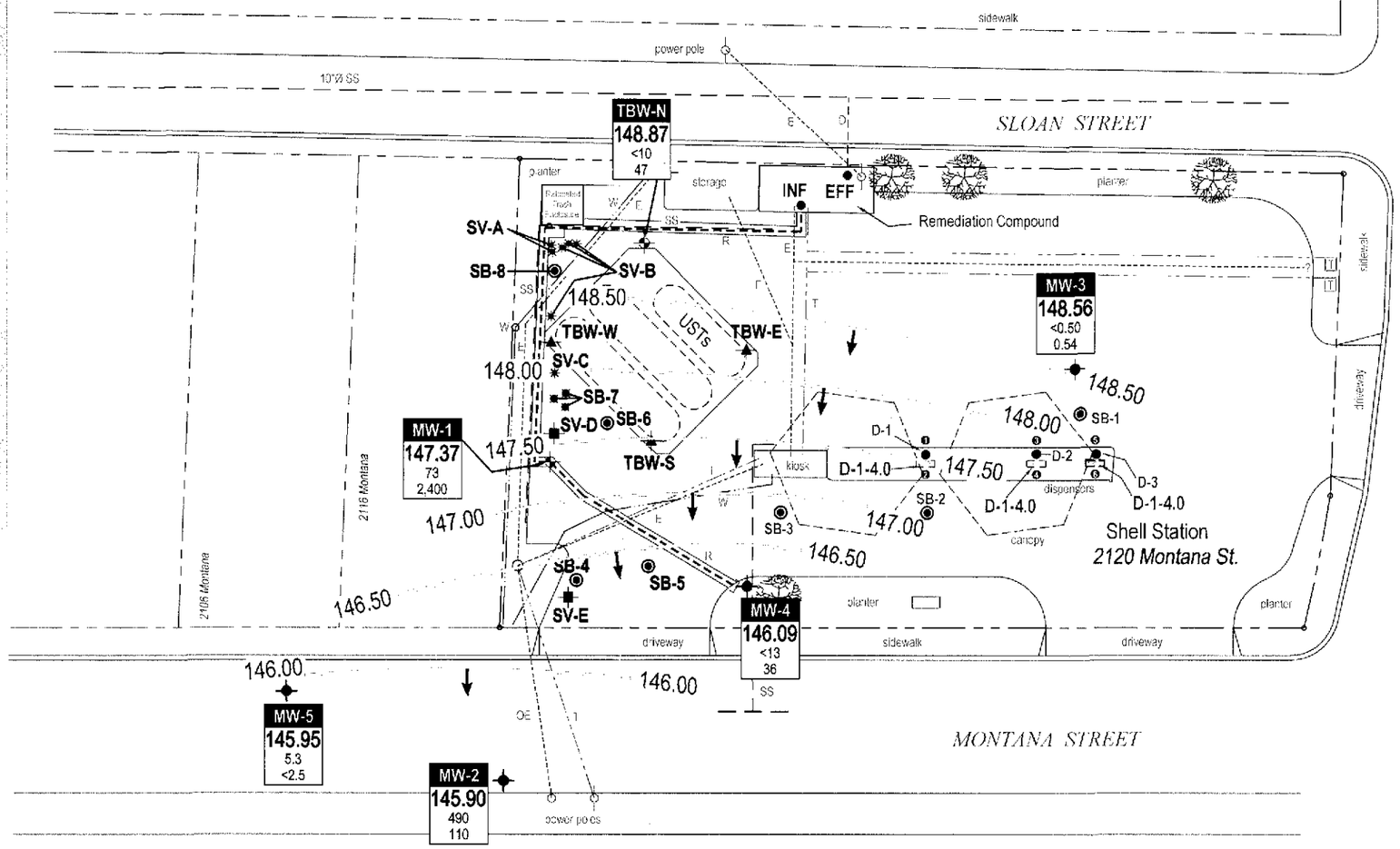


Groundwater Gradient Direction
(1Q01 through 3Q05)



Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor
Relative to Site



0 15 30 60
Scale (ft)

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Groundwater Elevation Contour Map

September 1, 2005

CAMBRIA

FIGURE
3

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident No.98995740

Table 1: Soil Analytical Data, Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)
D-1	11/11/97	5	**1.8**	<0.0050	<0.0050	<0.0050	**0.0059**	**0.16**	NA	NA	NA	NA	9.2 [a]
D-2	11/11/97	5	**9.5**	**0.024**	**0.016**	<0.0050	**0.088**	**0.37**	NA	NA	NA	NA	9.2 [a]
D-3	11/11/97	5	**59**	**0.76**	**0.14**	<0.050	**0.095**	**1.1**	NA	NA	NA	NA	9.2 [a]
SB-1-5	10/27/99	5	**54**	<0.050	<0.050	**0.091**	**0.099**	<0.50	NA	NA	NA	NA	NA
SB-1-10	10/27/99	10	**12**	<0.0050	<0.0050	**0.0093**	**0.030**	<0.05	NA	NA	NA	NA	NA
SB-2-5	10/27/99	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-2-10	10/27/99	10	**2.0**	**0.0050**	**0.0063**	<0.0050	<0.0050	**0.27 (0.24)** [b]	NA	NA	NA	NA	NA
SB-2-15	10/27/99	15	**14**	**0.019**	**0.032**	**0.064**	**0.072**	<0.05	NA	NA	NA	NA	NA
SB-2-20	10/27/99	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-3-5	10/27/99	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.05	NA	NA	NA	NA	NA
SB-3-10	10/27/99	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.11**	NA	NA	NA	NA	NA
SB-3-15	10/27/99	15	**17**	**0.013**	**0.018**	**0.054**	**0.16**	**0.19**	NA	NA	NA	NA	NA
MW-1-5.5	2/20/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.12**	NA	NA	NA	NA	NA
MW-1-10.0	2/20/01	10	**4.7**	**0.066**	<0.0050	**0.12**	**0.14**	**2.4**	NA	NA	NA	NA	NA
MW-1-15.5	2/20/01	15.5	**1.0**	**0.014**	**0.041**	**0.024**	**0.098**	**5.0**	NA	NA	NA	NA	NA
MW-1-20.5	2/20/01	20.5	**1.5**	**0.023**	**0.16**	**0.037**	**0.17**	**2.0**	NA	NA	NA	NA	NA
MW-1-24.0	2/20/01	24	**4.4**	**0.024**	**0.14**	**0.050**	**0.27**	**0.51**	NA	NA	NA	NA	NA
MW-2-5.5	2/21/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-2-10.5	2/21/01	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-2-15.5	2/21/01	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**5.2**	NA	NA	NA	NA	NA
MW-2-21.0	2/21/01	21	**10**	**0.028**	**0.012**	**0.080**	**0.021**	**1.3**	NA	NA	NA	NA	NA
MW-3-5.5	2/21/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-10.5	2/21/01	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-15.5	2/21/01	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-3-20.5	2/21/01	20.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA
MW-4-5.5	6/21/02	5.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA

Table 1: Soil Analytical Data, Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)
MW-4-9.0	6/21/02	9	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-4-13.5	6/21/02	13.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-5-5.5	6/21/02	5.5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-5-9.0	6/21/02	9	**1.3**	**0.0083**	<0.005	<0.005	<0.005	<0.5	NA	NA	NA	NA	NA
MW-5-19.0	6/21/02	19	**18**	**0.0071**	<0.005	**0.014**	**0.019**	<0.5	NA	NA	NA	NA	NA
D-1-4.0	5/6/2004	4	<4.8	<0.024	<0.024	<0.024	**0.17**	**0.77**	NA	NA	NA	NA	**7.5**
D-2-4.0	5/6/2004	4	**1,900**	**1.7**	<1.0	**21**	**57**	**5.80**	NA	NA	NA	NA	**7.3**
D-3-4.0	5/6/2004	4	**110**	<0.50	<0.50	**3.1**	<0.50	**0.65**	NA	NA	NA	NA	**8.7**
SB-4-5	6/15/05	5	<1.0	**0.0072**	<0.0050	<0.0050	<0.0050	**0.13**	**0.53**	<0.010	<0.0050	<0.0050	NA
SB-4-10	6/15/05	10	**2.0**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.020**	<0.010	<0.0050	<0.0050	NA
SB-4-15	6/15/05	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	NA
SB-4-20	6/15/05	20	**23**	<0.025	<0.025	**0.056**	**0.10**	**0.061**	**0.25**	<0.050	<0.025	<0.025	NA
SB-5-5	6/15/05	5	<5.0	<0.025	<0.025	<0.025	<0.025	<0.025	**2.3**	<0.050	<0.025	<0.025	NA
SB-5-10	6/15/05	10	<4.9	<0.024	<0.024	<0.024	<0.024	<0.024	**3.3**	<0.049	<0.024	<0.024	NA
SB-5-13	6/15/05	13	**9.3**	<0.024	<0.024	**0.030**	**0.040**	<0.024	**0.14**	<0.049	<0.024	<0.024	NA
SB-5-15	6/15/05	15	**8.6**	<0.0050	<0.0050	**0.20**	<0.0050	**0.065**	**0.50**	<0.010	<0.0050	<0.0050	NA
SB-6-5	6/15/05	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.030**	**0.13**	<0.010	<0.0050	<0.0050	NA
SB-6-10	6/15/05	10	<1.0	<0.0050	<0.0050	<0.0050	**0.0064**	**0.0068**	**0.49**	<0.010	<0.0050	<0.0050	NA
SB-6-15	6/15/05	15	<4.8	<0.024	<0.024	<0.024	<0.024	**0.13**	**9.3**	<0.048	<0.024	<0.024	NA
SB-6-17	6/15/05	17	<4.9	<0.025	<0.025	<0.025	<0.025	<0.025	**3.1**	<0.049	<0.025	<0.025	NA
SB-8-5	6/15/05	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.0050**	**0.011**	<0.010	<0.0050	<0.0050	NA
SB-8-10	6/15/05	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**1.6**	<0.010	<0.0050	<0.0050	NA
SB-8-12	6/15/05	12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.014**	**0.30**	<0.010	<0.0050	<0.0050	NA
SB-8-15	6/15/05	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.23**	**0.38**	<0.010	<0.0050	<0.0050	NA

Table 1: Soil Analytical Data, Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	TBA (ppm)	DIPE (ppm)	ETBE (ppm)	TAME (ppm)	Lead (ppm)

Abbreviations and Notes:

fbg = Feet below grade
ppm = Parts per million, equivalent to mg/Kg
mg/Kg = Miligrams per kilogram
<x = Not detected at detection limit x
NA -Not analyzed

TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
TBA = Tert-Butyl alcohol
DIPE = Di-isopropyl ether
ETBE= Ethyl tert butyl ether
TAME = Tert amyl methyl ether

TPHg analyzed by EPA Method 8015M for samples collected prior to 2000; later samples analyzed by EPA Method 8260B.
Benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8020 prior to 2000; later samples analyzed by EPA Method 8260B.
MTBE analyzed by EPA Method 8020 prior to 2000, unless otherwise noted; later samples analyzed by EPA Method 8260B.
TBA, DIPE, ETBE, and TAME analyzed by EPA Method 8260B.
Lead sample from 1997 analyzed according to Title 22; 2004 lead samples analyzed by EPA Method 6010B.

a - Lead results reported are based on a composite sample of D-1, D-2, and D-3.
b - Results in parentheses were analyzed by EPA Method 8260.
Note: SB-7 was not advanced due to utility conflicts.

Table 2: Groundwater Analytical Data, Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Date	Sample Depth (fbg)	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	TBA (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)
SB-1-W	10/27/99	15	**446**	**4.72**	**1.57**	<0.500	**4.53**	**50.3**	NA	NA	NA	NA
SB-2-W	10/27/99	20	**524**	**10.6**	**1.47**	**2.42**	**2.18**	**59.4**	NA	NA	NA	NA
SB-3-W	10/27/99	20	**2,380**	**6.75**	**6.63**	**46.4**	**75.2**	**3,210**	NA	NA	NA	NA
SB-4-W	6/15/05	21 - 25	**6,200**	**34**	**140**	**130**	**520**	**74**	<25	<10	<10	<10
SB-5-W	6/15/05	14 - 18	**28,000**	**100**	<20	**890**	**2,400**	**200**	<200	<80	<80	<80
SB-6-W	6/15/05	16 - 20	<2,500	<25	<25	<25	<50	**1,100**	**15,000**	<100	<100	<100
SB-8-W	6/16/05	14 - 18	<50	<0.50	<0.50	<0.50	<1.0	**59**	**66**	<2.0	<2.0	<2.0

Abbreviations and Notes:

fbg = Feet below grade

ppb = Parts per billion, equivalent to µg/L

µg/L = Micrograms per liter

<x = Not detected at detection limit x

NA - Not analyzed

TPHg = Total *petroleum hydrocarbons as gasoline*

MTBE = Methyl tertiary butyl ether

TBA = Tert-Butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tert butyl ether

TAME = Tert amyl methyl ether

TPHg analyzed by EPA Method 8015M for samples SB-1-W, SB-2-W, and SB-3-W; analyzed by EPA Method 8260B for all other samples.

Benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8020 for samples SB-1-W, SB-2-W, and SB-3-W; analyzed by EPA Method 8260B for all other samples.

MTBE, TBA, DIPE, ETBE and TAME analyzed by EPA Method 8260B.

Note: SB-7 was not advanced due to utility conflicts.

Table 3: Groundwater Extraction - System Analytical Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

	Influent			Midfluent 1			Midfluent 2			Effluent		
Sample Date (mm/dd/yy)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)
04/02/2003	51,000	1,300	7,100	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
04/08/2003	45,000	1,200	8,600	1,600	5.3	3.2	220	<0.50	<0.50	<50	<0.50	<0.50
04/22/2003	<50	<25	1,700	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/01/2003	45,000	1,600	8,300	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/21/2003	12,000	370	1,500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/03/2003	10,000	470	1,900	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/17/2003	1,200	42	29	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
04/21/2004	10,000	540	950	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/08/2004	970	26	290	<50	<0.50	<0.50	<50	<0.50	<0.50	94	<0.50	<0.50
06/30/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	<50	<0.50	<0.50
07/07/2004	1,700	71	500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
08/03/2004	1,000	52	390	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
09/14/2004	4,100	230	1,100	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
10/12/2004	140	3.9	140	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
11/12/2004	2,600	180	680	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
12/02/2004	690	41	340	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
01/03/2005	<500	17	1,500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
02/14/2005	<100	<1.0	120	<50	<0.50	<0.50	<50	<0.50	<0.50	150 a	<0.50	<0.50
03/02/2005	4,900	190	1,000	<50	<0.50	<0.50	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50
04/11/2005	440	6.7	320	<50 b	<0.50	<0.50	<50	<0.50	<0.50	<50 b	<0.50	<0.50
05/09/2005	120	<0.50	79	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50

Table 3: Groundwater Extraction - System Analytical Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample Date (mm/dd/yy)	Influent			Midfluent 1			Midfluent 2			Effluent		
	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)
06/09/2005	<500	<0.50	<0.50	<500	<5.0	<5.0	<50	<0.50	<0.50	<50	<0.50	<0.50
07/15/2005	480	18	220	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
08/04/2005	290	18	130	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
Conc. = Concentration
ppb = parts per billion, equivalent to µg/L
µg/L = Micrograms per liter
TPHg, benzene, and MTBE analyzed by EPA Method 8260B
a = TPHg contains a discreet peak of ethylhexanol, which are not believed to be gasoline related
b = Siloxane peaks were found is sample which are not believed to be gasoline related

Table 4: Groundwater Extraction - Operation and Mass Removal Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Period Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	TPHg Period Removal (pounds)	TPHg Cumulative Removal (pounds)	Benzene Conc. (ppb)	Benzene Period Removal (pounds)	Benzene Cumulative Removal (pounds)	MTBE Conc. (ppb)	MTBE Period Removal (pounds)	MTBE Cumulative Removal (pounds)
04/02/2003	0.0	393	0	0	0		0.000	0.000		0.000	0.000		0.000	0.000
04/02/2003	5.3	1,006	613	1.93	613	51,000	0.261	0.261	1,300	0.007	0.007	7,100	0.036	0.036
04/08/2003	11.4	2,010	1,004	2.74	1,617	45,000	0.377	0.638	1,200	0.010	0.017	8,600	0.072	0.108
04/22/2003	303.0	15,640	13,630	0.78	15,247	<50	0.003	0.641	<25	0.001	0.018	1,700	0.193	0.302
05/01/2003	399.0	17,840	2,200	0.38	17,447	45,000	0.826	1.47	1,600	0.029	0.047	8,300	0.152	0.454
05/20/2003	784.0	43,320	25,480	1.10	42,927		9.568	11.0		0.340	0.388		1.765	2.22
05/21/2003	808.5	44,639	1,319	0.90	44,246	12,000	0.132	11.2	370	0.004	0.392	1,500	0.017	2.24
06/03/2003	1116.9	59,813	15,174	0.82	59,420	10,000	1.266	12.4	470	0.060	0.451	1,900	0.241	2.48
06/17/2003	1455.5	64,741	4,928	0.24	64,348	1,200	0.049	12.5	42	0.002	0.453	29	0.001	2.48
07/01/2003	1697.4	68,668	3,927	0.27	68,275		0.039	12.5		0.001	0.454		0.001	2.48
07/18/2003	1867.0	69,099	431	0.04	68,706		0.004	12.5		0.000	0.455		0.000	2.48
	System Shutdown due to presence of SPH													
04/21/2004	1984.4	1,516.3	0	0.00	68,706	10,000	0.000	12.5	540	0.000	0.455	950	0.000	2.48
05/25/2004	1984.4	1,516.3	0	0.00	68,706		0.000	12.5		0.000	0.455		0.000	2.48
06/08/2004	2,107.5	4,798.2	3,282	0.44	71,988	970	0.027	12.6	26	0.001	0.455	290	0.008	2.49
06/22/2004	2280.6	10,108	5,310	0.51	77,298		0.043	12.6		0.001	0.456		0.013	2.50
06/30/2004	2475.2	18,527.5	8,420	0.72	85,717		0.068	12.7		0.002	0.458		0.020	2.52
07/07/2004	2494.5	19,377	850	0.73	86,567	1,700	0.012	12.7	71	0.001	0.459	500	0.004	2.52
07/22/2004	2861.5	34,214	14,837	0.67	101,404		0.210	12.9		0.009	0.468		0.062	2.58
08/03/2004	3142.1	59,767	25,553	1.52	126,957	1,000	0.213	13.1	52	0.011	0.479	390	0.083	2.67
08/17/2004	3501.3	81,350	21,583	1.00	148,540		0.180	13.3		0.009	0.488		0.070	2.74
08/31/2004	3813.2	81,571	221	0.01	148,761		0.002	13.3		0.000	0.488		0.001	2.74
09/14/2004	4153.4	101,123	19,552	0.96	168,313	4,100	0.669	13.9	230	0.038	0.526	1,100	0.179	2.92
09/29/2004	4513.1	120,885	19,762	0.92	188,075		0.676	14.6		0.038	0.564		0.181	3.10
10/12/2004	4824.1	134,612	13,727	0.74	201,802	140	0.016	14.6	3.9	0.000	0.564	140	0.016	3.12
10/22/2004	4990.6	145,220	10,608	1.06	212,410		0.012	14.7		0.000	0.564		0.012	3.13
11/02/2004	5021.0	147,500	2,280	1.25	214,690		0.003	14.7		0.000	0.564		0.003	3.13
11/12/2004	5263.0	163,212	15,712	1.08	230,402	2,600	0.341	15.0	180	0.024	0.588	680	0.089	3.22
11/22/2004	5498.2	164,899	1,687	0.12	232,089		0.037	15.0		0.003	0.590		0.010	3.23
12/02/2004	5734.9	172,940	8,041	0.57	240,130	690	0.046	15.1	41	0.003	0.593	340	0.023	3.25

Table 4: Groundwater Extraction - Operation and Mass Removal Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Period Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	TPHg Period Removal (pounds)	TPHg Cumulative Removal (pounds)	Benzene Conc. (ppb)	Benzene Period Removal (pounds)	Benzene Cumulative Removal (pounds)	MTBE Conc. (ppb)	MTBE Period Removal (pounds)	MTBE Cumulative Removal (pounds)
12/13/2004	6001.6	178,400	5,460	0.34	245,590		0.031	15.1		0.002	0.595		0.015	3.27
12/27/2004	6338.4	180,207	1,807	0.09	247,397		0.010	15.1		0.001	0.596		0.005	3.27
01/03/2005	6501.9	182,474	2,267	0.23	249,664	<500	0.005	15.1	17	0.000	0.596	1,500	0.028	3.30
01/21/2005	6941.6	197,770	15,296	0.58	264,960		0.032	15.2		0.002	0.598		0.191	3.49
01/31/2005	7172.4	209,951	12,181	0.88	277,141		0.025	15.2		0.002	0.600		0.152	3.65
02/14/2005	7512.9	210,719	768	0.04	277,909	<100	0.000	15.2	<1.0	0.000	0.600	120	0.001	3.65
03/02/2005	7897.9	231,103	20,384	0.88	298,293	4,900	0.833	16.0	190	0.032	0.632	1,000	0.170	3.82
03/17/2005	7901.2	231,419	316	1.60	298,609		0.013	16.0		0.001	0.633		0.003	3.82
03/29/2005	8042.9	241,058	9,639	1.13	308,248		0.394	16.4		0.015	0.648		0.080	3.90
04/11/2005	8168.4	249,172	8,114	1.08	316,362	440	0.030	16.5	6.7	0.000	0.649	320	0.022	3.92
04/25/2005	8503.2	269,805	20,633	1.03	336,995		0.076	16.5		0.001	0.650		0.055	3.98
05/09/2005	8841.9	283,739	13,934	0.69	350,929	120	0.014	16.5	<0.50	0.000	0.650	79	0.009	3.99
05/27/2005	9271.3	290,449	6,710	0.26	357,639		0.007	16.6		0.000	0.650		0.004	3.99
06/09/2005	9581.5	290,688	239	0.01	357,878	<500	0.000	16.6	<0.50	0.000	0.650	<0.50	0.000	3.99
06/20/2005	9682.4	291,021	333	0.06	358,211		0.001	16.6		0.000	0.650		0.000	3.99
07/15/2005	10283.3	306,225	15,204	0.42	373,415	480	0.061	16.6	18	0.002	0.652	220	0.028	4.02
07/29/2005	10621.9	313,437	7,212	0.35	380,627		0.029	16.6		0.001	0.653		0.013	4.03
08/04/2005	10762.1	315,854	2,417	0.29	383,044	290	0.006	16.6	18	0.000	0.653	130	0.003	4.03
08/23/2005	11213.3	319,640	3,786	0.14	386,830		0.009	16.7		0.001	0.654		0.004	4.04
			Total Extracted Volume =		**386,830**	**Total Pounds Removed:**		**16.7**	**Total Pounds Removed:**		**0.654**	**Total Pounds Removed:**		**4.04**
			Average Operational Flow Rate =		**#REF!**	**Total Gallons Removed:**		**2.73**	**Total Gallons Removed:**		**0.089**	**Total Gallons Removed:**		**0.654**

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
Conc. = Concentration
ppb = Parts per billion, equivalent to mg/L
mg/L = Micrograms per liter
L = Liter
gal = Gallon

Table 4: Groundwater Extraction - Operation and Mass Removal Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

				Period		TPHg			Benzene			MTBE		
Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	Benzene Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	MTBE Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)

gpm = Gallons per minute
g = Gram
Mass removed based on the formula: volume extracted (gal) x Concentration (mg/L) x ($g/10^6 mg$) x (pound/453.6g) x (3.785 L/gal)
When constituents are not detected, the concentration is assumed to be equal to half the detection limit in subsequent calculations.
Volume removal data based on the formula: mass (pounds) x $(density)^{-1}$ (cc/g) x 453.6 (g/pound) x (L/1000 cc) * (gal/3.785 L)
Density inputs: TPHg = 0.73 g/cc, benzene = 0.88 g/cc, MTBE = 0.74 g/cc
TPHg, BTEX, and MTBE analyzed by EPA Method 8260B

Table 5: Soil Physical Parameters - Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Sample Date	Sample Depth (fbg)	Moisture Content (% wt)	Calculated Volumetic Water Content (a) (% wt)	Dry Bulk Density (g/cc)	Porosity, Total (b) (% Vb)	Calculated Volumetric Air Content (c) (% wt)
SV-D-5	6/14/2005	5	25.01	--	1.47	44.32	--
SV-E-5	6/14/2005	5	25.45	--	1.44	46.62	--
			Average Value:		Average Value:	Average Value:	
			25.23	**36.73**	**1.46**	**45.47**	**8.74**
SV-D-10	6/14/2005	10	29.45	--	1.59	40.95	--
SV-E-10	6/14/2005	10	23.25	--	1.54	42.85	--
			Average Value:		Average Value:	Average Value:	
			26.35	**41.27**	**1.57**	**41.90**	**0.63**

Abbreviations:

fbg = Feet below grade

% wt = Percent by weight

g/cc = Grams per cubic centimeter

% Vb = % of Bulk volume

mg/kg = Milligrams per kilogram

Notes:

(a) Volumetric water content calculated as follows: (moisture content x dry bulk density)/density of water

(b) Assumes specific gravity of 2.65

(b) Volumetric air content calculated as follows: (porosity - volumetric water content)

Table 6: Soil Vapor Analytical Data - Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample ID	Date	Depth (fbg)	TPHg ($\mu g/m^3$)	Benzene ($\mu g/m^3$)	Toluene ($\mu g/m^3$)	Ethylbenzene ($\mu g/m^3$)	Total Xylenes ($\mu g/m^3$)	Acetone ($\mu g/m^3$)	Isopropanol ($\mu g/m^3$)	Propane ($\mu g/m^3$)	Carbon dioxide ($\mu g/m^3$)	Methane ($\mu g/m^3$)	Oxygen ($\mu g/m^3$)
SV-D-5.0	8/24/05	5	**22,000**	<130	<150	<170	<170	<480	**52,000**	<180	**160,000,000**	<2,700	**130,000,000**
SV-D-10.0	8/24/05	10	**16,000,000**	**480**	<510	<590	<590	<1,600	**3,700**	**770**	**260,000,000**	**7,800,000**	**41,000,000**
SV-E-5.0	8/24/05	5	**25,000**	<6.4	**25**	<8.7	<8.7	<24	**140**	**20**	**130,000,000**	**10,000**	**140,000,000**
SV-E-5.0 DUP	8/24/05	5	**10,000**	<6.4	<7.5	<8.7	<8.7	**26**	**130**	**21**	**130,000,000**	**7,300**	**140,000,000**
SV-E-10.0	8/24/05	10	**78,000,000**	**46,000**	<7,800	<9,000	<9,000	<25,000	<25,000	<9,300	**250,000,000**	**40,000,000**	**36,000,000**
TRIP BLANK	8/24/05	N/A	<4.1	<6.4	<7.5	<8.7	<8.7	<24	<24	<9.0	<180,000	<1,300	<2,600,000

Abbreviations and Notes:

fbg = Feet below grade

$\mu g/m^3$ = Micrograms per cubic meter

<x = Not detected at detection limit x

N/A = Not applicable

TPHg = Total petroleum hydrocarbons as gasoline

TPHg analyzed by method EPA-19 TO-3.

Carbon dioxide, methane, and oxygen analyzed by method ASTM D1946.

Benzene, toluene, acetone, isopropanol, and propane analyzed by method EPA-19 TO-14A.

Table 7: Door to Door Survey Results, Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Owner Name	Tenant Name	Address	City	Zip	Response Received	Well Onsite (#wells)	Well Use	Sump Pump	Foundation Type	Basement/ Material	Crawl Space/ Material	USTs	Comments
Kwong Pak Kwok	Kwong Pak Kwok	2110 Montana St.	Oakland	94602	Yes	0	NA	No	Unk.	Yes/ Concrete	Yes/ Earth	No	Basement is small, in rear, 1/4 size of total structure.
Unk.	Unk.	2106 Montana St.	Oakland	94602	No	Unk.	NA	Unk.	Unk.	Unk.	Unk.	Unk.	Left form with resident.
Unk.	Unk.	2102 Montana St.	Oakland	94602	No	Unk.	NA	Unk.	Unk.	Unk.	Unk.	Unk.	Left form on property.
John Griffin or Gary Sheppard	Unk.	2026 Montana St.	Oakland	94602	Yes	0	NA	No	Unk.	No/ NA	Yes/ Earth	No	
Kinder Co. / Tom Stenstrom	K.T. Graham (Paradise Books)	3401Fruitvale Ave.	Oakland	94602	Yes	Unk.	NA	No	Slab-on-grade	No/ NA	No/ NA	No	
Unk.	Mel's	3400 Fruitvale Ave.	Oakland	94602	No	Unk.	NA	Unk.	Unk.	Unk.	Unk.	Unk.	Left form with employee.
Unk.	China Gourmet	3407 Fruitvale Ave.	Oakland	94602	No	Unk.	NA	Unk.	Unk.	Unk.	Unk.	Unk.	Left form with employee.
Kinder Co.	Subway	3409 Fruitvale Ave.	Oakland	94602	Yes	0	NA	No	Unk.	No/ NA	No/ NA	No	
Unk.	NA	3411 Fruitvale Ave.	Oakland	94602	No	Unk.	NA	Unk.	Unk.	Unk.	Unk.	Unk.	Vacant.

Abbreviations and Notes:

Unk. = Unknown

NA = Not Applicable

ATTACHMENT A

Boring Logs

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SV-D
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	14-Jun-05
LOCATION	2120 Montana Street, Oakland	**DRILLING COMPLETED**	14-Jun-05
PROJECT NUMBER	247-0733-006	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	6"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	A. Cool, P.G. #7659	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 10.65 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Concrete	0.8
					GM		**Silty GRAVEL**; (GM); Dark gray; loose; dry; 5% clay, 15% silt, 80% gravel.	1.5
109							**CLAY**; (CL); Black; medium stiff; dry; 85% clay; 15% silt; medium plasticity.	
8		SV-D-5		5	CL			
							@ 7 fbg - 70% clay, 25% silt, 5% gravel; low plasticity.	
1.5		SV-D-10		10			@ 10 fbg - Gray to black; damp; 70% clay, 20% silt, 10% gravel; low plasticity.	10.7

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Fine Sand #1C
- 3" Screen, 1/4" Teflon
- Bentonite Pellets
- Portland Type I/II
- Bentonite Seal
- Monterey Fine Sand #1C
- 3" Screen, 1/4" Teflon
- Bottom of Boring @ 10.65 ft bgs

WELL LOG (PID) G:\OA19F2~1\GINT\GINT.GPJ DEFAULT.GDT 10/21/05

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SV-E
JOB/SITE NAME	Shell-branded Service Station	**DRILLING STARTED**	14-Jun-05
LOCATION	2120 Montana Street, Oakland	**DRILLING COMPLETED**	14-Jun-05
PROJECT NUMBER	247-0733-006	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	6"	**SCREENED INTERVALS**	NA
LOGGED BY	S. Dalie IV	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	A. Cool, P.G. #7659	***DEPTH TO WATER (Static)***	NA
REMARKS	Hand augered to 10.65 fbg.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Concrete	0.8
					GM		**Silty GRAVEL**; (GM); Brown; loose; dry; 5% clay, 10% silt, 85% gravel.	2.0
59					SW		**Well Graded SAND** (SW); Light brown; loose; dry; 100% sand.	3.5
					SM		**Silty SAND** (SM); Brown; medium dense; dry; 25% silt, 75% sand.	4.5
285		SV-E- 5		5	CL		**CLAY**; (CL); Dark brown to gray; very stiff; dry; 85% clay, 15% silt.	
410		SV-E- 10		10				10.7

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Fine Sand #1C
- 3" Screen, 1/4" Teflon
- Bentonite Pellets
- Portland Type I/II
- Bentonite Seal
- Monterey Fine Sand #1C
- 3" Screen, 1/4" Teflon
- Bottom of Boring @ 10.65 ft bgs

WELL LOG (PID): G:\OA19F2~1\GINT\GINT.GPJ DEFAULT.GDT 10/21/05

ATTACHMENT B

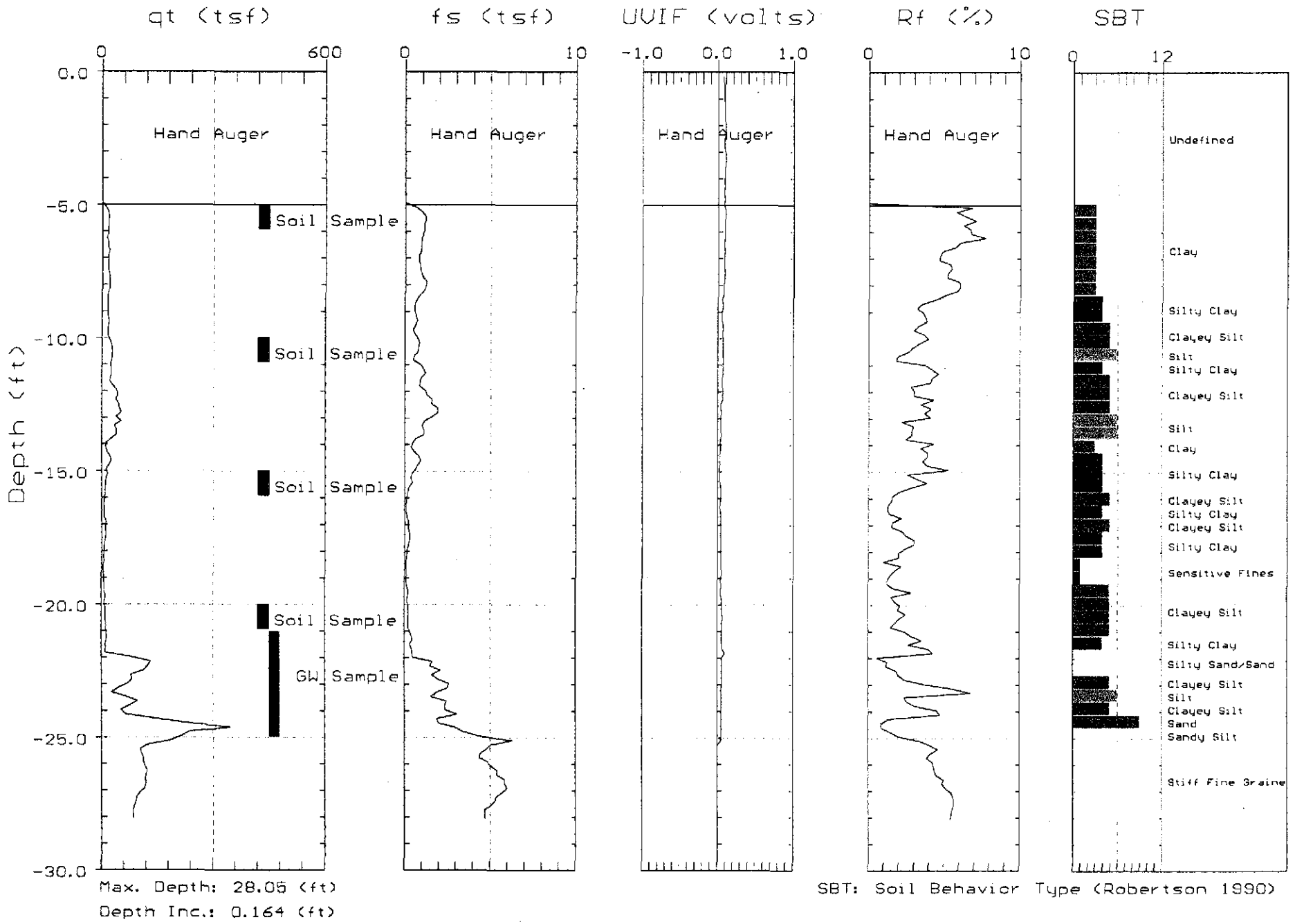
CPT Test Data

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-4

Engineer: C.VASKO
Date: 06:15:105 08:15



Max. Depth: 28.05 (ft)
Depth Inc.: 0.164 (ft)

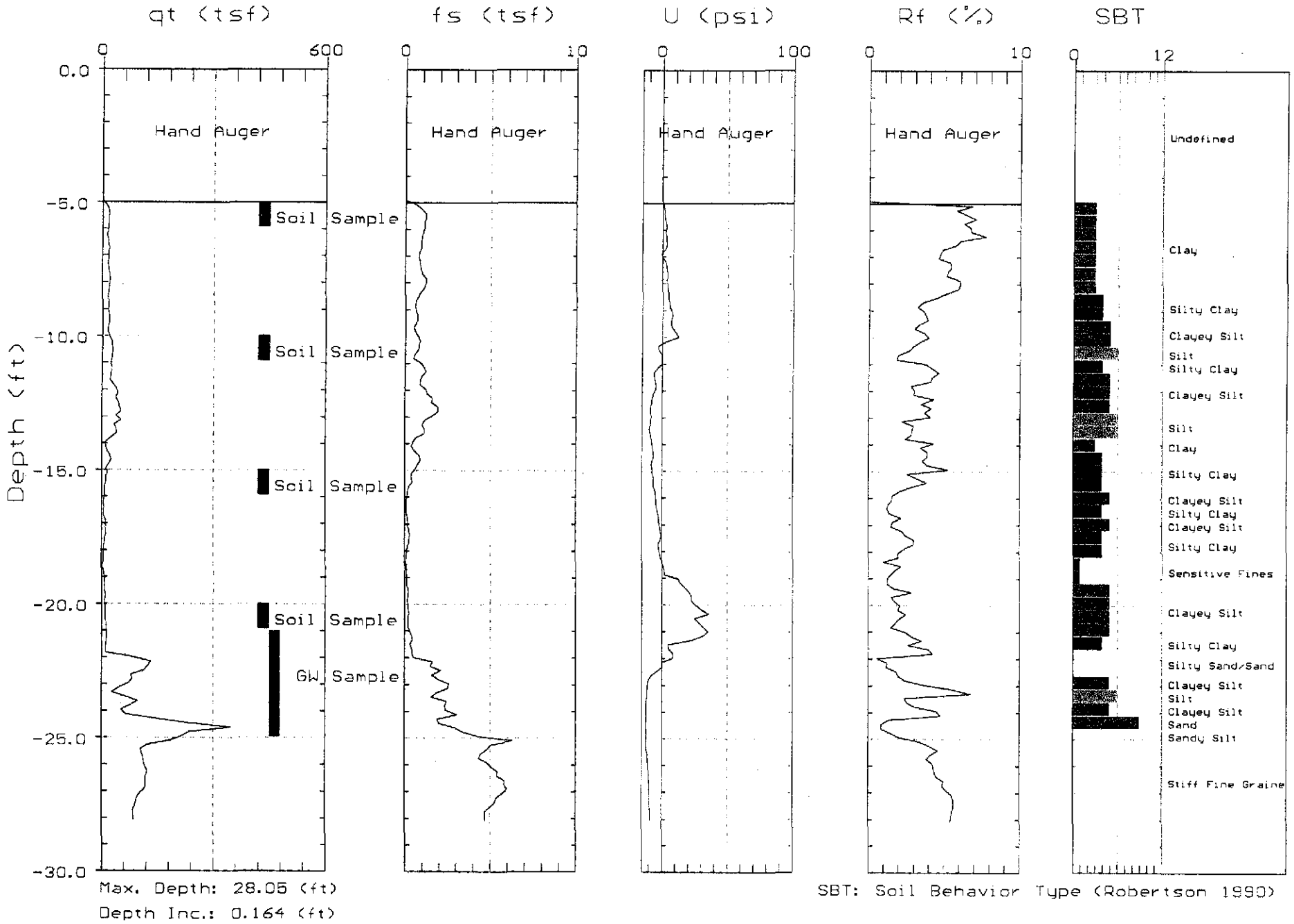
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-4

Engineer: C.VASKO
Date: 06:15:105 08:15



Max. Depth: 28.05 (ft)
Depth Inc.: 0.164 (ft)

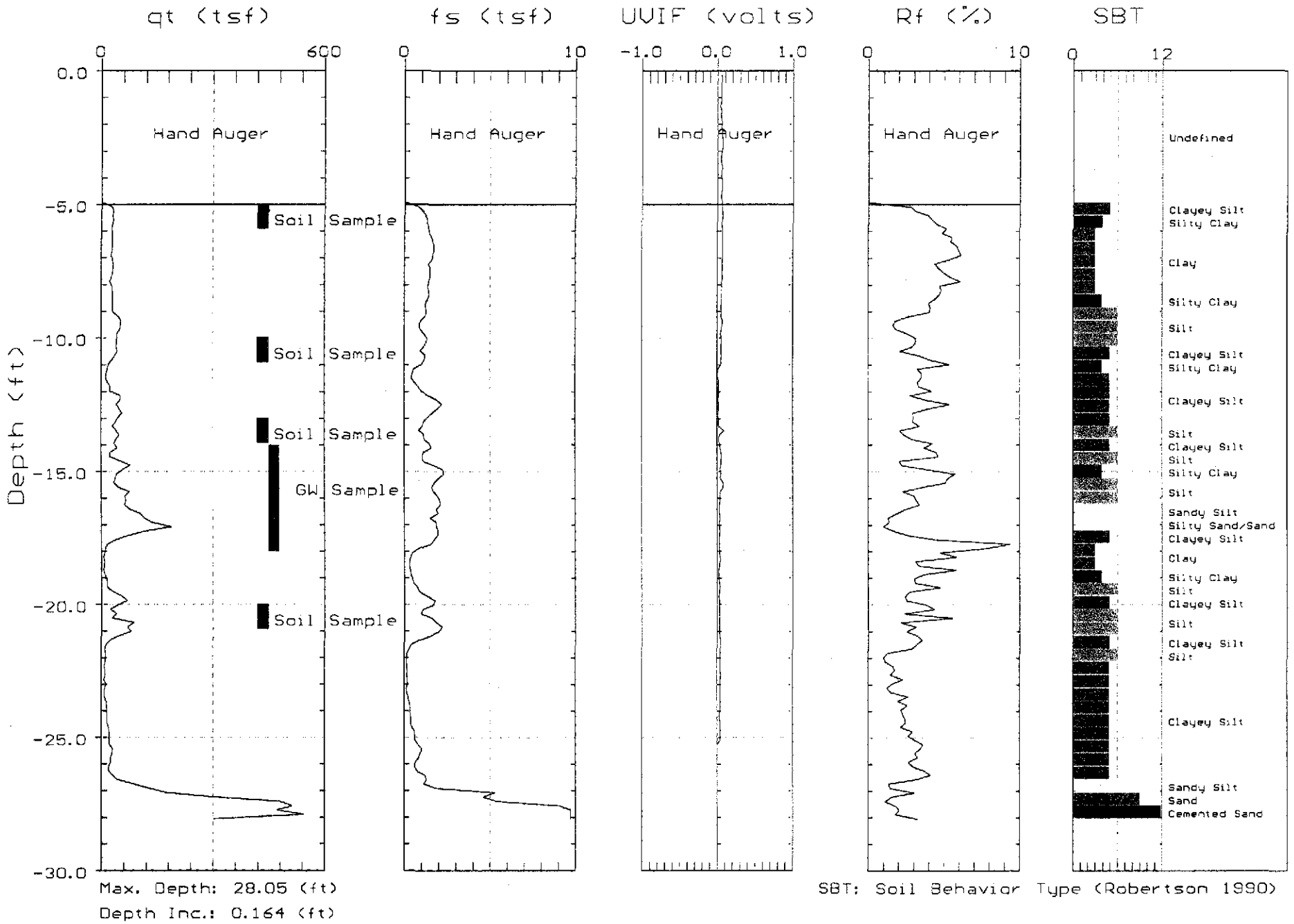
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-5

Engineer: C.VASKO
Date: 06:15:105 10:18



Max. Depth: 28.05 (ft)
Depth Inc.: 0.164 (ft)

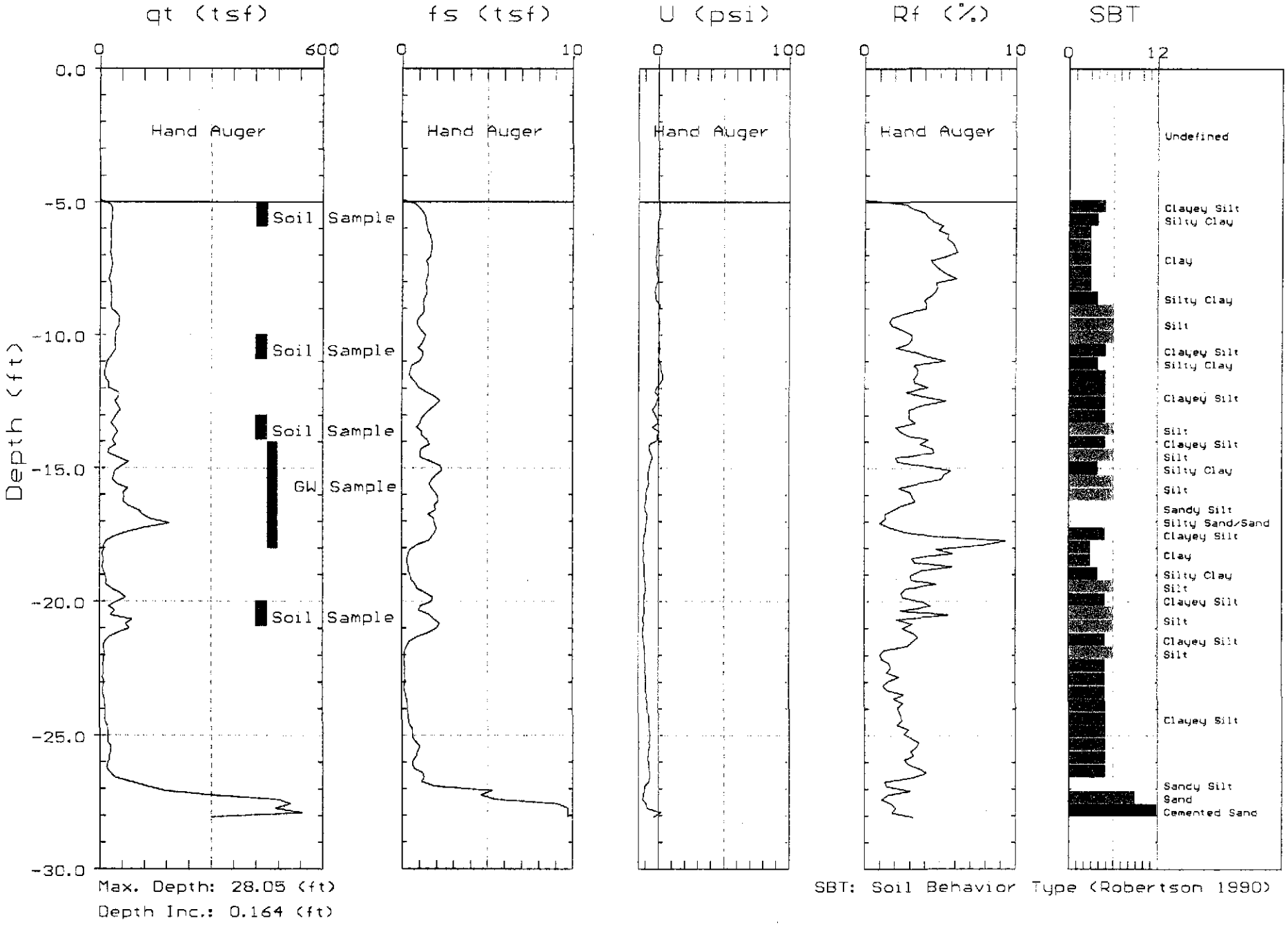
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-5

Engineer: C.VASKO
Date: 06:15:105 10:18



Max. Depth: 28.05 (ft)
Depth Inc.: 0.164 (ft)

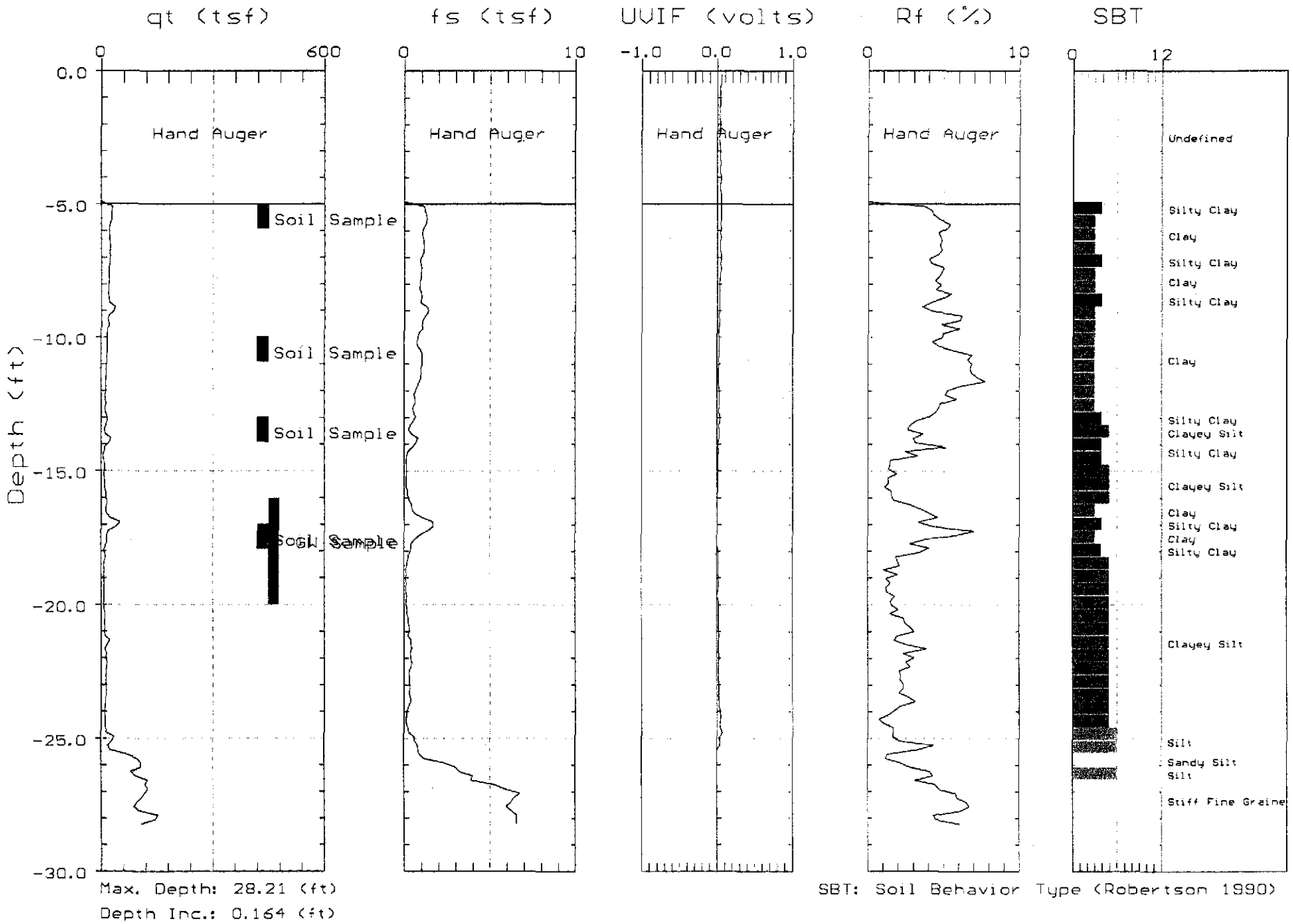
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-6

Engineer: C.VASKO
Date: 06:15:105 12:59

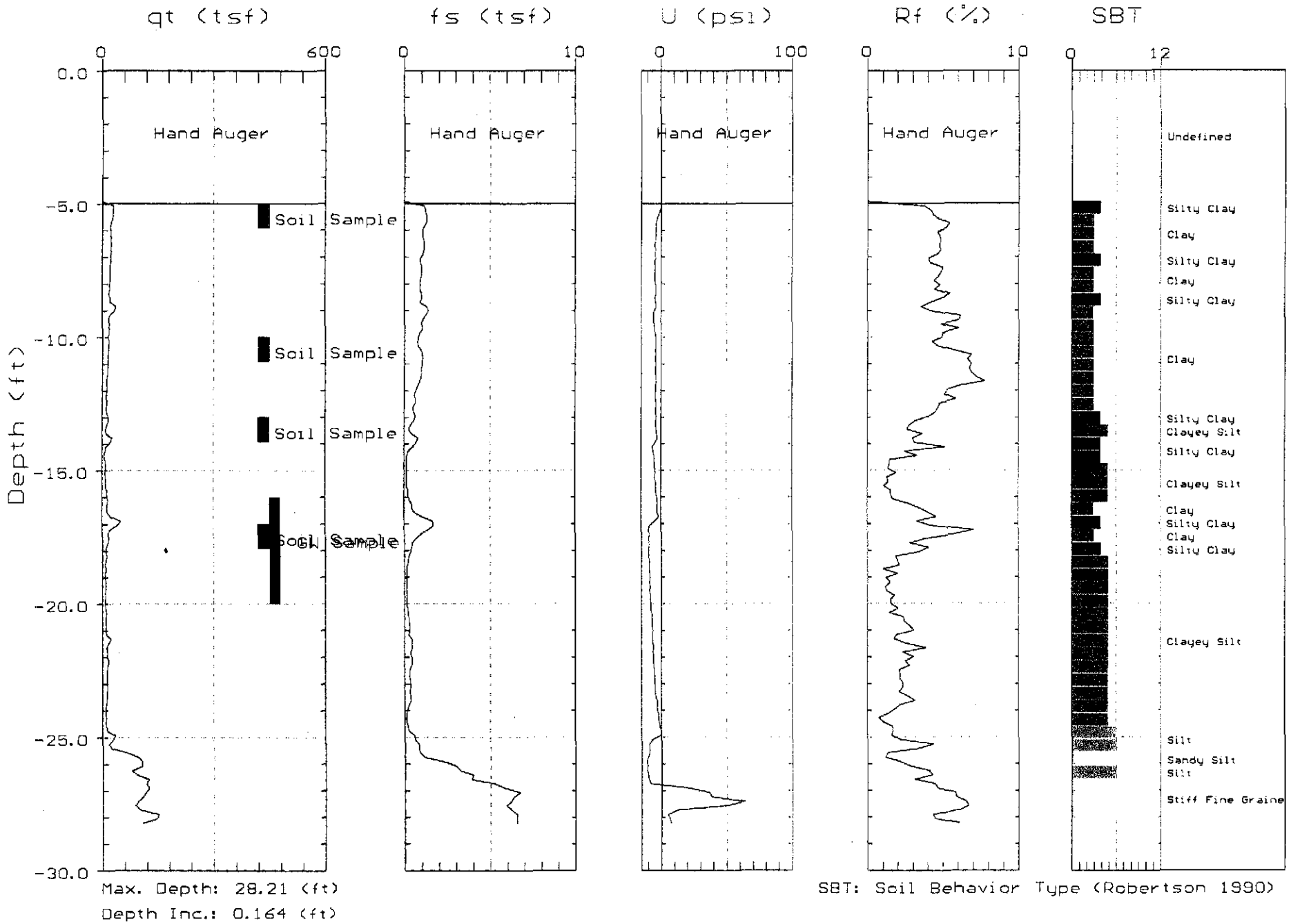


GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-6

Engineer: C.VASKO
Date: 06:15:105 12:59



Max. Depth: 28.21 (ft)
Depth Inc.: 0.164 (ft)

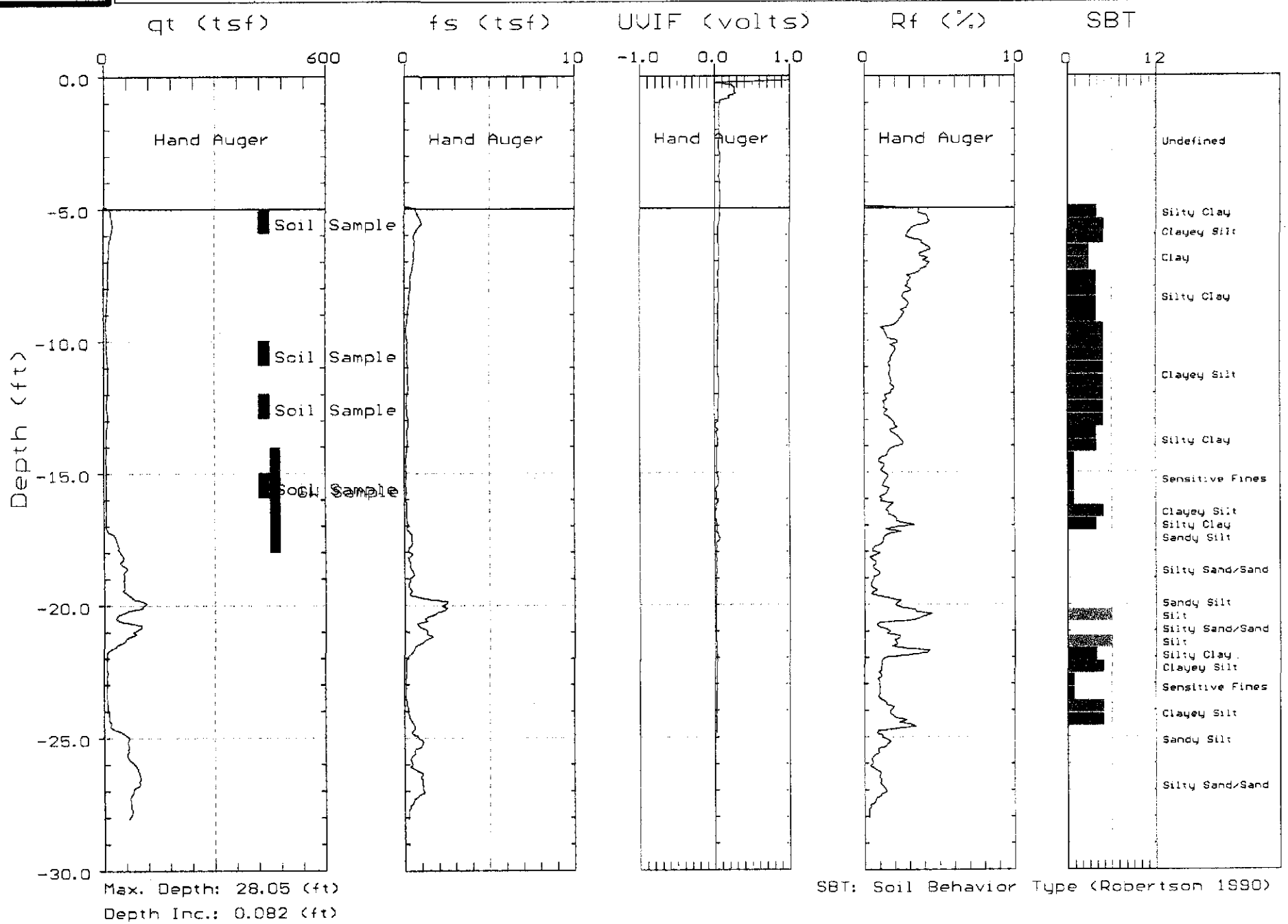
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-8

Engineer: C.VASKO
Date: 06:16:105 09:13



Max. Depth: 28.05 (ft)
Depth Inc.: 0.082 (ft)

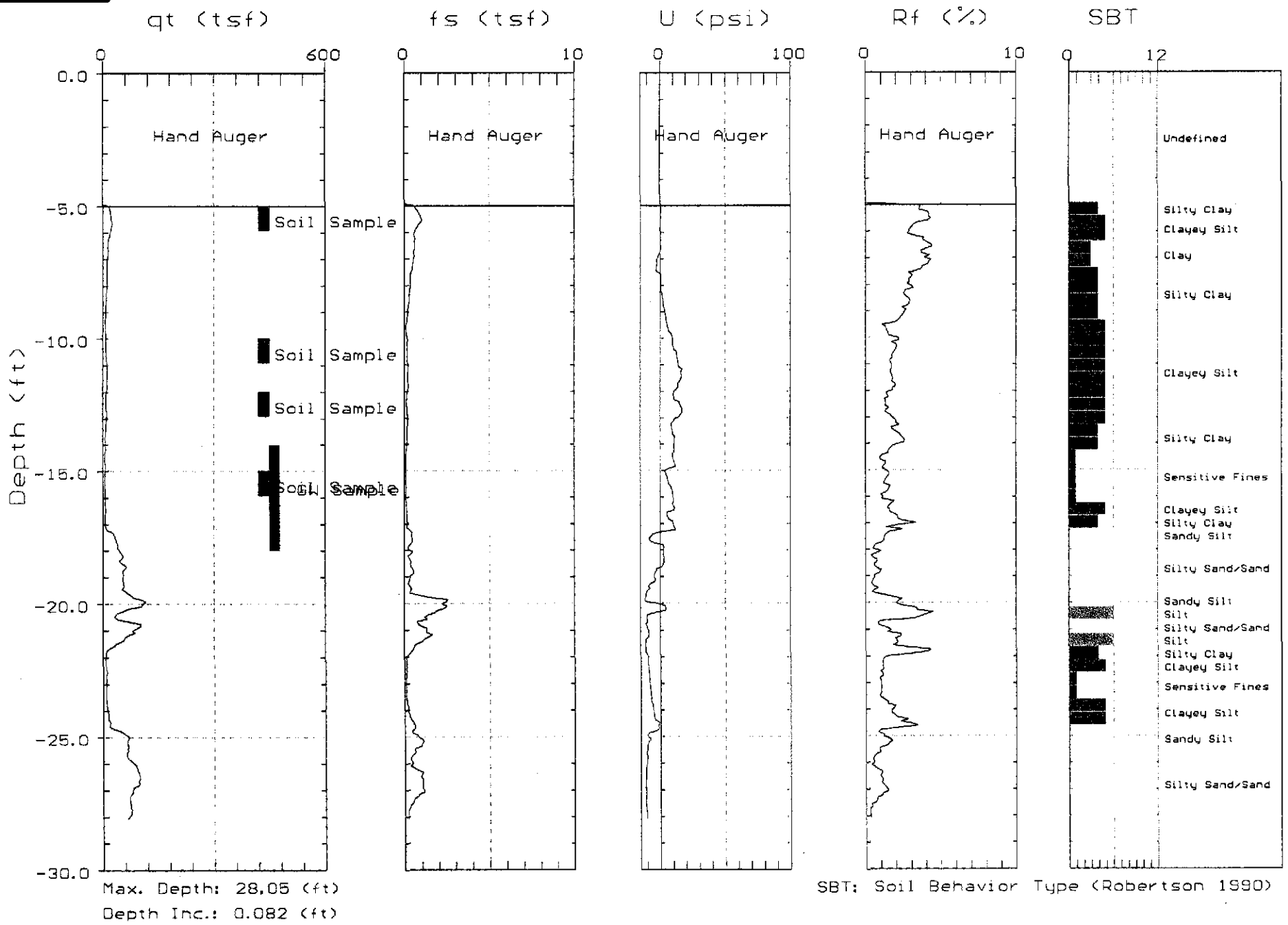
SBT: Soil Behavior Type (Robertson 1990)

GREGG

CAMBRIA ENV.

Site: 2120 MONTANA ST.
Location: CPT-SB-8

Engineer: C.VASKO
Date: 06:16:105 09:13



Max. Depth: 28.05 (ft)
Depth Inc.: 0.082 (ft)

SBT: Soil Behavior Type (Robertson 1990)

ATTACHMENT C

Historical Groundwater Data

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

September 23, 2005

Denis Brown
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

Third Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Monitoring performed on September 1, 2005

Groundwater Monitoring Report **050901-DW-2**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/cl

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Anni Kreml
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-1	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	12.14	147.45	ND
MW-1	3/23/2001	16,600	753	1,720	407	2,330	NA	27,500	NA	NA	NA	NA	159.59	12.25	147.34	ND
MW-1	5/31/2001	<20,000d	1,000d	920d	490d	2,000d	NA	54,000d	NA	NA	NA	NA	161.13	12.22	148.91	ND
MW-1	6/27/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.00b	NA	ND
MW-1	7/9/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.17	146.67	0.31
MW-1	9/25/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	14.27	145.66	0.43
MW-1	11/20/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.49	146.14	0.05
MW-1	12/5/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	11.32	148.31	0.05
MW-1	3/1/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.22	146.56	0.24
MW-1	6/6/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	12.99	147.00	0.50
MW-1	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.37	146.22	ND
MW-1	9/6/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	13.30	146.70	0.54
MW-1	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	13.78	146.61	1.03
MW-1	3/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	11.21	148.38	0.03
MW-1	6/30/2003	7,800	<25	37	<25	380	NA	2,000	NA	NA	NA	NA	159.57	12.20	147.37	ND
MW-1	9/9/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	15.70	145.28	2.38
MW-1	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	11.25	147.89	0.07
MW-1	3/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	11.80	147.40	0.15
MW-1	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	12.42	146.71	0.06
MW-1	9/17/2004	8,000	530	380	330	960	NA	1,100	<20	<20	<20	4,100	159.08	15.95	143.13	ND
MW-1	12/6/2004	2,800	150	<5.0	120	120	NA	300	NA	NA	NA	NA	159.08	13.15	145.93	ND
MW-1	3/2/2005	13,000	490	710	360	2,200	NA	5,000	NA	NA	NA	NA	159.08	12.14	146.94	ND
MW-1	6/10/2005	5,600	210	120	120	910	NA	3,100	NA	NA	NA	NA	159.08	NA	NA	<0.01
MW-1	**9/1/2005**	**<1,300**	**73**	**<13**	**30**	**42**	**NA**	**2,400**	**<50**	**<50**	**<50**	**13,000**	**159.08**	**11.71**	**147.37**	**ND**
MW-2	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	158.03	11.60	146.43	ND
MW-2	3/23/2001	4,450	280	41.0	62.1	63.0	NA	16,600	NA	NA	NA	NA	158.03	11.76	146.27	ND
MW-2	5/31/2001	<20,000a	820a	<200a	<200a	<200a	NA	63,000a	NA	NA	NA	NA	158.03	11.40	146.63	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-2	6/27/2001	<50,000	610	4.0	13	9.2	NA	47,000	NA	NA	NA	NA	158.03	12.65	145.38	ND
MW-2	9/25/2001	<2,000	41	<20	<20	<20	NA	6,400	NA	NA	NA	NA	158.03	12.89	145.14	ND
MW-2	12/5/2001	<2,000	74	<20	<20	<20	NA	8,400	NA	NA	NA	NA	158.03	10.40	147.63	ND
MW-2	3/1/2002	<1,000	<10	<10	<10	<10	NA	2,900	NA	NA	NA	NA	158.03	11.52	146.51	ND
MW-2	6/6/2002	<5,000	210	<50	<50	<50	NA	23,000	NA	NA	NA	NA	158.03	12.15	145.88	ND
MW-2	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	158.03	12.25	145.78	ND
MW-2	9/6/2002	<2,000	56	<20	<20	<20	NA	11,000	NA	NA	NA	NA	158.01	12.44	145.57	ND
MW-2	12/12/2002	<2,500	80	<25	<25	<25	NA	13,000	NA	NA	NA	NA	158.01	12.53	145.48	ND
MW-2	3/31/2003	<5,000	230	1,200	95	150	NA	13,000	NA	NA	NA	NA	158.01	11.98	146.03	ND
MW-2	6/30/2003	<12,000	780	<120	170	250	NA	9,000	NA	NA	NA	NA	158.01	12.10	145.91	ND
MW-2	9/9/2003	140,000	4,600	40,000	4,800	32,000	NA	11,000	NA	NA	NA	NA	158.01	12.94	145.07	ND
MW-2	12/29/2003	220,000	240	4,800	2,900	19,000	NA	1,000	NA	NA	NA	NA	158.01	11.20	146.81	ND
MW-2	3/17/2004	25,000	170	390	280	1,400	NA	1,500	NA	NA	NA	NA	158.01	11.40	146.61	ND
MW-2	5/24/2004	140,000	<25	220	1,200	6,800	NA	320	NA	NA	NA	NA	158.01	12.28	145.73	ND
MW-2	9/17/2004	64,000	2,900	230	2,300	9,700	NA	6,300	<100	<100	<100	4,100	158.01	12.90	145.11	ND
MW-2	12/6/2004	47,000	1,200	46	1,300	6,000	NA	3,900	NA	NA	NA	NA	158.01	13.02	144.99	ND
MW-2	3/2/2005	85,000	1,600	81	1,900	6,900	NA	2,500	NA	NA	NA	NA	158.01	11.06	146.95	ND
MW-2	6/10/2005	100,000	450	<25	440	800	NA	300	NA	NA	NA	NA	158.01	11.71	146.30	ND
MW-2	**9/1/2005**	**140,000 g**	**490**	**<25**	**550**	**850**	**NA**	**110**	**<100**	**<100**	**<100**	**1,900**	**158.01**	**12.11**	**145.90**	**ND**
MW-3	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	161.13	11.42	149.71	ND
MW-3	3/23/2001	<50.0	<0.500	<0.500	<0.500	<0.500	NA	1.26	NA	NA	NA	NA	161.13	11.42	149.71	ND
MW-3	5/31/2001	<50e	<0.50e	<0.50e	<0.50e	<0.50e	NA	<5.0e	NA	NA	NA	NA	159.59	13.00	146.59	ND
MW-3	6/27/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA	161.13	12.32	148.81	ND
MW-3	9/25/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA	161.13	12.50	148.63	ND
MW-3	12/5/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.13	10.13	151.00	ND
MW-3	3/1/2002	<50	<0.50	<0.50	<0.50	0.73	NA	<5.0	NA	NA	NA	NA	161.13	11.63	149.50	ND
MW-3	6/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.13	11.55	149.58	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-3	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	161.13	11.72	149.41	ND
MW-3	9/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.11	12.24	148.87	ND
MW-3	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.11	12.18	148.93	ND
MW-3	3/31/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.78	NA	NA	NA	NA	161.11	11.94	149.17	ND
MW-3	6/30/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	161.11	12.50	148.61	ND
MW-3	9/9/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	161.11	12.55	148.56	ND
MW-3	12/29/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.70	NA	NA	NA	NA	161.11	10.90	150.21	ND
MW-3	3/17/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	2.1	NA	NA	NA	NA	161.11	11.63	149.48	ND
MW-3	5/24/2004	<50	<0.50	<0.50	<0.50	1.0	NA	0.96	NA	NA	NA	NA	161.11	11.32	149.79	ND
MW-3	9/17/2004	<50	<0.50	<0.50	<0.50	1.0	NA	2.6	<2.0	<2.0	<2.0	<5.0	161.11	12.13	148.98	ND
MW-3	12/6/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	6.1	NA	NA	NA	NA	161.11	12.28	148.83	ND
MW-3	3/2/2005	<50 f	<0.50	<0.50	<0.50	<1.0	NA	2.4	NA	NA	NA	NA	161.11	10.42	150.69	ND
MW-3	6/10/2005	<50 f	<0.50	<0.50	<0.50	<1.0	NA	1.6	NA	NA	NA	NA	161.11	11.15	149.96	ND
MW-3	**9/1/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**0.54**	**<2.0**	**<2.0**	**<2.0**	**<5.0**	**161.11**	**12.55**	**148.56**	**ND**
MW-4	7/10/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	13.19	NA	ND
MW-4	7/16/2002	800	1.1	1.1	2.6	2.4	NA	450	NA	NA	NA	NA	NM	13.56	NA	ND
MW-4	9/6/2002	1,100	3.0	1.8	8.0	4.6	NA	110	NA	NA	NA	NA	160.09	13.67	146.42	ND
MW-4	12/12/2002	130	<0.50	<0.50	<0.50	<0.50	NA	940	NA	NA	NA	NA	160.09	14.06	146.03	ND
MW-4	3/31/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	500	NA	NA	NA	NA	160.09	13.69	146.40	ND
MW-4	6/30/2003	3,100	5.3	<5.0	7.1	<10	NA	420	NA	NA	NA	NA	160.09	14.12	145.97	ND
MW-4	9/9/2003	1,400	2.4	2.0	2.6	3.2	NA	140	NA	NA	NA	NA	160.09	14.92	145.17	ND
MW-4	12/29/2003	2,700	10	6.2	20	11	NA	420	NA	NA	NA	NA	160.09	12.71	147.38	ND
MW-4	3/17/2004	1,900	6.9	3.0	33	22	NA	290	NA	NA	NA	NA	160.09	13.24	146.85	ND
MW-4	5/24/2004	1,800	<2.5	<2.5	<2.5	11	NA	44	NA	NA	NA	NA	160.09	14.03	146.06	ND
MW-4	9/17/2004	3,300	57	10	47	32	NA	310	<10	<10	<10	700	160.09	13.58	146.51	ND
MW-4	12/6/2004	4,700	9.4	3.8	34	12	NA	150	NA	NA	NA	NA	160.09	14.65	145.44	ND
MW-4	3/2/2005	<1,300	<13	<13	<13	<25	NA	150	NA	NA	NA	NA	160.09	12.67	147.42	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-4	6/10/2005	2,600	4.1	1.9	25	5.6	NA	61	NA	NA	NA	NA	160.09	13.11	146.98	ND
MW-4	***9/1/2005***	**4,000 g**	**<13**	**<13**	**22**	**<25**	**NA**	**36**	**<50**	**<50**	**<50**	**<130**	**160.09**	**14.00**	**146.09**	**ND**
MW-5	7/10/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	12.22	NA	ND
MW-5	7/16/2002	6,100	65	7.2	100	130	NA	410	NA	NA	NA	NA	NM	12.50	NA	ND
MW-5	9/6/2002	5,900	100	8.1	41	32	NA	230	NA	NA	NA	NA	158.25	12.77	145.48	ND
MW-5	12/12/2002	4,900	70	5.7	25	17	NA	280	NA	NA	NA	NA	158.25	12.71	145.54	ND
MW-5	3/31/2003	6,400	61	4.9	23	13	NA	330	NA	NA	NA	NA	158.25	11.93	146.32	ND
MW-5	6/30/2003	3,400	18	<2.5	17	5.5	NA	47	NA	NA	NA	NA	158.25	11.97	146.28	ND
MW-5	9/9/2003	6,800	46	23	39	42	NA	67	NA	NA	NA	NA	158.25	12.44	145.81	ND
MW-5	12/29/2003	8,400	44	6.2	36	16	NA	60	NA	NA	NA	NA	158.25	11.38	146.87	ND
MW-5	3/17/2004	7,100	120	22	42	27	NA	300	NA	NA	NA	NA	158.25	11.68	146.57	ND
MW-5	5/24/2004	6,100	72	17	34	23	NA	110	NA	NA	NA	NA	158.25	12.30	145.95	ND
MW-5	9/17/2004	5,700	27	5.3	35	<10	NA	28	<20	<20	<20	<50	158.25	12.15	146.10	ND
MW-5	12/6/2004	4,500	11	<5.0	22	<10	NA	7.5	NA	NA	NA	NA	158.25	12.85	145.40	ND
MW-5	3/2/2005	6,500	14	<2.5	18	<5.0	NA	6.0	NA	NA	NA	NA	158.25	10.83	147.42	ND
MW-5	6/10/2005	5,300	19	2.4	17	4.3	NA	7.2	NA	NA	NA	NA	158.25	12.00	146.25	ND
MW-5	**9/1/2005**	**1,900 g**	**5.3**	**<2.5**	**6.9**	**<5.0**	**NA**	**<2.5**	**<10**	**<10**	**<10**	**<25**	**158.25**	**12.30**	**145.95**	**ND**
TBW-N	*09/25/2001 c*	120,000	3,200	2,800	4,000	18,000	NA	31,000	NA	NA	NA	NA	NM	12.25	NM	ND
TBW-N	11/20/2001	72,000	2,200	3,600	2,600	14,000	NA	35,000	NA	NA	NA	NA	NM	12.13	NM	ND
TBW-N	12/5/2001	76,000	1,600	3,200	2,900	15,000	NA	30,000	NA	NA	NA	NA	NM	11.51	NM	ND
TBW-N	3/1/2002	91,000	1,200	4,200	2,800	14,000	NA	29,000	NA	NA	NA	NA	NM	11.88	NM	ND
TBW-N	6/6/2002	100,000	2,100	8,200	3,400	17,000	NA	18,000	NA	NA	NA	NA	NM	12.48	NM	ND
TBW-N	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	12.39	NM	ND
TBW-N	9/6/2002	69,000	870	4,800	2,300	11,000	NA	17,000	NA	NA	NA	NA	161.26	12.36	148.90	ND
TBW-N	12/12/2002	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	161.26	NA	NA	NA
TBW-N	12/19/2002	110,000	1,900	13,000	3,100	18,000	NA	19,000	NA	NA	NA	NA	161.26	10.82	150.44	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
TBW-N	3/31/2003	62,000	1,600	6,500	2,200	11,000	NA	11,000	NA	NA	NA	NA	161.26	10.63	150.63	ND
TBW-N	6/30/2003	260,000	7,700	<120	5,800	40,000	NA	8,400	NA	NA	NA	NA	161.26	11.51	149.75	ND
TBW-N	9/9/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.92	11.37	148.64	0.11
TBW-N	12/29/2003	130,000	840	8,200	2,400	18,000	NA	5,400	NA	NA	NA	NA	159.92	10.40	149.52	ND
TBW-N	3/17/2004	32,000	440	1,500	580	4,500	NA	3,700	NA	NA	NA	NA	159.92	10.49	149.44	0.01
TBW-N	5/24/2004	110,000	380	2,600	1,600	11,000	NA	3,100	NA	NA	NA	NA	159.92	10.72	149.20	ND
TBW-N	9/17/2004	25,000	120	490	570	3,900	NA	490	<200	<200	<200	4,500	159.92	10.80	149.12	ND
TBW-N	12/6/2004	15,000	33	11	410	1,500	NA	200	NA	NA	NA	NA	159.92	11.00	148.92	ND
TBW-N	3/2/2005	7,900	15	<10	120	610	NA	460	NA	NA	NA	NA	159.92	10.58	149.34	ND
TBW-N	6/10/2005	1,200	<5.0	<5.0	13	25	NA	93	NA	NA	NA	NA	159.92	10.68	149.24	ND
TBW-N	**9/1/2005**	**3,500 g**	**<10**	**<10**	**86**	**330**	**NA**	**47**	**<40**	**<40**	**<40**	**1,700**	**159.92**	**11.05**	**148.87**	**ND**

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

GW = Groundwater

TBW-N = tank backfill well-north

NA = Not analyzed

ND = Not detected

NM = Not measured

ug/L = parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)

Notes:

a = Resampled on June 27, 2001, due to possible mislabeling.

b = Separate phase hydrocarbons encountered during purge; groundwater elevation may not be accurate.

c = Sample TBW-N was analyzed once within hold time, but the analyte concentrations all exceeded the instrument working ranges. The sample was diluted and re-analyzed out of hold time. The diluted analysis is reported because it more accurately reflects the concentrations present.

d = These results are listed as MW-3 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

e = These results are listed as MW-1 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

f= The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

g = Quantit. of unknown hydrocarbon(s) in sample based on gasoline.

Survey data provided by Cambria Environmental Technology, May 2001.

Site surveyed February 12, 2002 and June 26, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells MW-1 and TBW-N surveyed September 23, 2003 by Virgil Chavez Land Surveying of Vallejo, CA.

When separate phase hydrocarbons are present, ground water elevation is adjusted using the relation:

Corrected groundwater elevation = Top-of-casing elevation - Depth to water + (0.8 x Hydrocarbon thickness).

ATTACHMENT D

UVIF Information

Ultra Violet Induced Flourescence (UVIFCPTu)

Gregg In Situ, Inc. conducts Ultra Violet Induced Fluorescence (UVIF) Cone Penetration Tests using a UVIF module that is located behind the standard piezocone, *Figure UVIF*. The ultra violet induced fluorescence cone works on the principle that polyaromatic hydrocarbons (PAH's), mixed with soil and groundwater, fluoresce when irradiated by ultra violet light. Therefore, by measuring the UVIF intensity of the soil and groundwater the lateral and vertical extent of polyaromatic hydrocarbon contamination in the ground can be determined.

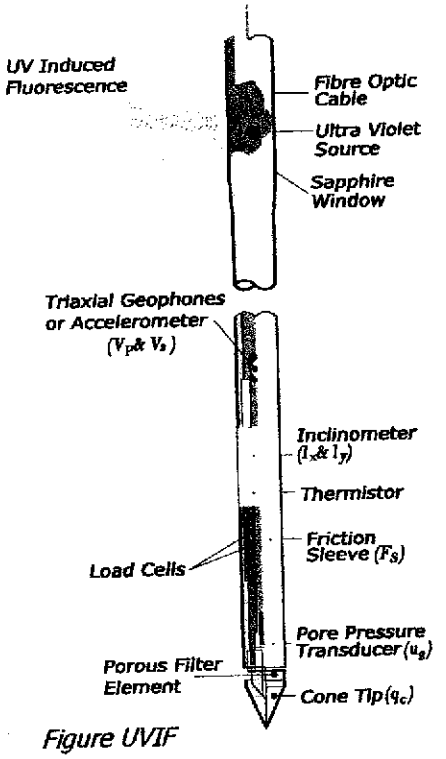


Figure UVIF

The UVIF module uses principles of fluorescence spectrometry by irradiating the soil with ultra violet light. The hydrocarbon molecules absorb the UV light energy during radiation and immediately re-emit the light at a longer wavelength. This re-emission is termed fluorescence. The difference between the excitation (250 nm) and emission (275-550 nm) wavelengths is called the Stokes shift. Specific hydrocarbon compounds can be identified by the magnitude of their Stokes shift, *Figure EWL*.

In general, as the number of aromatic rings increase the fluorescent response shifts toward longer wavelengths. Therefore, lighter compounds tend to fluoresce at shorter wavelengths and heavier compounds fluoresce at longer wavelengths.

The UVIF module contains a fiber optic cable that captures the emitted radiation and sends it to an amplifier at the surface so the intensity can be recorded. Therefore, the soil parameters are recorded along with the UVIF intensity in real time, *Figure Output*.

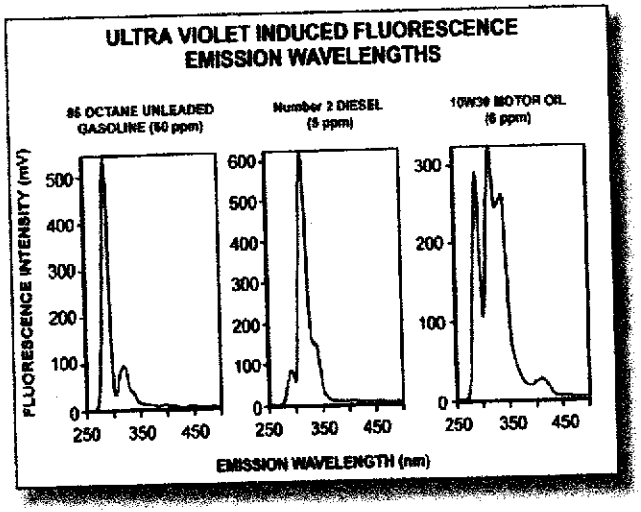


Figure EWL (After Fontana, 1994)

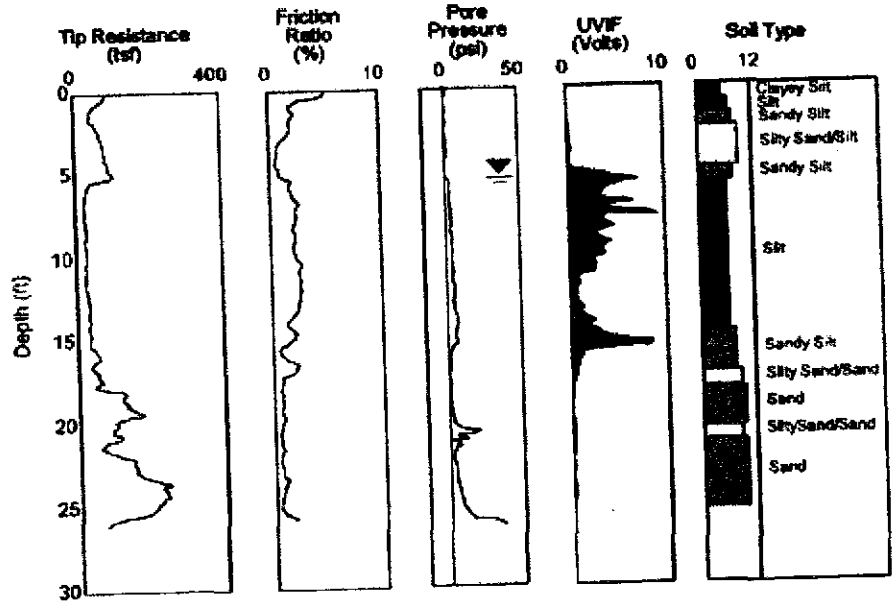


Figure Output

For a detailed reference on UVIF cone testing, refer to Woeller et. al., 2000.

GREGG

2726 Walnut Avenue · Signal Hill · California · 90755 · Phone: (562) 427-6899 · Fax: (562) 427-3314
Email: info@greggdrilling.com
Web Site: www.greggdrilling.com
Additional locations in: Charleston · Houston · Palo Alto · Salt Lake City · San Francisco · Vancouver

CAMBRIA

STANDARD FIELD PROCEDURES FOR CONE PENETROMETER TESTING AND GEOPROBE® WITH ULTRAVIOLET INDUCED FLUORESCENCE MODULE

This document describes Cambria Environmental Technology□s standard field methods for Cone Penetrometer Testing (CPT) and direct-push soil and groundwater sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines.

Use of CPT for logging and soil and groundwater sampling requires separate borings. Typically an initial boring is advanced to estimate soil and groundwater characteristics as described below. To collect soil samples a separate boring must be advanced using a soil sampling device. If groundwater samples are collected, another separate boring must be advanced using a groundwater sampling device. Specific field procedures are summarized below.

Cone Penetrometer Testing (CPT) with Ultraviolet Induced Fluorescence (UVIF) Module

Cone Penetrometer Testing is performed by a trained geologist or engineer working under the supervision of a California Professional Geologist (PG) or a Certified Engineering Geologist (CEG). According to Gregg In Situ, Inc., Cone Penetrometer Tests (CPT) are carried out by pushing an integrated electronic piezocone into the subsurface. The piezocone is pushed using a specially designed CPT rig with a force capacity of 20 to 25 tons. The piezocones are capable of recording the following parameters:

Tip Resistance (Qc)
Sleeve Friction (Fs)
Pore Water Pressure (U)
Bulk Soil Resistivity (rho) - with an added module

A compression cone is used for each CPT sounding. Piezocones with rated load capacities of 5, 10 or 20 tons are used depending on soil conditions. The 5 and 10 ton cones have a tip area of 10 sq. cm. and a friction sleeve area of 150 sq. cm. The 20 ton cones have a tip area of 15 sq. cm. and a friction sleeve area of 250 sq. cm. A pore water pressure filter is located directly behind the cone tip. Each of the filters is saturated in glycerin under vacuum pressure prior to penetration. Pore Pressure Dissipation Tests (PPDT) are recorded at 5 second intervals during pauses in penetration. The equilibrium pore water pressure from the dissipation test can be used to identify the depth to groundwater.

The measured parameters are printed simultaneously on a printer and stored on a computer disk for future analysis. All CPTs are carried out in accordance with ASTM D-3441. A complete set of baseline readings is taken prior to each sounding to determine any zero load offsets.

The inferred stratigraphic profile at each CPT location is included on the plotted CPT logs. The stratigraphic interpretations are based on relationships between cone bearing (Qc) and friction ratio (Rf). The friction ratio is a calculated parameter (Fs/Qc) used in conjunction with the cone bearing to identify the soil type. Generally, soft cohesive soils have low cone bearing pressures and high friction ratios. Cohesionless soils (sands) have high cone bearing pressures and low friction ratios. The classification of soils is based on correlations developed by Robertson et al (1986). It is not always possible to clearly identify a soil type based on Qc and Rf alone. Correlation with existing soils information and analysis of pore water pressure measurements should also be used in determining soil type.

The UVIF module is located behind the standard piezocone. The UVIF cone works on the principle that hydrocarbons and their polyaromatic hydrocarbon (PAH's) constituents, mixed with soil and groundwater, fluoresce when irradiated by ultra violet light. Therefore, by measuring the UVIF intensity of the soil and groundwater the lateral and vertical extent of hydrocarbon contamination in the ground can be determined.

The UVIF module uses principles of fluorescence spectrometry by irradiating the soil with ultraviolet (UV) light. The hydrocarbon molecules absorb the UV light energy during radiation and immediately re-emit the light at a longer wavelength. This re-emission is termed fluorescence. The difference between the excitation (250 nanometers (nm)) and emission (275-550 nm) wavelengths is called the Stokes shift. Specific hydrocarbon compounds can be identified by the magnitude of their Stokes shift. In general, as the number of aromatic rings increase the fluorescent response shifts toward longer wavelengths. Therefore, lighter compounds tend to fluoresce at shorter wavelengths and heavier compounds fluoresce at longer wavelengths.

The UVIF module contains a fiber optic cable that captures the emitted radiation and sends it to an amplifier at the surface so the intensity can be recorded. Therefore, the soil parameters are recorded along with the UVIF intensity in real time.

CPT and sampling equipment are steam-cleaned or washed prior to work and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent. Groundwater samples are decanted into appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4° C, and transported under chain-of-custody to the laboratory.

After the CPT probes are removed, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound by vapor odor or staining, estimate groundwater depth and quality and to submit samples for chemical analysis.

Soil Classification/Logging

All soil samples are classified according to the Unified Soil Classification System by a trained geologist or engineer working under the supervision of a California Professional Geologist (PG) or a Certified Engineering Geologist (CEG). The following soil properties are noted for each soil sample:

- Principal and secondary grain size category (i.e., sand, silt, clay or gravel)
- Approximate percentage of each grain size category,
- Color,
- Approximate water or separate-phase hydrocarbon saturation percentage,
- Observed odor and/or discoloration,
- Other significant observations (i.e., cementation, presence of marker horizons, mineralogy), and
- Estimated permeability.

Soil Sampling

Soil samples are collected from borings driven using hydraulic push technologies. A minimum of one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples can be collected near the water table and at lithologic changes. Samples are collected using samplers lined with polyethylene or brass tubes driven into undisturbed sediments at the bottom of the borehole. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Drilling and sampling equipment is steam-cleaned or washed prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Storage, Handling and Transport

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon[7] tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

After a soil sample has been collected, soil from the remaining tubing is placed inside a sealed plastic bag and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector measures volatile hydrocarbon vapor concentrations in the bag=s headspace, extracting the vapor through a slit in the plastic bag. The measurements are used along with the field observations, odors, stratigraphy, and groundwater depth to select soil samples for analysis.

Grab Groundwater Sampling

Groundwater samples are collected from the open borehole using bailers, advancing disposable Tygon[7] tubing into the borehole and extracting groundwater using a diaphragm pump, or using a hydro-punch style sampler with a bailer or tubing. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4° C, and transported under chain-of-custody to the laboratory.

Duplicates and Blanks

Blind duplicate water samples are usually collected only for monitoring well sampling programs, at a rate of one blind sample for every 10 wells sampled. Laboratory-supplied trip blanks accompany samples collected for all sampling programs to check for cross-contamination caused by sample handling and transport. These trip blanks are analyzed if the internal laboratory quality assurance/quality control (QA/QC) blanks contain the suspected field contaminants. An equipment blank may also be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

ATTACHMENT E

Soil Boring Permit

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939 www.acfcwcd.org

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2120 Montana Street
Oakland, CA
Alameda County

CLIENT
Name Shell Oil Products Co. (US)
Address 20945 Wilmington Phone 707 865-0251
City Carson, CA Zip 90810

APPLICANT
Name Cambria Environmental
Fax 420-9170
Address 5900 Hollis St Ste A Phone 420-3339
City Emeryville, CA Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☒
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:
Mud Rotary ☐ Air Rotary ☐ Auger ☒ - 5, 8" borings
Cable ☐ Other ☒ - CPT - 10, 8" borings

DRILLER'S NAME Gregg Drilling
DRILLER'S LICENSE NO. C57 485D-165

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Owner's Well Number _____

GEOTECHNICAL/CONTAMINATION PROJECTS
Number of Borings 15 Maximum
Hole Diameter 8 in. Depth _____ ft.
5-8" borings, 10-8" borings
STARTING DATE 6/14
COMPLETION DATE 6/16

FOR OFFICE USE
PERMIT NUMBER W05-0516
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL/CONTAMINATION
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compatible cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS B & I

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

CK 1309

allow one parcel/site

APPROVED _____ DATE 5-3-05

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 4/29/05

PLEASE PRINT NAME Stewart Dalie
Senior Staff Scientist

Rev 5-11-04

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD, CA. 94544-1395
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W05-0516

WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
B#1-GENERAL CONDITIONS: GEOTECHNICAL & CONTAMINATION BOREHOLES

1. Prior to any drilling activities, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that Federal, State, County or to the City and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.

2. Boreholes shall not be left open for a period of more than **24 hours.** All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permitte, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statues regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

4. Permit is valid only for the purpose specified herein **June 14 to June 16, 2005**changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

6. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

7. **Applicant shall contact George Bolton for a inspection time at 510-670-5594 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.**

ATTACHMENT F

Certified Laboratory Analytical Reports

SEVERN TRENT STL

Submission#: 2005-06-0489

Cambria Environmental Emeryville

July 01, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Cynthia Vasko

Project#: 247-0733
Project: 98995740
Site: 2120 Montana, Oakland, CA

Dear Ms. Vasko:

Attached is our report for your samples received on 06/17/2005 09:30
This report has been reviewed and approved for release. Reproduction of this report *is permitted only in its entirety.*

Please note that any unused portion of the samples will be discarded after 08/01/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

URS

Unit Weight/Moisture Content/Porosity

Project Name: STL San Francisco

Project Number: 26813664.00000

Location: 2120 Montana Street, Oakland, CA

Sample Number	Total Unit Weight, pcf	Dry Unit Weight, pcf	Moisture Content, %	Assumed Specific Gravity	Total Porosity
SV-D-5	115.1	92.1	25.01	2.65	44.30%
				2.70	45.33%
				2.75	46.32%
SV-D-10	128.8	99.5	29.45	2.65	39.85%
				2.70	40.96%
				2.75	42.04%
SV-E-5	112.8	89.9	25.45	2.65	45.62%
				2.70	46.63%
				2.75	47.60%
SV-E-10	118.6	96.3	23.25	2.65	41.79%
				2.70	42.87%
				2.75	43.91%

SEVERN TRENT STL

Chain of Custody

Date Shipped: 6/20/2005

2005-06-0489 - 1

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager	Melissa Brewer
Phone:	Ext:
Fax:	(925) 484-1096
Email:	mbrewer@stl-inc.com

To:

URS-Pleasant Hill, CA
3440 Vincent Road
Pleasant Hill, CA 94523

Phone:	(925) 974-1550	Ext:	
Fax:	(925) 256-1250		
Contact:	Sam		Capps
Phone:	(925) 974-1550	Ext:	3601

CL Submission #: 2005-06-0489
CL PO #:

Project #: 247-0733
Project Name: 98995740
EDF Global ID: T0600102236

Client Sample ID / Analysis	CL#	Sampled	Matrix / Method	TAT
SV-D-5	1	6/14/2005 10:15:00AM	Soil	
EDF Field ID: SV-D-5				
Subcontract - Others /*TOTAL POROSITY,—MOSTURE CONTENT,&—SOLID BULK DENSITY*/				5 Day
SV-D-10	2	6/14/2005 10:30:00AM	Soil	
EDF Field ID: SV-D-10				
Subcontract - Others /*TOTAL POROSITY,—MOSTURE CONTENT,&—SOLID BULK DENSITY*/				5 Day
SV-E-5	3	6/14/2005 10:45:00AM	Soil	
EDF Field ID: SV-E-5				
Subcontract - Others /*TOTAL POROSITY,—MOSTURE CONTENT,&—SOLID BULK DENSITY*/				5 Day
SV-E-10	4	6/14/2005 11:00:00AM	Soil	
EDF Field ID: SV-E-10				
Subcontract - Others /*TOTAL POROSITY,—MOSTURE CONTENT,&—SOLID BULK DENSITY*/				5 Day

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature / Time: 0927	Signature / Time	Signature / Time
Printed Name / Date: 6.20.05	Printed Name / Date	Printed Name / Date
Company: URS	Company	Company

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature / Time: 9:21-5	Signature / Time	Signature / Time
Printed Name / Date: Rosa Orozco	Printed Name / Date	Printed Name / Date
Company: URS	Company	Company

LAB STL San francisco

SHELL Chain Of Custody Record

1116696

Shell Project Manager to be Invoiced:

- ☐ SCIENCE & ENGINEERING
- ☑ TECHNICAL SERVICES
- ☐ CRMT HOUSTON

2005-06-0489

Dennis Brown

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT): 1 3 5 6 7 5

DATE: 6/16/05

Page 1 of 1

SAMPLING COMPANY: Cambria Environmental

LOG CODE: CETO

ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA

PROJECT CONTACT (Hardcopy or PDF Report to): Cynthia Vasko / Stu Dalie

TELEPHONE: 510-420-3344

FAX: 510-420-9170

E-MAIL: cvasko@cambria-env.com

SITE ADDRESS (Street and City): 2120 Montana, Oakland, CA

GLOBAL ID NO.: T0600102236

EDF DELIVERABLE TO (Responsible Party or Designee): shelloaklandedf@cambria-env.com

PHONE NO.: 510-420-0700

E-MAIL: cvasko@CAMBRIA-ENV.COM

CONSULTANT PROJECT NO.: 247-0733 -( )

SAMPLER NAME(S) (Print): Stu Dalie

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ______

GC/MS MTBE CONFIRMATION: HIGHEST ______ HIGHEST per BORING ______ ALL ______

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

please cc lab results to cvasko@cambria-env.com and sdalie@cambria-env.com

run for total porosity, moisture content, & soil bulk density.

REQUESTED ANALYSIS

Field Sample Identification	Sampling Date	Sampling Time	Matrix	No. of Cont.	TPHg (EPA Method 8260)	BTEX (EPA Method 8260)	TBA (EPA Method 8260)	MTBE (8260B - 0.5ppb RL)	5 oxygenates	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B-)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)	Physical parameters	MTBE (8260B) Confirmation, See Note	Field Notes: Container/Preservative or PID Readings or Laboratory Notes
SV-D-5	6/14/05	1015	Soil	1																			X		SV-D
SV-D-10		1030	Soil	1																			X		
SV-E-5		1045	Soil	1																			X		SV-E
SV-E-10		11	Soil	1																			X		

On ICE / Field point ID

TEMPERATURE ON RECEIPT C°: 3

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	6/16/05	by 5 pm
[signature]	[signature]	6/17/05	0930
[signature]	[signature]	6.17.05	12:00

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

O&G Graphic (714) 898-8702

SEVERN TRENT STL

Submission#: 2005-06-0510

Cambria Environmental Emeryville

June 30, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Cynthia Vasko

Project#: 247-0733
Project: 98995740
Site: 2120 Montana, Oakland, CA

Dear Ms. Vasko:

Attached is our report for your samples received on 06/17/2005 09:30
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 08/01/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

SEVERN TRENT STL

Submission: 2005-06-0510

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SB-4-5	06/15/2005 09:15	Soil	1
SB-4-10	06/15/2005 09:30	Soil	2
SB-4-W	06/15/2005 09:00	Water	3
SB-4-15	06/15/2005 09:45	Soil	4
SB-4-20	06/15/2005 10:00	Soil	5
SB-5-W	06/15/2005 11:00	Water	6
SB-5-5	06/15/2005 11:30	Soil	7
SB-5-10	06/15/2005 11:45	Soil	8
SB-5-15	06/15/2005 12:00	Soil	9
SB-5-13	06/15/2005 11:50	Soil	10
SB-6-W	06/15/2005 13:00	Water	11
SB-6-5	06/15/2005 13:30	Soil	12
SB-6-10	06/15/2005 13:45	Soil	13
SB-6-15	06/15/2005 14:00	Soil	14
SB-6-17	06/15/2005 14:30	Soil	15
SB-8-5	06/16/2005 10:00	Soil	16
SB-8-10	06/16/2005 10:20	Soil	17
SB-8-12	06/16/2005 10:30	Soil	18
SB-8-15	06/16/2005 10:45	Soil	19
SB-8-W	06/16/2005 12:00	Water	20

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B
Sample ID: **SB-4-5**
Sampled: 06/15/2005 09:15
Matrix: Soil

Test(s): 8260B
Lab ID: 2005-06-0510 - 1
Extracted: 6/29/2005 00:01
QC Batch#: 2005/06/28-4A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/29/2005 00:01	
Benzene	0.0072	0.0050	mg/Kg	1.00	06/29/2005 00:01	
Toluene	ND	0.0050	mg/Kg	1.00	06/29/2005 00:01	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/29/2005 00:01	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/29/2005 00:01	
tert-Butyl alcohol (TBA)	0.53	0.010	mg/Kg	1.00	06/29/2005 00:01	
Methyl tert-butyl ether (MTBE)	0.13	0.0050	mg/Kg	1.00	06/29/2005 00:01	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/29/2005 00:01	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/29/2005 00:01	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/29/2005 00:01	
Surrogate(s)						
1,2-Dichloroethane-d4	99.9	76-124	%	1.00	06/29/2005 00:01	
Toluene-d8	98.7	75-116	%	1.00	06/29/2005 00:01	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: **SB-4-10** | Lab ID: 2005-06-0510-2
Sampled: 06/15/2005 09:30 | Extracted: 6/26/2005 22:56
Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	2.0	1.0	mg/Kg	1.00	06/26/2005 22:56	
Benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
Toluene	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
tert-Butyl alcohol (TBA)	0.020	0.010	mg/Kg	1.00	06/26/2005 22:56	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/26/2005 22:56	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/26/2005 22:56	
Surrogate(s)						
1,2-Dichloroethane-d4	105.3	76-124	%	1.00	06/26/2005 22:56	
Toluene-d8	97.4	75-116	%	1.00	06/26/2005 22:56	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: SB-4-W | Lab ID: 2005-06-0510-3
Sampled: 06/15/2005 09:00 | Extracted: 6/29/2005 20:15
Matrix: Water | QC Batch#: 2005/06/29-1B.69
Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	6200	250	ug/L	5.00	06/29/2005 20:15	
Benzene	34	2.5	ug/L	5.00	06/29/2005 20:15	
Toluene	140	2.5	ug/L	5.00	06/29/2005 20:15	
Ethylbenzene	130	2.5	ug/L	5.00	06/29/2005 20:15	
Total xylenes	520	5.0	ug/L	5.00	06/29/2005 20:15	
tert-Butyl alcohol (TBA)	ND	25	ug/L	5.00	06/29/2005 20:15	
Methyl tert-butyl ether (MTBE)	74	2.5	ug/L	5.00	06/29/2005 20:15	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	06/29/2005 20:15	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	06/29/2005 20:15	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	06/29/2005 20:15	
Surrogate(s)						
1,2-Dichloroethane-d4	117.9	73-130	%	5.00	06/29/2005 20:15	
Toluene-d8	100.6	81-114	%	5.00	06/29/2005 20:15	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: **SB-4-15** | Lab ID: 2005-06-0510 - 4
Sampled: 06/15/2005 09:45 | Extracted: 6/26/2005 23:22
Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/26/2005 23:22	
Benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
Toluene	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	06/26/2005 23:22	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/26/2005 23:22	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/26/2005 23:22	
Surrogate(s)						
1,2-Dichloroethane-d4	103.0	76-124	%	1.00	06/26/2005 23:22	
Toluene-d8	96.2	75-116	%	1.00	06/26/2005 23:22	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B

Sample ID: **SB-4-20** | Lab ID: 2005-06-0510 - 5

Sampled: 06/15/2005 10:00 | Extracted: 6/26/2005 23:48

Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	23	5.0	mg/Kg	5.00	06/26/2005 23:48	
Benzene	ND	0.025	mg/Kg	5.00	06/26/2005 23:48	
Toluene	ND	0.025	mg/Kg	5.00	06/26/2005 23:48	
Ethyl benzene	0.056	0.025	mg/Kg	5.00	06/26/2005 23:48	
Total xylenes	0.10	0.025	mg/Kg	5.00	06/26/2005 23:48	
tert-Butyl alcohol (TBA)	0.25	0.050	mg/Kg	5.00	06/26/2005 23:48	
Methyl tert-butyl ether (MTBE)	0.061	0.025	mg/Kg	5.00	06/26/2005 23:48	
Di-isopropyl Ether (DIPE)	ND	0.050	mg/Kg	5.00	06/26/2005 23:48	
Ethyl tert-butyl ether (ETBE)	ND	0.025	mg/Kg	5.00	06/26/2005 23:48	
tert-Amyl methyl ether (TAME)	ND	0.025	mg/Kg	5.00	06/26/2005 23:48	
Surrogate(s)						
1,2-Dichloroethane-d4	101.3	76-124	%	5.00	06/26/2005 23:48	
Toluene-d8	97.4	75-116	%	5.00	06/26/2005 23:48	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B

Sample ID: SB-5-W | Lab ID: 2005-06-0510 - 6

Sampled: 06/15/2005 11:00 | Extracted: 6/29/2005 16:18

Matrix: Water | QC Batch#: 2005/06/29-01.65

Analysis Flag: L2, pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	28000	2000	ug/L	40.00	06/29/2005 16:18	
Benzene	100	20	ug/L	40.00	06/29/2005 16:18	
Toluene	ND	20	ug/L	40.00	06/29/2005 16:18	
Ethylbenzene	890	20	ug/L	40.00	06/29/2005 16:18	
Total xylenes	2400	40	ug/L	40.00	06/29/2005 16:18	
tert-Butyl alcohol (TBA)	ND	200	ug/L	40.00	06/29/2005 16:18	
Methyl tert-butyl ether (MTBE)	200	20	ug/L	40.00	06/29/2005 16:18	
Di-isopropyl Ether (DIPE)	ND	80	ug/L	40.00	06/29/2005 16:18	
Ethyl tert-butyl ether (ETBE)	ND	80	ug/L	40.00	06/29/2005 16:18	
tert-Amyl methyl ether (TAME)	ND	80	ug/L	40.00	06/29/2005 16:18	
Surrogate(s)						
1,2-Dichloroethane-d4	105.9	73-130	%	40.00	06/29/2005 16:18	
Toluene-d8	103.7	81-114	%	40.00	06/29/2005 16:18	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**SB-5-5**	Lab ID:	2005-06-0510-7
Sampled:	06/15/2005 11:30	Extracted:	6/29/2005 00:27
Matrix:	Soil	QC Batch#:	2005/06/28-4A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	5.0	mg/Kg	4.95	06/29/2005 00:27	
Benzene	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
Toluene	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
Ethyl benzene	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
Total xylenes	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
tert-Butyl alcohol (TBA)	2.3	0.050	mg/Kg	4.95	06/29/2005 00:27	
Methyl tert-butyl ether (MTBE)	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
Di-isopropyl Ether (DIPE)	ND	0.050	mg/Kg	4.95	06/29/2005 00:27	
Ethyl tert-butyl ether (ETBE)	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
tert-Amyl methyl ether (TAME)	ND	0.025	mg/Kg	4.95	06/29/2005 00:27	
Surrogate(s)						
1,2-Dichloroethane-d4	103.4	76-124	%	4.95	06/29/2005 00:27	
Toluene-d8	96.5	75-116	%	4.95	06/29/2005 00:27	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B
Sample ID: **SB-5-10**
Sampled: 06/15/2005 11:45
Matrix: Soil

Test(s): 8260B
Lab ID: 2005-06-0510 - 8
Extracted: 6/29/2005 00:53
QC Batch#: 2005/06/28-4A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	4.9	mg/Kg	4.85	06/29/2005 00:53	
Benzene	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
Toluene	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
Ethyl benzene	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
Total xylenes	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
tert-Butyl alcohol (TBA)	3.3	0.049	mg/Kg	4.85	06/29/2005 00:53	
Methyl tert-butyl ether (MTBE)	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
Di-isopropyl Ether (DIPE)	ND	0.049	mg/Kg	4.85	06/29/2005 00:53	
Ethyl tert-butyl ether (ETBE)	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
tert-Amyl methyl ether (TAME)	ND	0.024	mg/Kg	4.85	06/29/2005 00:53	
Surrogate(s)						
1,2-Dichloroethane-d4	96.2	76-124	%	4.85	06/29/2005 00:53	
Toluene-d8	96.1	75-116	%	4.85	06/29/2005 00:53	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**SB-5-15**	Lab ID:	2005-06-0510-9
Sampled:	06/15/2005 12:00	Extracted:	6/27/2005 00:40
Matrix:	Soil	QC Batch#:	2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	8.6	1.0	mg/Kg	1.00	06/27/2005 00:40	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 00:40	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 00:40	
Ethyl benzene	0.20	0.0050	mg/Kg	1.00	06/27/2005 00:40	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 00:40	
tert-Butyl alcohol (TBA)	0.50	0.010	mg/Kg	1.00	06/27/2005 00:40	
Methyl tert-butyl ether (MTBE)	0.065	0.0050	mg/Kg	1.00	06/27/2005 00:40	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 00:40	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 00:40	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 00:40	
Surrogate(s)						
1,2-Dichloroethane-d4	102.3	76-124	%	1.00	06/27/2005 00:40	
Toluene-d8	100.7	75-116	%	1.00	06/27/2005 00:40	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SB-5-13	Lab ID:	2005-06-0510-10
Sampled:	06/15/2005 11:50	Extracted:	6/29/2005 01:19
Matrix:	Soil	QC Batch#:	2005/06/28-4A 62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	9.3	4.9	mg/Kg	4.85	06/29/2005 01:19	
Benzene	ND	0.024	mg/Kg	4.85	06/29/2005 01:19	
Toluene	ND	0.024	mg/Kg	4.85	06/29/2005 01:19	
Ethyl benzene	0.030	0.024	mg/Kg	4.85	06/29/2005 01:19	
Total xylenes	0.040	0.024	mg/Kg	4.85	06/29/2005 01:19	
tert-Butyl alcohol (TBA)	0.14	0.049	mg/Kg	4.85	06/29/2005 01:19	
Methyl tert-butyl ether (MTBE)	ND	0.024	mg/Kg	4.85	06/29/2005 01:19	
Di-isopropyl Ether (DIPE)	ND	0.049	mg/Kg	4.85	06/29/2005 01:19	
Ethyl tert-butyl ether (ETBE)	ND	0.024	mg/Kg	4.85	06/29/2005 01:19	
tert-Amyl methyl ether (TAME)	ND	0.024	mg/Kg	4.85	06/29/2005 01:19	
Surrogate(s)						
1,2-Dichloroethane-d4	95.6	76-124	%	4.85	06/29/2005 01:19	
Toluene-d8	97.9	75-116	%	4.85	06/29/2005 01:19	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B

Sample ID: **SB-6-W** | Lab ID: 2005-06-0510-113

Sampled: 06/15/2005 13:00 | Extracted: 6/29/2005 16:44

Matrix: Water | QC Batch#: 2005/06/29-01.65

Analysis Flag: L2, pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	2500	ug/L	50.00	06/29/2005 16:44	
Benzene	ND	25	ug/L	50.00	06/29/2005 16:44	
Toluene	ND	25	ug/L	50.00	06/29/2005 16:44	
Ethylbenzene	ND	25	ug/L	50.00	06/29/2005 16:44	
Total xylenes	ND	50	ug/L	50.00	06/29/2005 16:44	
tert-Butyl alcohol (TBA)	15000	250	ug/L	50.00	06/29/2005 16:44	
Methyl tert-butyl ether (MTBE)	1100	25	ug/L	50.00	06/29/2005 16:44	
Di-isopropyl Ether (DIPE)	ND	100	ug/L	50.00	06/29/2005 16:44	
Ethyl tert-butyl ether (ETBE)	ND	100	ug/L	50.00	06/29/2005 16:44	
tert-Amyl methyl ether (TAME)	ND	100	ug/L	50.00	06/29/2005 16:44	
Surrogate(s)						
1,2-Dichloroethane-d4	107.2	73-130	%	50.00	06/29/2005 16:44	
Toluene-d8	102.5	81-114	%	50.00	06/29/2005 16:44	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: **SB-6-5** | Lab ID: 2005-06-0510 - 12
Sampled: 06/15/2005 13:30 | Extracted: 6/27/2005 01:32
Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/27/2005 01:32	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
tert-Butyl alcohol (TBA)	0.13	0.010	mg/Kg	1.00	06/27/2005 01:32	
Methyl tert-butyl ether (MTBE)	0.030	0.0050	mg/Kg	1.00	06/27/2005 01:32	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 01:32	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 01:32	
Surrogate(s)						
1,2-Dichloroethane-d4	101.9	76-124	%	1.00	06/27/2005 01:32	
Toluene-d8	97.5	75-116	%	1.00	06/27/2005 01:32	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**SB-6-10**	Lab ID:	2005-06-0510 - 13
Sampled:	06/15/2005 13:45	Extracted:	6/29/2005 01:45
Matrix:	Soil	QC Batch#:	2005/06/28-4A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/29/2005 01:45	
Benzene	ND	0.0050	mg/Kg	1.00	06/29/2005 01:45	
Toluene	ND	0.0050	mg/Kg	1.00	06/29/2005 01:45	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/29/2005 01:45	
Total xylenes	0.0064	0.0050	mg/Kg	1.00	06/29/2005 01:45	
tert-Butyl alcohol (TBA)	0.49	0.010	mg/Kg	1.00	06/29/2005 01:45	
Methyl tert-butyl ether (MTBE)	0.0068	0.0050	mg/Kg	1.00	06/29/2005 01:45	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/29/2005 01:45	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/29/2005 01:45	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/29/2005 01:45	
Surrogate(s)						
1,2-Dichloroethane-d4	105.7	76-124	%	1.00	06/29/2005 01:45	
Toluene-d8	75.0	75-116	%	1.00	06/29/2005 01:45	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: **SB-6-15** | Lab ID: 2005-06-0510 - 14
Sampled: 06/15/2005 14:00 | Extracted: 6/29/2005 02:11
Matrix: Soil | QC Batch#: 2005/06/28-4A 62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	4.8	mg/Kg	4.81	06/29/2005 02:11	
Benzene	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
Toluene	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
Ethyl benzene	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
Total xylenes	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
tert-Butyl alcohol (TBA)	9.3	0.048	mg/Kg	4.81	06/29/2005 02:11	
Methyl tert-butyl ether (MTBE)	0.13	0.024	mg/Kg	4.81	06/29/2005 02:11	
Di-isopropyl Ether (DIPE)	ND	0.048	mg/Kg	4.81	06/29/2005 02:11	
Ethyl tert-butyl ether (ETBE)	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
tert-Amyl methyl ether (TAME)	ND	0.024	mg/Kg	4.81	06/29/2005 02:11	
Surrogate(s)						
1,2-Dichloroethane-d4	95.7	76-124	%	4.81	06/29/2005 02:11	
Toluene-d8	98.0	75-116	%	4.81	06/29/2005 02:11	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SB-6-17	Lab ID:	2005-06-0510 - 15
Sampled:	06/15/2005 14:30	Extracted:	6/29/2005 02:37
Matrix:	Soil	QC Batch#:	2005/06/28-4A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	4.9	mg/Kg	4.90	06/29/2005 02:37	
Benzene	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
Toluene	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
Ethyl benzene	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
Total xylenes	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
tert-Butyl alcohol (TBA)	3.1	0.049	mg/Kg	4.90	06/29/2005 02:37	
Methyl tert-butyl ether (MTBE)	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
Di-isopropyl Ether (DIPE)	ND	0.049	mg/Kg	4.90	06/29/2005 02:37	
Ethyl tert-butyl ether (ETBE)	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
tert-Amyl methyl ether (TAME)	ND	0.025	mg/Kg	4.90	06/29/2005 02:37	
Surrogate(s)						
1,2-Dichloroethane-d4	103.1	76-124	%	4.90	06/29/2005 02:37	
Toluene-d8	97.3	75-116	%	4.90	06/29/2005 02:37	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SB-8-5	Lab ID:	2005-06-0510 - 16
Sampled:	06/16/2005 10:00	Extracted:	6/27/2005 03:16
Matrix:	Soil	QC Batch#:	2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/27/2005 03:16	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
tert-Butyl alcohol (TBA)	0.011	0.010	mg/Kg	1.00	06/27/2005 03:16	
Methyl tert-butyl ether (MTBE)	0.0050	0.0050	mg/Kg	1.00	06/27/2005 03:16	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 03:16	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 03:16	
Surrogate(s)						
1,2-Dichloroethane-d4	103.7	76-124	%	1.00	06/27/2005 03:16	
Toluene-d8	94.5	75-116	%	1.00	06/27/2005 03:16	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: **SB-8-10** | Lab ID: 2005-06-0510 - 17
Sampled: 06/16/2005 10:20 | Extracted: 6/27/2005 03:43
Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/27/2005 03:43	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
tert-Butyl alcohol (TBA)	1.6	0.010	mg/Kg	1.00	06/27/2005 03:43	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 03:43	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 03:43	
Surrogate(s)						
1,2-Dichloroethane-d4	116.2	76-124	%	1.00	06/27/2005 03:43	
Toluene-d8	95.2	75-116	%	1.00	06/27/2005 03:43	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B | Test(s): 8260B
Sample ID: SB-8-12 | Lab ID: 2005-06-0510 - 18
Sampled: 06/16/2005 10:30 | Extracted: 6/27/2005 04:09
Matrix: Soil | QC Batch#: 2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/27/2005 04:09	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
tert-Butyl alcohol (TBA)	0.30	0.010	mg/Kg	1.00	06/27/2005 04:09	
Methyl tert-butyl ether (MTBE)	0.014	0.0050	mg/Kg	1.00	06/27/2005 04:09	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 04:09	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 04:09	
Surrogate(s)						
1,2-Dichloroethane-d4	111.7	76-124	%	1.00	06/27/2005 04:09	
Toluene-d8	93.0	75-116	%	1.00	06/27/2005 04:09	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SB-8-15'	Lab ID:	2005-06-0510 - 19
Sampled:	06/16/2005 10:45	Extracted:	6/27/2005 04:35
Matrix:	Soil	QC Batch#:	2005/06/26-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/27/2005 04:35	
Benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
Toluene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
tert-Butyl alcohol (TBA)	0.38	0.010	mg/Kg	1.00	06/27/2005 04:35	
Methyl tert-butyl ether (MTBE)	0.23	0.0050	mg/Kg	1.00	06/27/2005 04:35	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	06/27/2005 04:35	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	06/27/2005 04:35	
Surrogate(s)						
1,2-Dichloroethane-d4	106.8	76-124	%	1.00	06/27/2005 04:35	
Toluene-d8	93.4	75-116	%	1.00	06/27/2005 04:35	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SB-8-W	Lab ID:	2005-06-0510 - 20
Sampled:	06/16/2005 12:00	Extracted:	6/28/2005 13:14
Matrix:	Water	QC Batch#:	2005/06/28-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	06/28/2005 13:14	
Benzene	ND	0.50	ug/L	1.00	06/28/2005 13:14	
Toluene	ND	0.50	ug/L	1.00	06/28/2005 13:14	
Ethylbenzene	ND	0.50	ug/L	1.00	06/28/2005 13:14	
Total xylenes	ND	1.0	ug/L	1.00	06/28/2005 13:14	
tert-Butyl alcohol (TBA)	66	5.0	ug/L	1.00	06/28/2005 13:14	
Methyl tert-butyl ether (MTBE)	59	0.50	ug/L	1.00	06/28/2005 13:14	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	06/28/2005 13:14	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	06/28/2005 13:14	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	06/28/2005 13:14	
Surrogate(s)						
1,2-Dichloroethane-d4	111.6	73-130	%	1.00	06/28/2005 13:14	
Toluene-d8	95.7	81-114	%	1.00	06/28/2005 13:14	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B | Soil | Test(s): 8260B
Method Blank | **QC Batch # 2005/06/26-2B.62**
MB: 2005/06/26-2B.62-047 | Date Extracted: 06/26/2005 19:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	06/26/2005 19:47	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	06/26/2005 19:47	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	06/26/2005 19:47	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	06/26/2005 19:47	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	06/26/2005 19:47	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	06/26/2005 19:47	
Benzene	ND	0.0050	mg/Kg	06/26/2005 19:47	
Toluene	ND	0.0050	mg/Kg	06/26/2005 19:47	
Ethyl benzene	ND	0.0050	mg/Kg	06/26/2005 19:47	
Total xylenes	ND	0.0050	mg/Kg	06/26/2005 19:47	
Surrogates(s)					
1,2-Dichloroethane-d4	105.0	76-124	%	06/26/2005 19:47	
Toluene-d8	97.4	75-116	%	06/26/2005 19:47	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B
Test(s): 8260B

Method Blank
Water
QC Batch # 2005/06/28-1A.62

MB: 2005/06/28-1A.62-035
Date Extracted: 06/28/2005 07:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	06/28/2005 07:35	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	06/28/2005 07:35	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/28/2005 07:35	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	06/28/2005 07:35	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	06/28/2005 07:35	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	06/28/2005 07:35	
Benzene	ND	0.5	ug/L	06/28/2005 07:35	
Toluene	ND	0.5	ug/L	06/28/2005 07:35	
Ethylbenzene	ND	0.5	ug/L	06/28/2005 07:35	
Total xylenes	ND	1.0	ug/L	06/28/2005 07:35	
Surrogates(s)					
1,2-Dichloroethane-d4	100.2	73-130	%	06/28/2005 07:35	
Toluene-d8	97.3	81-114	%	06/28/2005 07:35	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B | Soil | Test(s): 8260B

Method Blank | **QC Batch # 2005/06/28-4A.62**

MB: 2005/06/28-4A.62-014 | Date Extracted: 06/28/2005 19:14

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	06/28/2005 19:14	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	06/28/2005 19:14	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	06/28/2005 19:14	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	06/28/2005 19:14	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	06/28/2005 19:14	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	06/28/2005 19:14	
Benzene	ND	0.0050	mg/Kg	06/28/2005 19:14	
Toluene	ND	0.0050	mg/Kg	06/28/2005 19:14	
Ethyl benzene	ND	0.0050	mg/Kg	06/28/2005 19:14	
Total xylenes	ND	0.0050	mg/Kg	06/28/2005 19:14	
Surrogates(s)					
1,2-Dichloroethane-d4	99.4	76-124	%	06/28/2005 19:14	
Toluene-d8	94.2	75-116	%	06/28/2005 19:14	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Method Blank Water **QC Batch # 2005/06/29-01.65**

MB: 2005/06/29-01.65-001 Date Extracted: 06/29/2005 09:01

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	06/29/2005 09:01	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	06/29/2005 09:01	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/29/2005 09:01	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	06/29/2005 09:01	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	06/29/2005 09:01	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	06/29/2005 09:01	
Benzene	ND	0.5	ug/L	06/29/2005 09:01	
Toluene	ND	0.5	ug/L	06/29/2005 09:01	
Ethylbenzene	ND	0.5	ug/L	06/29/2005 09:01	
Total xylenes	ND	1.0	ug/L	06/29/2005 09:01	
Surrogates(s)					
1,2-Dichloroethane-d4	103.8	73-130	%	06/29/2005 09:01	
Toluene-d8	103.0	81-114	%	06/29/2005 09:01	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B | Test(s): 8260B

Method Blank | **Water** | **QC Batch # 2005/06/29-1B.69**

MB: 2005/06/29-1B.69-024 | Date Extracted: 06/29/2005 08:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	06/29/2005 08:24	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	06/29/2005 08:24	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/29/2005 08:24	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	06/29/2005 08:24	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	06/29/2005 08:24	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	06/29/2005 08:24	
Benzene	ND	0.5	ug/L	06/29/2005 08:24	
Toluene	ND	0.5	ug/L	06/29/2005 08:24	
Ethylbenzene	ND	0.5	ug/L	06/29/2005 08:24	
Total xylenes	ND	1.0	ug/L	06/29/2005 08:24	
Surrogates(s)					
1,2-Dichloroethane-d4	100.6	73-130	%	06/29/2005 08:24	
Toluene-d8	97.8	81-114	%	06/29/2005 08:24	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — Soil — QC Batch #: 2005/06/26-2B.62

LCS 2005/06/26-2B.62-020 — Extracted: 06/26/2005 — Analyzed: 06/26/2005 19:20

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0489		0.05	97.8			65-165	20		
Benzene	0.0480		0.05	96.0			69-129	20		
Toluene	0.0480		0.05	96.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	497		500	99.4			76-124			
Toluene-d8	480		500	96.0			75-116			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/06/28-1A.62**

LCS: 2005/06/28-1A.62-009 Extracted: 06/28/2005 Analyzed: 06/28/2005 07:09
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.1		25	88.4			65-165	20		
Benzene	21.2		25	84.8			69-129	20		
Toluene	21.5		25	86.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	489		500	97.8			73-130			
Toluene-d8	477		500	95.4			81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville
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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Soil** **QC Batch # 2005/06/28-4A.62**

LCS 2005/06/28-4A.62-048 Extracted: 06/28/2005 Analyzed: 06/28/2005 18:48

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0411		0.05	82.2			65-165	20		
Benzene	0.0438		0.05	87.6			69-129	20		
Toluene	0.0478		0.05	95.6			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	455		500	91.0			76-124			
Toluene-d8	486		500	97.2			75-116			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/06/29-01.65**

LCS 2005/06/29-01.65-035 Extracted: 06/29/2005 Analyzed: 06/29/2005 08:35
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	20.7		25.0	82.8			65-165	20		
Benzene	23.7		25.0	94.8			69-129	20		
Toluene	23.8		25.0	95.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	474		500	94.8			73-130			
Toluene-d8	483		500	96.6			81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/06/29-1B.69**

LCS 2005/06/29-1B.69-006 Extracted: 06/29/2005 Analyzed: 06/29/2005 08:06
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	21.5		25	86.0			65-165	20		
Benzene	21.9		25	87.6			69-129	20		
Toluene	22.8		25	91.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	497		500	99.4			73-130			
Toluene-d8	485		500	97.0			81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Matrix Spike (MS / MSD) — Soil — **QC Batch # 2005/06/26-2B.62**

SB-5-5 >> MS — Lab ID: 2005-06-0510-007

MS: 2005/06/26-2B.62-038 — Extracted: 06/26/2005 — Analyzed: 06/26/2005 21:38 — Dilution: 5.00

MSD: 2005/06/26-2B.62-004 — Extracted: 06/26/2005 — Analyzed: 06/26/2005 22:04 — Dilution: 5.00

Compound	Conc. mg/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.158	0.137	0.132	0.047709	54.5	10.0	138.	65-165	20	M5	M5,R1
Benzene	0.0418	0.0505	ND	0.047709	87.6	101.4	14.6	69-129	20		
Toluene	0.0415	0.0483	ND	0.047709	87.0	97.0	10.9	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	500	498		500	100.0	99.6		76-124			
Toluene-d8	499	484		500	99.8	96.8		75-116			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/06/28-1A.62**

MS/MSD Lab ID: 2005-06-0697 - 003

MS: 2005/06/28-1A.62-046 Extracted: 06/28/2005 Analyzed: 06/28/2005 09:46

Dilution: 1.00

MSD: 2005/06/28-1A.62-012 Extracted: 06/28/2005 Analyzed: 06/28/2005 10:12

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	21.7	25.8	ND	25	86.8	103.2	17.3	69-129	20		
Toluene	21.6	25.2	ND	25	86.4	100.8	15.4	70-130	20		
Methyl tert-butyl ether	21.7	25.3	1.15	25	82.2	96.6	16.1	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	483	495		500	96.6	99.0		73-130			
Toluene-d8	481	470		500	96.2	94.0		81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2005/06/28-4A.62**

MS/MSD Lab ID: 2005-06-0592-009A

MS: 2005/06/28-4A.62-009 Extracted: 06/28/2005 Analyzed: 06/28/2005 23:09
Dilution: 1.00

MSD: 2005/06/28-4A.62-035 Extracted: 06/28/2005 Analyzed: 06/28/2005 23:35
Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0363	0.0381	ND	0.049407	73.5	76.2	3.6	65-165	20		
Benzene	0.0382	0.0396	ND	0.049407	77.3	79.2	2.4	69-129	20		
Toluene	0.0412	0.0402	ND	0.049407	83.4	80.4	3.7	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	464	476		500	92.8	95.2		76-124			
Toluene-d8	489	474		500	97.8	94.8		75-116			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Matrix Spike (MS / MSD) — **Water** — **QC Batch # 2005/06/29-01.65**

MS/MSD — Lab ID: 2005-06-0542-006

MS: 2005/06/29-01.65-008 — Extracted: 06/29/2005 — Analyzed: 06/29/2005 10:08 — Dilution: 5.00

MSD: 2005/06/29-01.65-004 — Extracted: 06/29/2005 — Analyzed: 06/29/2005 10:35 — Dilution: 5.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	158	186	13.2	125	115.8	138.2	17.6	65-165	20		
Benzene	130	133	0.755	125	103.4	105.8	2.3	69-129	20		
Toluene	129	138	0.731	125	102.6	109.8	6.8	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	527	571		500	105.4	114.2		73-130			
Toluene-d8	476	472		500	95.2	94.4		81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/06/29-1B.69**

MS/MSD Lab ID: 2005-06-0520-002

MS: 2005/06/29-1B.69-042 Extracted: 06/29/2005 Analyzed: 06/29/2005 13:42
Dilution: 1.00

MSD: 2005/06/29-1B.69-027 Extracted: 06/29/2005 Analyzed: 06/29/2005 14:00
Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	18.8	22.2	ND	25	75.2	88.8	16.6	65-165	20		
Benzene	19.7	21.3	ND	25	78.8	85.2	7.8	69-129	20		
Toluene	20.8	22.7	ND	25	83.2	90.8	8.7	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	470	472		500	94.0	94.4		73-130			
Toluene-d8	489	487		500	97.8	97.4		81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 247-0733
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present in the sample.

Result Flag

M5

MS/MSD spike recoveries were below acceptance limits. See blank spike (LCS).

R1

Analyte RPD was out of QC limits.

STL San francisc — SHELL Chain Of Custody Record

116695

Shell Project Manager to be invoiced:
☐ SCIENCE & ENGINEERING ☑ TECHNICAL SERVICES ☐ CRMT HOUSTON
Dennis Brown

2005-06-0510

INCIDENT NUMBER (S&E ONLY): 98995740
SAP or CRMT NUMBER (TS/CRMT): 135675

DATE: 6/16/05
Page 1 of 2

SAMPLING COMPANY	LOG CODE	SITE ADDRESS (Street and City)	GLOBAL ID NO.:
Cambria Environmental	CETO	2120 Montana, Oakland, CA	T0600102236

ADDRESS			
5900 Hollis Street, Suite A, Emeryville, CA			
EDF DELIVERABLE TO (Responsible Party or Consultant)	**PHONE NO.:**	**E-MAIL:**	**CONSULTANT PROJECT NO.:**
shelloaklandedf@cambria-env.com	510-420-0700	cvasko@CAMBRIA-ENV.COM	247-0733-( )
PROJECT CONTACT (Hard copy or PDF Report to)		**SAMPLER NAME(S) (Print):** Stu Dalla	**TLAB USE ONLY**
Cynthia Vasko / Stu Dalla			
TELEPHONE: 510-420-3344	**FAX:** 510-420-9170	**E-MAIL:** cvasko@cambria-env.com	

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

please cc lab routine to cvasko@cambria-env.com and stdalla@cambria-env.com

REQUESTED ANALYSIS

Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPHg (EPA Method 8260)	BTEX (EPA Method 8260)	TBA (EPA Method 8260)	MTBE (8260B - 0.5ppb RL)	5 oxygenates	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B-)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note
SB-4-5	6/15/05	915	Soil	1	X	X			X															
SB-4-10		930	↓	1	X	X			X															
SB-4-W		900	H2O	5 VOA	X	X			X															
SB-4-15		945	Soil	1	X	X			X															
SB-4-20		1000	↓	1	X	X			X															
SB-5-W		1100	H2O	5 VOA	X	X			X															
SB-5-5		1130	Soil	1	X	X			X															
SB-5-10		1150	↓	1	X	X			X															
SB-5-15		1210	↓	1	X	X			X															
SB-5-13	↓	1150	↓	1	X	X			X															

FIELD NOTES:
Container/Preservative or PID Readings or Laboratory Notes

On ICE: Field point ID

TEMPERATURE ON RECEIPT C°: 3

SB-4

SB-5

Relinquished by: (Signature)	Received by: (Signature)	Date: 6/16/05	Time: 1455
Relinquished by: (Signature)	Received by: (Signature)	Date: 6/17/05	Time: 0930
Relinquished by: (Signature)	Received by: (Signature)	Date: 6.17.05	Time: 12:00

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

10/1/2000 Revision

CRQ Graphics (714) 895-9702

STL San francisc

SHELL Chain Of Custody Record

116696

Shell Project Manager to be invoiced:
☐ SCIENCE & ENGINEERING
☑ TECHNICAL SERVICES
☐ CRMT HOUSTON
Dennis B

05-06-0510

INCIDENT NUMBER (S&E ONLY): 98995740
SAP or CRMT NUMBER (TS/CRMT): 113567

DATE: 6/16/05
Page 2 of 2

SAMPLING COMPANY: Cambria Environmental	LOG CODE: CETO	SITE ADDRESS (Street and City): 2120 Montana, Oakland, CA	GLOBAL ID NO.: T0600102236
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA			
PROJECT CONTACT (Hardcopy or PDF Report to): Cynthie Vasko / Stu Dalle		SHELL DELIVERABLE TO (Responsible Party or Designee): shelloaklandadf@cambria-env.com	PHONE NO.: 510-420-0700
TELEPHONE: 510-420-3344	FAX: 510-420-9170	E-MAIL: cvasko@cambria-env.com	CONSULTANT PROJECT NO.: 247-0733-009/008
		SAMPLER NAME(S) (Print): Stu Dalle	LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS):
☑ 10 DAY ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORM ☐ UST AGENCY: _____

GO/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

please cc lab reults to cvasko@cambria-env.com and sdalle@cambria-env.com

REQUESTED ANALYSIS

LAB USE	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPHg (EPA Method 8260)	BTEX (EPA Method 8260)	TBA (EPA Method 8260)	MTBE (8260B - 0.5ppb RL)	5 oxygenates	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (48-____)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note
	SB-6-W	6/15/5	1400	H2O	5 VOA	X	X			X															
	SB-6-5		1320	Soil	1																				
	SB-6-10		1345		1																				
	SB-6-15		2000		1																				
	SB-6-17		2130		1	X	X			X															
	SB-9-5	6/16/05	1010	Soil	1																				
	SB-9-10		1040		1																				
	SB-9-12		1300		1																				
	SB-9-15		1045		1																				
	SB-9-W		1120	H2O	5 VOA																				

FIELD NOTES:
Container/Preservative or PID Readings or Laboratory Notes

On ICE / Field point ID

TEMPERATURE ON RECEIPT C°: 3

SB-6

SB-9

Relinquished by: (Signature)	Received by: (Signature)	Date: 6/16/5	Time: 5pm
Relinquished by: (Signature)	Received by: (Signature)	Date: 6/17/05	Time: 0930
Relinquished by: (Signature)	Received by: (Signature)	Date: 6.17.05	Time: 12:00

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/18/00 Revision

O&D Graphics (714) 895-8702

SEVERN TRENT STL

Submission#: 2005-06-0483

Cambria Environmental Emeryville

June 28, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Cynthia Vasko

Project#: 247-0733-017
Project: 98995740
Site: 2120 Montana, Oakland, CA

Dear Ms. Vasko:

Attached is our report for your samples received on 06/17/2005 09:30
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 08/01/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

SEVERN TRENT STL

Submission: 2005-06-0483

Total Lead

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SP-1	06/16/2005 13:00	Soil	1

Total Lead

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s):	3050B	Test(s):	6010B
Sample ID:	**SP-1**	Lab ID:	2005-06-0483 - 1
Sampled:	06/16/2005 13:00	Extracted:	6/22/2005 15:02
Matrix:	Soil	QC Batch#:	2005/06/22-02.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	42	1.0	mg/Kg	1.00	06/24/2005 10:20	

Total Lead

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 3050B
Method Blank
MB: 2005/06/22-02.15-025

Soil

Test(s): 6010B
QC Batch # 2005/06/22-02.15
Date Extracted: 06/22/2005 15:02

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	06/24/2005 10:06	

Total Lead

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 3050B

Test(s): 6010B

Laboratory Control Spike **Soil** ***QC Batch # 2005/06/22-02.15***

LCS 2005/06/22-02.15-026 Extracted: 06/22/2005 Analyzed: 06/24/2005 10:08
LCSD 2005/06/22-02.15-027 Extracted: 06/22/2005 Analyzed: 06/24/2005 10:12

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	103	101	100.0	103.0	101.0	2.0	80-120	20		

SEVERN TRENT STL

Submission: 2005-06-0483

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SP-1	06/16/2005 13:00	Soil	1

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Prep(s): 5030B
Sample ID: **SP-1**
Sampled: 06/16/2005 13:00
Matrix: Soil

Test(s): 8260B
Lab ID: 2005-06-0483 - **1**
Extracted: 6/26/2005 08:29
QC Batch#: 2005/06/26-1A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/26/2005 08:29	
Benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 08:29	
Toluene	ND	0.0050	mg/Kg	1.00	06/26/2005 08:29	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/26/2005 08:29	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/26/2005 08:29	
Surrogate(s)						
1,2-Dichloroethane-d4	114.1	76-124	%	1.00	06/26/2005 08:29	
Toluene-d8	93.9	75-116	%	1.00	06/26/2005 08:29	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B
Method Blank

Soil

Test(s): 8260B
QC Batch # 2005/06/26-1A.66

MB: 2005/06/26-1A.66-053

Date Extracted: 06/26/2005 07:53

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	06/26/2005 07:53	
Benzene	ND	0.0050	mg/Kg	06/26/2005 07:53	
Toluene	ND	0.0050	mg/Kg	06/26/2005 07:53	
Ethyl benzene	ND	0.0050	mg/Kg	06/26/2005 07:53	
Total xylenes	ND	0.0050	mg/Kg	06/26/2005 07:53	
Surrogates(s)					
1,2-Dichloroethane-d4	110.0	76-124	%	06/26/2005 07:53	
Toluene-d8	94.6	75-116	%	06/26/2005 07:53	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville
Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Soil** **QC Batch # 2005/06/26-1A.66**

LCS 2005/06/26-1A.66-028 Extracted: 06/26/2005 Analyzed: 06/26/2005 07:28

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0487		0.05	97.4			69-129	20		
Toluene	0.0522		0.05	104.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	528		500	105.6			76-124			
Toluene-d8	470		500	94.0			75-116			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Cynthia Vasko

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3344 Fax: (510) 420-9170

Project: 247-0733-017
98995740

Received: 06/17/2005 09:30

Site: 2120 Montana, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2005/06/26-1A.66**

MS/MSD

Lab ID: 2005-06-0452 - 008

MS: 2005/06/26-1A.66-044 Extracted: 06/26/2005 Analyzed: 06/26/2005 09:44

Dilution: 1.00

MSD: 2005/06/26-1A.66-009 Extracted: 06/26/2005 Analyzed: 06/26/2005 10:09

Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	0.0411	0.0435	ND	0.039246	104.8	116.2	10.3	69-129	20		
Toluene	0.0422	0.0471	ND	0.039246	107.7	125.9	15.6	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	604	566		500	120.8	113.2		76-124			
Toluene-d8	469	483		500	93.8	96.6		75-116			

Calscience
Environmental
Laboratories, Inc.

June 30, 2005

Melissa Brewer
Severn Trent Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566-4756

Subject: **Calscience Work Order No.:** **05-06-1825**
Client Reference: **2005-06-0483 / 247-0733-017 / 98995740**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/29/2005 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Ranjit K. K. Clarke

Calscience Environmental
Laboratories, Inc.
Ranjit Clarke
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Severn Trent Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566-4756

Date Received: 06/29/05
Work Order No: 05-06-1825
Preparation: DHS LUFT
Method: DHS LUFT

Project: 2005-06-0483 / 247-0733-017 / 98995740

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SP-1	05-06-1825-1	06/16/05	Solid	06/29/05	06/29/05	050629L11

Parameter	Result	RL	DF	Qual	Units
Organic Lead	ND	1.00	1		mg/kg

Method Blank	099-10-020-427	N/A	Solid	06/29/05	06/29/05	050629L11

Parameter	Result	RL	DF	Qual	Units
Organic Lead	ND	0.100	1		mg/kg

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Severn Trent Laboratories, Inc.
1220 Quarry Lane
Pleasanton, CA 94566-4756

Date Received: 06/29/05
Work Order No: 05-06-1825
Preparation: DHS LUFT
Method: DHS LUFT

Project: 2005-06-0483 / 247-0733-017 / 98995740

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
05-06-1826-1	Solid	FLAA	06/29/05	06/29/05	050625S11

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Organic Lead	56	62	22-145	3	0-18	

RPD - Relative Percent Difference, CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Severn Trent Laboratories, Inc.		Date Received:	N/A
1220 Quarry Lane		Work Order No:	05-06-1825
Pleasanton, CA 94566-4756		Preparation:	DHS LUFT
		Method:	DHS LUFT

Project: 2005-06-0483 / 247-0733-017 / 98995740

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lcs File ID	LCS Batch Number
099-10-020-427	Solid	FLAA	06/29/05	NONE	050629L11

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Organic Lead	25.0	26.6	106	75-125	

RPD - Relative Percent Difference, CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 05-06-1825

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

SEVERN TRENT STL

Chain of Custody

(1825)

Date Shipped: 6/28/2005

2005-06-0483 - 1

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager: Melissa Brewer
Phone: Ext:
Fax: (925) 484-1096
Email: mbrewer@stl-inc.com

To:

CalScience Analytical Laboratory
7440 Lincoln Way
Garden Grove, CA 92841

Phone: (714) 895-5494 Ext:
Fax: ( ) -
Contact: Sample Control
Phone: (714) 895-5494 Ext:

CL Submission #: 2005-06-0483
CL PO #:

Project #: 247-0733-017
Project Name: 98995740
EDF Global ID: T0600102236

Client Sample ID	# Containers	Sampled	Matrix	Method	TAT
SP-1	1	6/18/2005 1:00:00PM	Soil		
EDF Field ID: SP-1					
Subcontract - Organic Lead * Results Due ~~7/5/05~~ 7/1/05				LUFT	5 Day

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

RUSH

RELINQUISHED BY: 1	RELINQUISHED BY: 2	RELINQUISHED BY: 3
Signature: [signature] Time: 1500	Signature: FedEx Time: 10:00	Signature: Time:
Printed Name: M. VILLANUEVA Date: 6/29/05	Printed Name: Date: 6/29/05	Printed Name: Date:
Company: STL SF	Company:	Company:

RECEIVED BY: 1	RECEIVED BY: 2	RECEIVED BY: 3
Signature: [signature] Time: 10:00	Signature: Time:	Signature: Time:
Printed Name: W. BATTIN Date: 6-29-05	Printed Name: Date:	Printed Name: Date:
Company: CEL	Company:	Company:

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 05 - 06 - 1825

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: STL DATE: 6-29-05

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.
_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
3.9 °C IR thermometer.
_____ Ambient temperature.

Initial: WB

CUSTODY SEAL INTACT:

Sample(s) _____ Cooler ✓ No (Not Intact) : _____ Not Applicable (N/A): _____

Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)			
VOA vial(s) free of headspace			✓
Tedlar bag(s) free of condensation			✓

Initial: WB

COMMENTS:

LAB STL San francisco

SHELL Chain Of Custody Record

116697

3T6 0657

Shell Project Manager to be invoiced:

- ☐ SCIENCE & ENGINEERING
- ☑ TECHNICAL SERVICES
- ☐ CRMT HOUSTON

Dennis Brown

2005-06-0483

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT): 1 3 5 6 7 5

DATE: 6/16/05

Page 1 of 2

SAMPLING COMPANY: Cambria Environmental	LOG CODE: CETO
SITE ADDRESS (Street and City): 2120 Montana, Oakland, CA	GLOBAL ID NO.: T0600102236
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA	EDF DELIVERABLE TO: shelloaklandedf@cambria-env.com
PHONE NO.: 510-420-0700	E-MAIL: cvasko@CAMBRIA-ENV.COM
CONSULTANT PROJECT NO.: 247-0733-(005)	
PROJECT CONTACT: Cynthia Vasko / Stu Dalie	SAMPLER NAME(S) (Print): Stu Dalie
TELEPHONE: 510-420-3344	FAX: 510-420-9170
E-MAIL: cvasko@cambria-env.com	LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ____

GC/MS MTBE CONFIRMATION: HIGHEST ____ HIGHEST per BORING ____ ALL ____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

please cc lab results to cvasko@cambria-env.com and sdalie@cambria-env.com

1 4pt comp for waste disposal

REQUESTED ANALYSIS

Field Sample Identification	Sampling Date	Sampling Time	Matrix	No. of Cont.	TPHg (EPA Method 8260)	BTEX (EPA Method 8260)	TBA (EPA Method 8260)	MTBE (8260B - 0.5ppb RL)	5 oxygenates	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B-)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
SP-1A	6/16/05	1:00	Soil	1	X	X															X				SP-1
SP-1B	↓	↓	↓	1	X	X															X				SP-1
SP-1C	↓	↓	↓	1	X	X															X				SP-1
SP-1D	↓	↓	↓	1	X	X															X				SP-1

On ICE ◯ Field point ◯

TEMPERATURE ON RECEIPT C°: 3

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	6/16/05	by 5 pm
[signature]	[signature]	6/17/05	0930
[signature]	[signature]	6.17.05	1200

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

10/16/00 Revision

Brewer, Melissa

From: Vasko, Cynthia [cvasko@cambria-env.com]
Sent: Tuesday, June 28, 2005 1:26 PM
To: Brewer, Melissa
Cc: 'Barone, Ron'
Subject: RE: Partial 2120 Montana, Oakland, CA: 2005-06-0483

That should be fine; thanks.

Cynthia Vasko
Project Engineer
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A, Emeryville, CA 94608
phone: 510-420-3344
fax: 510-420-9170
cell: 510-385-0137 (change)

-----Original Message-----
From: Brewer, Melissa [mailto:MBrewer@stl-inc.com]
Sent: Tuesday, June 28, 2005 1:00 PM
To: Cynthia Vasko
Cc: Dalie, Stu
Subject: Partial 2120 Montana, Oakland, CA: 2005-06-0483

From: Melissa Brewer <mbrewer@stl-inc.com>

Project# : 247-0733-017
Project Name: 98995740

This email includes reports for the following tests:

- Cover Letter
  File: STLSF2005060483-Finalreport-FRP0000485330.PDF

Sorry, I forgot to mention that we'll need to add Organic Lead to this project and ship the sample to Calscience. What TAT do you need for the Organic Lead? Presently the project is due by this Friday.

Please let me know if you have any questions.

Melissa Brewer
Project Manager

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566-4756
Phone: (925) 484-1919
Fax: (925) 484-1096

SEVERN TRENT STL

Submission#: 2005-08-0720

Cambria Environmental Emeryville

September 14, 2005

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Cynthia Vasko

Project#: 247-0733-007
Project: 98995740
Site: 2120 Montana Street, Oakland

Dear Ms. Vasko:

Attached is our report for your samples received on 08/25/2005 11:00
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 10/09/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

STL Los Angeles
1721 South Grand Avenue
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921
www.stl-inc.com

September 13, 2005

STL LOT NUMBER: **E5H300181**

Melissa Brewer
STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Dear Ms. Brewer,

This report contains the analytical results for the six samples received under chain of custody by STL Los Angeles on August 26, 2005. These samples are associated with your CAMBRIA - EMERYVILLE project.

The preliminary results were sent via facsimile on September 09, 2005.

STL Los Angeles certifies that the test results provided in this report meet all the requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number is 01118CA / E87652.

This report shall not be reproduced except in full, without the written approval of the laboratory.

This report contains 000063 pages.

SEVERN TRENT STL

CASE NARRATIVE

All applicable quality control procedures met method-specified acceptance criteria. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. Any matrix related anomalies are footnoted within the report.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Jesse Bacwaden
Project Manager

CC: Project File

ACCREDITED IN ACCORDANCE WITH nelac

E5H300181
Date Shipped: 8/25/2005

SEVERN TRENT **STL**

Chain of Custody

2005-08-0720 - 1

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager:	Melissa Brewer			
Phone:	Ext:			
Fax:	(925) 484-1096			
Email:	mbrewer@stl-inc.com			

To:

STL Los Angeles - Sub contract
1721 South Grand Avenue
Santa Ana, CA 92705

Phone:	(714) 258-8610	Ext:	
Fax:	(714) 258-0921		
Contact:	Sample	Control	
Phone:	(714) 258-8610	Ext:	

CL Submission #: 2005-08-0720
CL PO #:

Project #: 247-0733-007
Project Name: 98995740
EDF Global ID: T0600102236

Client Sample ID / Analysis	CL#	Sampled	Matrix / Method	TAT
SV-D-5.0	1	8/24/2005 11:49:00AM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day
SV-D-10.0	2	8/24/2005 12:32:00PM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day
SV-E-5.0	3	8/24/2005 1:51:00PM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [signature] Time: 1400	Signature: Time:	Signature: Time:
Printed Name: Moffatt Date: 9-25-05	Printed Name: Date:	Printed Name: Date:
Company: STL	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature: [signature] Time: 1030	Signature: Time:	Signature: Time:
Printed Name: K FORKING Date: 8/26/05	Printed Name: Date:	Printed Name: Date:
Company: STL	Company:	Company:

E5H300181

Date Shipped: 8/25/2005

SEVERN TRENT **STL**

Chain of Custody

2005-08-0720 - 1

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager:	Melissa Brewer
Phone:	Ext:
Fax:	(925) 484-1096
Email:	mbrewer@stl-inc.com

To:

STL Los Angeles - Sub contract
1721 South Grand Avenue
Santa Ana, CA 92705

Phone:	(714) 258-8610	Ext:
Fax:	(714) 258-0921	
Contact:	Sample Control	
Phone:	(714) 258-8610	Ext:

CL Submission #: 2005-08-0720
CL PO #:

Project #: 247-0733-007
Project Name: 98995740
EDF Global ID: T0600102236

Client Sample ID / Analysis	Lot #	Sampled	Matrix / Method	TAT
SV-E-10.0	4	8/24/2005 2:55:00PM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day
TRIP BLANK	5	8/24/2005 12:00:00AM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day
SV-E-5.0 DUP	6	8/24/2005 1:51:00PM	Air	
OTHER/~~PENDING~~ /*O2, CO2, CH4 BY ASTM D1946*/				5 Day
Subcontract - TO-14 (Air samples) /*TO-14A LIST TO INCLUDE PROPANE, ISOPROPANOL, BTEX & ALL OTHER STANDARD CONSTITUENTS*/			TO-14	5 Day
Subcontract - TO-3 in air			TO-3	5 Day

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature / Time: 1400	Signature / Time	Signature / Time
Printed Name / Date: Stafford 8-25	Printed Name / Date	Printed Name / Date
Company: STL	Company	Company

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature / Time: KFREITAS 1030	Signature / Time	Signature / Time
Printed Name / Date: STL 8/26/05	Printed Name / Date	Printed Name / Date
Company	Company	Company

ESH300181

Date Shipped: 8/25/2005

SEVERN TRENT STL

Chain of Custody

2005-08-0720 - 1

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager:	Melissa Brewer			
Phone:	Ext:			
Fax:	(925) 484-1096			
Email:	mbrewer@stl-inc.com			

To:

STL Los Angeles - Sub contract
1721 South Grand Avenue
Santa Ana, CA 92705

Phone:	(714) 258-8610	Ext:	
Fax:	(714) 258-0921		
Contact:	Sample	Control	
Phone:	(714) 258-8610	Ext:	

CL Submission #: 2005-08-0720
CL PO #:

Project #: 247-0733-007
Project Name: 98995740
EDF Global ID: T0600102236

Client Sample ID	CL#	Sampled	Matrix
Analysis			Method / TAT

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: J Stafford Time: 1400	Signature / Time	Signature / Time
Printed Name: J Stafford Date: 8-25	Printed Name / Date	Printed Name / Date
Company: STL	Company	Company

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature: K FREITAG Time: 1030	Signature / Time	Signature / Time
Printed Name: STL Date: 8/26/05	Printed Name / Date	Printed Name / Date
Company	Company	Company

SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: 12206
DATE CLEANED: 8-11-05 B
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF-55
Duration of comp. : 15 30 hrs. / mins.
Flow setting: 158-166 ml/min
Initials: KD

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/16/05	KD
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	11.65	8-31-05	M
FINAL PRESSURE (PSIA)	23.92	8-31-05	M

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: 11368
DATE CLEANED: 8-4-05C
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF-68
Duration of comp. : 15 ~~hrs.~~ 30 mins.
Flow setting: 158-166 ml/min
Initials: (R)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/16/05	(R)
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.03	83105	M
FINAL PRESSURE (PSIA)	24.46	83105	M

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: 93153
DATE CLEANED: 8-15-05B
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF-77
Duration of comp. : 15 ~~hrs.~~ 30 (mins.)
Flow setting: 158-166 ml/min
Initials: (R)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/16/05	(R)
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.09	83105	
FINAL PRESSURE (PSIA)	24.66	83105	

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: A-173
DATE CLEANED: 7-26-05B
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HE-58
Duration of comp. : ~~15~~ 30 ~~hrs.~~ / mins.
Flow setting: 158-166 ml/min
Initials: KJ

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/16/05	KJ
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	11.90	83105	TT
FINAL PRESSURE (PSIA)	24.66	83105	TT

Pressurization Gas: N2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: 0124
DATE CLEANED: 8-2-05D
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF-5D
Duration of comp. : 15 ~~hrs.~~ / 30 (mins.)
Flow setting: 158-166 ml/min
Initials: (R)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK	[redacted]	30"	8/16/05	(R)
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	.02	83105	D
FINAL PRESSURE (PSIA)	15.54	63105	M

Pressurization Gas: N2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

CANISTER FIELD DATA RECORD

CLIENT: CAMBRIA ENV.
CANISTER SERIAL #: 9310 BB
DATE CLEANED: 8-11-05 D
CLIENT SAMPLE #:
SITE LOCATION:

VFR ID: HF-76
Duration of comp. : ~~15~~ 30 ~~hrs.~~ / (mins.)
Flow setting: 158-166 ml/min
Initials: (RJ)

READING	TIME	Vac. (inches Hg) Or PRESS. (psig)	DATE	INITIALS
INITIAL VACUUM CHECK		30"	8/16/05	(RJ)
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY CANISTER PRESSURIZATION			
INITIAL VACUUM (PSIA)	12.07	8310	JT
FINAL PRESSURE (PSIA)	24.71	8310	JT

Pressurization Gas: N_2

COMMENTS:

COMPOSITE TIME (HOURS)	FLOW RATE RANGE (ml/min)
15 Min.	316 – 333
30 Min.	158 – 166.7
1	79.2 – 83.3
2	39.6 – 41.7
4	19.8 – 20.8
6	13.2 – 13.9
8	9.9 – 10.4
10	7.92 – 8.3
12	6.6 – 6.9
24	3.5 – 4.0

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SEVERN TRENT STL

Analytical Report

ANALYTICAL REPORT

PROJECT NO. 2005-08-0720

CAMBRIA - EMERYVILLE

Lot #: E5H300181

Melissa Brewer

STL San Francisco

SEVERN TRENT LABORATORIES, INC.

Jesse Bacwaden
Project Manager

September 9, 2005

EXECUTIVE SUMMARY - Detection Highlights

E5H300181

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
SV-D-5.0 08/24/05 11:49 001				
Carbon dioxide	160000000	370000	ug/m3	ASTM D1946
Oxygen	130000000	5300000	ug/m3	ASTM D1946
TPH (as Gasoline)	22	8.4	mg/m3	EPA-19 TO-3
Isopropanol	52000	1200	ug/m3	EPA-19 TO-14A
SV-D-10.0 08/24/05 12:32 002				
Carbon dioxide	260000000	370000	ug/m3	ASTM D1946
Methane	7800000	2600	ug/m3	ASTM D1946
Oxygen	41000000	5300000	ug/m3	ASTM D1946
TPH (as Gasoline)	16000	160	mg/m3	EPA-19 TO-3
Propane	770 G	610	ug/m3	EPA-19 TO-14A
Benzene	480 G	440	ug/m3	EPA-19 TO-14A
Isopropanol	3700 G	1600	ug/m3	EPA-19 TO-14A
SV-E-5.0 08/24/05 13:51 003				
Carbon dioxide	130000000	370000	ug/m3	ASTM D1946
Methane	10000	2700	ug/m3	ASTM D1946
Oxygen	140000000	5300000	ug/m3	ASTM D1946
TPH (as Gasoline)	25	8.4	mg/m3	EPA-19 TO-3
Propane	20	9.0	ug/m3	EPA-19 TO-14A
Toluene	25	7.5	ug/m3	EPA-19 TO-14A
Isopropanol	140	24	ug/m3	EPA-19 TO-14A
SV-E-10.0 08/24/05 14:55 004				
Carbon dioxide	250000000	370000	ug/m3	ASTM D1946
Methane	40000000	2700	ug/m3	ASTM D1946
Oxygen	36000000	5400000	ug/m3	ASTM D1946
TPH (as Gasoline)	78000	1500	mg/m3	EPA-19 TO-3
Benzene	46000 G	6600	ug/m3	EPA-19 TO-14A
SV-E-5.0 DUP 08/24/05 13:51 006				
Carbon dioxide	130000000	370000	ug/m3	ASTM D1946
Methane	7300	2700	ug/m3	ASTM D1946
Oxygen	140000000	5300000	ug/m3	ASTM D1946
TPH (as Gasoline)	10	8.4	mg/m3	EPA-19 TO-3
Propane	21	9.0	ug/m3	EPA-19 TO-14A
Acetone	26	24	ug/m3	EPA-19 TO-14A
Isopropanol	130	24	ug/m3	EPA-19 TO-14A

ANALYTICAL METHODS SUMMARY

E5H300181

PARAMETER	ANALYTICAL METHOD
Fixed Gases	ASTM D1946
TPH by TO-3	EPA-19 TO-3
Volatile Organics(TO-14A)	EPA-19 TO-14A

References:

ASTM Annual Book Of ASTM Standards.

EPA-19 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA/600/4-89/017, January 1988

SAMPLE SUMMARY

E5H300181

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HJH8E	001	SV-D-5.0	08/24/05	11:49
HJH8M	002	SV-D-10.0	08/24/05	12:32
HJH8P	003	SV-E-5.0	08/24/05	13:51
HJH8T	004	SV-E-10.0	08/24/05	14:55
HJH8V	005	TRIP BLANK	08/24/05	
HJH9N	006	SV-E-5.0 DUP	08/24/05	13:51

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

STL SAN FRANCISCO

Client Sample ID: SV-D-5.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-001 Work Order #...: HJH8E1AE Matrix.....: AE
Date Sampled...: 08/24/05 Date Received..: 08/26/05
Prep Date.....: 09/06/05 Analysis Date..: 09/06/05
Prep Batch #...: 5250358
Dilution Factor: 20
Analyst ID.....: 101605 Instrument ID..: MSB
Method.....: EPA-19 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	ND G	180	ug/m3
Dichlorodifluoromethane	ND G	200	ug/m3
Chloromethane	ND G	160	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND G	280	ug/m3
Vinyl chloride	ND G	100	ug/m3
Bromomethane	ND G	160	ug/m3
Chloroethane	ND G	220	ug/m3
Trichlorofluoromethane	ND G	220	ug/m3
1,1-Dichloroethene	ND G	160	ug/m3
Carbon disulfide	ND G	620	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND G	300	ug/m3
Acetone	ND G	480	ug/m3
Methylene chloride	ND G	140	ug/m3
trans-1,2-Dichloroethene	ND G	160	ug/m3
1,1-Dichloroethane	ND G	160	ug/m3
Vinyl acetate	ND G	700	ug/m3
cis-1,2-Dichloroethene	ND G	160	ug/m3
2-Butanone (MEK)	ND G	580	ug/m3
Chloroform	ND G	190	ug/m3
1,1,1-Trichloroethane	ND G	220	ug/m3
Carbon tetrachloride	ND G	260	ug/m3
Benzene	ND G	130	ug/m3
1,2-Dichloroethane	ND G	160	ug/m3
Trichloroethene	ND G	220	ug/m3
1,2-Dichloropropane	ND G	180	ug/m3
Bromodichloromethane	ND G	260	ug/m3
cis-1,3-Dichloropropene	ND G	180	ug/m3
4-Methyl-2-pentanone (MIBK)	ND G	820	ug/m3
Toluene	ND G	150	ug/m3
trans-1,3-Dichloropropene	ND G	180	ug/m3
1,1,2-Trichloroethane	ND G	220	ug/m3
Tetrachloroethene	ND G	280	ug/m3
2-Hexanone	ND G	820	ug/m3
Dibromochloromethane	ND G	340	ug/m3

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STL SAN FRANCISCO

Client Sample ID: SV-D-5.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-001 Work Order #...: HJH8E1AE Matrix.....: AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND G	300	ug/m3
Chlorobenzene	ND G	180	ug/m3
Ethylbenzene	ND G	170	ug/m3
Xylenes (total)	ND G	170	ug/m3
m-Xylene & p-Xylene	ND G	170	ug/m3
o-Xylene	ND G	170	ug/m3
Styrene	ND G	170	ug/m3
Bromoform	ND G	160	ug/m3
1,1,2,2-Tetrachloroethane	ND G	280	ug/m3
Benzyl chloride	ND G	1000	ug/m3
4-Ethyltoluene	ND G	200	ug/m3
1,3,5-Trimethylbenzene	ND G	200	ug/m3
1,2,4-Trimethylbenzene	ND G	200	ug/m3
1,3-Dichlorobenzene	ND G	240	ug/m3
1,4-Dichlorobenzene	ND G	240	ug/m3
1,2-Dichlorobenzene	ND G	240	ug/m3
1,2,4-Trichloro-benzene	ND G	740	ug/m3
Hexachlorobutadiene	ND G	860	ug/m3

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

STL SAN FRANCISCO

Client Sample ID: SV-D-5.0

GC/MS Volatiles

Lot-Sample #...:	E5H300181-001	Work Order #...:	HJH8E2AE	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/06/05	Analysis Date..:	09/06/05		
Prep Batch #...:	5250358				
Dilution Factor:	50				
Analyst ID.....:	101605	Instrument ID..:	MSB		
		Method.....:	EPA-19 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropanol	52000	1200	ug/m3

STL SAN FRANCISCO

Client Sample ID: SV-D-5.0

GC Volatiles

Lot-Sample #...:	E5H300181-001	Work Order #...:	HJH8E1AD	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245201				
Dilution Factor:	2.05				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	**160000000**	**370000**	**ug/m3**
Methane	ND	2700	ug/m3
Oxygen	**130000000**	**5300000**	**ug/m3**

STL SAN FRANCISCO

Client Sample ID: SV-D-5.0

GC Volatiles

Lot-Sample #...:	E5H300181-001	Work Order #...:	HJH8E1AF	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	08/31/05	Analysis Date..:	08/31/05		
Prep Batch #...:	5244231				
Dilution Factor:	2.05				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	22	8.4	mg/m3

NOTE(S):

This sample has GC/FID characteristics for which reliable identification of a product could not be achieved.

STL SAN FRANCISCO

Client Sample ID: SV-D-10.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-002 Work Order #...: HJH8M1AE Matrix.....: AE
Date Sampled...: 08/24/05 Date Received..: 08/26/05
Prep Date.....: 09/07/05 Analysis Date..: 09/07/05
Prep Batch #...: 5251240
Dilution Factor: 68.06
Analyst ID.....: 101605 Instrument ID..: MSA
Method.....: EPA-19 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	**770 G**	**610**	**ug/m3**
Dichlorodifluoromethane	ND G	670	ug/m3
Chloromethane	ND G	560	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND G	950	ug/m3
Vinyl chloride	ND G	350	ug/m3
Bromomethane	ND G	530	ug/m3
Chloroethane	ND G	750	ug/m3
Trichlorofluoromethane	ND G	750	ug/m3
1,1-Dichloroethene	ND G	540	ug/m3
Carbon disulfide	ND G	2100	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND G	1000	ug/m3
Acetone	ND G	1600	ug/m3
Methylene chloride	ND G	470	ug/m3
trans-1,2-Dichloroethene	ND G	540	ug/m3
1,1-Dichloroethane	ND G	550	ug/m3
Vinyl acetate	ND G	2400	ug/m3
cis-1,2-Dichloroethene	ND G	540	ug/m3
2-Butanone (MEK)	ND G	2000	ug/m3
Chloroform	ND G	660	ug/m3
1,1,1-Trichloroethane	ND G	750	ug/m3
Carbon tetrachloride	ND G	880	ug/m3
Benzene	**480 G**	**440**	**ug/m3**
1,2-Dichloroethane	ND G	550	ug/m3
Trichloroethene	ND G	750	ug/m3
1,2-Dichloropropane	ND G	630	ug/m3
Bromodichloromethane	ND G	880	ug/m3
cis-1,3-Dichloropropene	ND G	620	ug/m3
4-Methyl-2-pentanone (MIBK)	ND G	2800	ug/m3
Toluene	ND G	510	ug/m3
trans-1,3-Dichloropropene	ND G	620	ug/m3
1,1,2-Trichloroethane	ND G	750	ug/m3
Tetrachloroethene	ND G	950	ug/m3
2-Hexanone	ND G	2800	ug/m3
Dibromochloromethane	ND G	1200	ug/m3

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STL SAN FRANCISCO

Client Sample ID: SV-D-10.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-002 Work Order #...: HJH8M1AE Matrix.....: AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND G	1000	ug/m3
Chlorobenzene	ND G	630	ug/m3
Ethylbenzene	ND G	590	ug/m3
Xylenes (total)	ND G	590	ug/m3
m-Xylene & p-Xylene	ND G	590	ug/m3
o-Xylene	ND G	590	ug/m3
Styrene	ND G	580	ug/m3
Bromoform	ND G	530	ug/m3
1,1,2,2-Tetrachloroethane	ND G	950	ug/m3
Benzyl chloride	ND G	3500	ug/m3
4-Ethyltoluene	ND G	670	ug/m3
1,3,5-Trimethylbenzene	ND G	670	ug/m3
1,2,4-Trimethylbenzene	ND G	670	ug/m3
1,3-Dichlorobenzene	ND G	820	ug/m3
1,4-Dichlorobenzene	ND G	820	ug/m3
1,2-Dichlorobenzene	ND G	820	ug/m3
1,2,4-Trichloro-benzene	ND G	2500	ug/m3
Hexachlorobutadiene	ND G	2900	ug/m3
Isopropanol	**3700 G**	**1600**	**ug/m3**

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

STL SAN FRANCISCO

Client Sample ID: SV-D-10.0

GC Volatiles

Lot-Sample #...:	E5H300181-002	Work Order #...:	HJH8M1AD	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245201				
Dilution Factor:	2.03				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	260000000	370000	ug/m3
Methane	7800000	2600	ug/m3
Oxygen	41000000	5300000	ug/m3

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Client Sample ID: SV-D-10.0

GC Volatiles

Lot-Sample #...:	E5H300181-002	Work Order #...:	HJH8M1AF	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	08/31/05	Analysis Date..:	08/31/05		
Prep Batch #...:	5244231				
Dilution Factor:	38.63				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	16000	160	mg/m3

NOTE(S):

This sample has GC/FID characteristics for which reliable identification of a product could not be achieved.

STL SAN FRANCISCO

Client Sample ID: SV-E-5.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-003	**Work Order #...:** HJH8P1AE	**Matrix.....:** AE	
Date Sampled...: 08/24/05	**Date Received..:** 08/26/05		
Prep Date.....: 09/06/05	**Analysis Date..:** 09/06/05		
Prep Batch #...: 5250358			
Dilution Factor: 1			
Analyst ID.....: 101605	**Instrument ID..:** MSB		
	Method.....: EPA-19 TO-14A		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	**20**	**9.0**	**ug/m3**
Dichlorodifluoromethane	ND	9.9	ug/m3
Chloromethane	ND	8.2	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	14	ug/m3
Vinyl chloride	ND	5.1	ug/m3
Bromomethane	ND	7.8	ug/m3
Chloroethane	ND	11	ug/m3
Trichlorofluoromethane	ND	11	ug/m3
1,1-Dichloroethene	ND	7.9	ug/m3
Carbon disulfide	ND	31	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	15	ug/m3
Acetone	ND	24	ug/m3
Methylene chloride	ND	6.9	ug/m3
trans-1,2-Dichloroethene	ND	7.9	ug/m3
1,1-Dichloroethane	ND	8.1	ug/m3
Vinyl acetate	ND	35	ug/m3
cis-1,2-Dichloroethene	ND	7.9	ug/m3
2-Butanone (MEK)	ND	29	ug/m3
Chloroform	ND	9.7	ug/m3
1,1,1-Trichloroethane	ND	11	ug/m3
Carbon tetrachloride	ND	13	ug/m3
Benzene	ND	6.4	ug/m3
1,2-Dichloroethane	ND	8.1	ug/m3
Trichloroethene	ND	11	ug/m3
1,2-Dichloropropane	ND	9.2	ug/m3
Bromodichloromethane	ND	13	ug/m3
cis-1,3-Dichloropropene	ND	9.1	ug/m3
4-Methyl-2-pentanone (MIBK)	ND	41	ug/m3
Toluene	**25**	**7.5**	**ug/m3**
trans-1,3-Dichloropropene	ND	9.1	ug/m3
1,1,2-Trichloroethane	ND	11	ug/m3
Tetrachloroethene	ND	14	ug/m3
2-Hexanone	ND	41	ug/m3
Dibromochloromethane	ND	17	ug/m3

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Client Sample ID: SV-E-5.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-003 Work Order #...: HJH8P1AE Matrix.....: AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND	15	ug/m3
Chlorobenzene	ND	9.2	ug/m3
Ethylbenzene	ND	8.7	ug/m3
Xylenes (total)	ND	8.7	ug/m3
m-Xylene & p-Xylene	ND	8.7	ug/m3
o-Xylene	ND	8.7	ug/m3
Styrene	ND	8.5	ug/m3
Bromoform	ND	7.8	ug/m3
1,1,2,2-Tetrachloroethane	ND	14	ug/m3
Benzyl chloride	ND	52	ug/m3
4-Ethyltoluene	ND	9.8	ug/m3
1,3,5-Trimethylbenzene	ND	9.8	ug/m3
1,2,4-Trimethylbenzene	ND	9.8	ug/m3
1,3-Dichlorobenzene	ND	12	ug/m3
1,4-Dichlorobenzene	ND	12	ug/m3
1,2-Dichlorobenzene	ND	12	ug/m3
1,2,4-Trichloro-benzene	ND	37	ug/m3
Hexachlorobutadiene	ND	43	ug/m3
Isopropanol	**140**	**24**	**ug/m3**

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Client Sample ID: SV-E-5.0

GC Volatiles

Lot-Sample #...:	E5H300181-003	Work Order #...:	HJH8P1AD	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245520				
Dilution Factor:	2.04				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	130000000	370000	ug/m3
Methane	10000	2700	ug/m3
Oxygen	140000000	5300000	ug/m3

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Client Sample ID: SV-E-5.0

GC Volatiles

Lot-Sample #...:	E5H300181-003	Work Order #...:	HJH8P1AF	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	08/31/05	Analysis Date..:	08/31/05		
Prep Batch #...:	5244231				
Dilution Factor:	2.04				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	25	8.4	mg/m3

NOTE(S):

This sample has GC/FID characteristics for which reliable identification of a product could not be achieved.

STL SAN FRANCISCO

Client Sample ID: SV-R-10.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-004 Work Order #...: HJH8T1AE Matrix.....: AE
Date Sampled...: 08/24/05 Date Received..: 08/26/05
Prep Date.....: 09/06/05 Analysis Date..: 09/06/05
Prep Batch #...: 5250358
Dilution Factor: 1038
Analyst ID.....: 101605 Instrument ID..: MSB
Method.....: EPA-19 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	ND G	9300	ug/m3
Dichlorodifluoromethane	ND G	10000	ug/m3
Chloromethane	ND G	8500	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND G	15000	ug/m3
Vinyl chloride	ND G	5300	ug/m3
Bromomethane	ND G	8100	ug/m3
Chloroethane	ND G	11000	ug/m3
Trichlorofluoromethane	ND G	11000	ug/m3
1,1-Dichloroethene	ND G	8200	ug/m3
Carbon disulfide	ND G	32000	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND G	16000	ug/m3
Acetone	ND G	25000	ug/m3
Methylene chloride	ND G	7200	ug/m3
trans-1,2-Dichloroethene	ND G	8200	ug/m3
1,1-Dichloroethane	ND G	8400	ug/m3
Vinyl acetate	ND G	36000	ug/m3
cis-1,2-Dichloroethene	ND G	8200	ug/m3
2-Butanone (MEK)	ND G	30000	ug/m3
Chloroform	ND G	10000	ug/m3
1,1,1-Trichloroethane	ND G	11000	ug/m3
Carbon tetrachloride	ND G	13000	ug/m3
Benzene	**46000 G**	**6600**	**ug/m3**
1,2-Dichloroethane	ND G	8400	ug/m3
Trichloroethene	ND G	11000	ug/m3
1,2-Dichloropropane	ND G	9500	ug/m3
Bromodichloromethane	ND G	13000	ug/m3
cis-1,3-Dichloropropene	ND G	9400	ug/m3
4-Methyl-2-pentanone (MIBK)	ND G	43000	ug/m3
Toluene	ND G	7800	ug/m3
trans-1,3-Dichloropropene	ND G	9400	ug/m3
1,1,2-Trichloroethane	ND G	11000	ug/m3
Tetrachloroethene	ND G	15000	ug/m3
2-Hexanone	ND G	43000	ug/m3
Dibromochloromethane	ND G	18000	ug/m3

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Client Sample ID: SV-E-10.0

GC/MS Volatiles

Lot-Sample #...: E5H300181-004 Work Order #...: HJH8T1AE Matrix.....: AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND G	16000	ug/m3
Chlorobenzene	ND G	9500	ug/m3
Ethylbenzene	ND G	9000	ug/m3
Xylenes (total)	ND G	9000	ug/m3
m-Xylene & p-Xylene	ND G	9000	ug/m3
o-Xylene	ND G	9000	ug/m3
Styrene	ND G	8800	ug/m3
Bromoform	ND G	8100	ug/m3
1,1,2,2-Tetrachloroethane	ND G	15000	ug/m3
Benzyl chloride	ND G	54000	ug/m3
4-Ethyltoluene	ND G	10000	ug/m3
1,3,5-Trimethylbenzene	ND G	10000	ug/m3
1,2,4-Trimethylbenzene	ND G	10000	ug/m3
1,3-Dichlorobenzene	ND G	12000	ug/m3
1,4-Dichlorobenzene	ND G	12000	ug/m3
1,2-Dichlorobenzene	ND G	12000	ug/m3
1,2,4-Trichloro-benzene	ND G	38000	ug/m3
Hexachlorobutadiene	ND G	45000	ug/m3
Isopropanol	ND G	25000	ug/m3

NOTE(S):

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

STL SAN FRANCISCO

Client Sample ID: SV-E-10.0

GC Volatiles

Lot-Sample #...:	E5H300181-004	Work Order #...:	HJH8T1AD	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245201				
Dilution Factor:	2.07				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	250000000	370000	ug/m3
Methane	40000000	2700	ug/m3
Oxygen	36000000	5400000	ug/m3

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Client Sample ID: SV-E-10.0

GC Volatiles

Lot-Sample #...:	E5H300181-004	Work Order #...:	HJH8T1AF	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/01/05	Analysis Date..:	09/01/05		
Prep Batch #...:	5245477				
Dilution Factor:	364.7				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	78000	1500	mg/m3

NOTE(S):

This sample has GC/FID characteristics for which reliable identification of a product could not be achieved.

STL SAN FRANCISCO

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: E5H300181-005 Work Order #...: HJH8V1AE Matrix.....: AQ
Date Sampled...: 08/24/05 Date Received..: 08/26/05
Prep Date.....: 09/07/05 Analysis Date..: 09/07/05
Prep Batch #...: 5251240
Dilution Factor: 1
Analyst ID.....: 101605 Instrument ID..: MSA
Method.....: EPA-19 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	ND	9.0	ug/m3
Dichlorodifluoromethane	ND	9.9	ug/m3
Chloromethane	ND	8.2	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	14	ug/m3
Vinyl chloride	ND	5.1	ug/m3
Bromomethane	ND	7.8	ug/m3
Chloroethane	ND	11	ug/m3
Trichlorofluoromethane	ND	11	ug/m3
1,1-Dichloroethene	ND	7.9	ug/m3
Carbon disulfide	ND	31	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	15	ug/m3
Acetone	ND	24	ug/m3
Methylene chloride	ND	6.9	ug/m3
trans-1,2-Dichloroethene	ND	7.9	ug/m3
1,1-Dichloroethane	ND	8.1	ug/m3
Vinyl acetate	ND	35	ug/m3
cis-1,2-Dichloroethene	ND	7.9	ug/m3
2-Butanone (MEK)	ND	29	ug/m3
Chloroform	ND	9.7	ug/m3
1,1,1-Trichloroethane	ND	11	ug/m3
Carbon tetrachloride	ND	13	ug/m3
Benzene	ND	6.4	ug/m3
1,2-Dichloroethane	ND	8.1	ug/m3
Trichloroethene	ND	11	ug/m3
1,2-Dichloropropane	ND	9.2	ug/m3
Bromodichloromethane	ND	13	ug/m3
cis-1,3-Dichloropropene	ND	9.1	ug/m3
4-Methyl-2-pentanone (MIBK)	ND	41	ug/m3
Toluene	ND	7.5	ug/m3
trans-1,3-Dichloropropene	ND	9.1	ug/m3
1,1,2-Trichloroethane	ND	11	ug/m3
Tetrachloroethene	ND	14	ug/m3
2-Hexanone	ND	41	ug/m3
Dibromochloromethane	ND	17	ug/m3

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Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: E5H300181-005 Work Order #...: HJH8V1AE Matrix.....: AQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND	15	ug/m3
Chlorobenzene	ND	9.2	ug/m3
Ethylbenzene	ND	8.7	ug/m3
Xylenes (total)	ND	8.7	ug/m3
m-Xylene & p-Xylene	ND	8.7	ug/m3
o-Xylene	ND	8.7	ug/m3
Styrene	ND	8.5	ug/m3
Bromoform	ND	7.8	ug/m3
1,1,2,2-Tetrachloroethane	ND	14	ug/m3
Benzyl chloride	ND	52	ug/m3
4-Ethyltoluene	ND	9.8	ug/m3
1,3,5-Trimethylbenzene	ND	9.8	ug/m3
1,2,4-Trimethylbenzene	ND	9.8	ug/m3
1,3-Dichlorobenzene	ND	12	ug/m3
1,4-Dichlorobenzene	ND	12	ug/m3
1,2-Dichlorobenzene	ND	12	ug/m3
1,2,4-Trichloro-benzene	ND	37	ug/m3
Hexachlorobutadiene	ND	43	ug/m3
Isopropanol	ND	24	ug/m3

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Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...:	E5H300181-005	Work Order #...:	HJH8V1AD	Matrix.....:	AQ
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245201				
Dilution Factor:	1				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	ND	180000	ug/m3
Methane	ND	1300	ug/m3
Oxygen	ND	2600000	ug/m3

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Client Sample ID: TRIP BLANK

GC Volatiles

Lot-Sample #...:	E5H300181-005	Work Order #...:	HJH8V1AF	Matrix.....:	AQ
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	08/31/05	Analysis Date..:	08/31/05		
Prep Batch #...:	5244231				
Dilution Factor:	1				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	ND	4.1	mg/m3

STL SAN FRANCISCO

Client Sample ID: SV-E-5.0 DUP

GC/MS Volatiles

Lot-Sample #...: E5H300181-006 Work Order #...: HJH9N1AE Matrix.....: AE
Date Sampled...: 08/24/05 Date Received..: 08/26/05
Prep Date.....: 09/06/05 Analysis Date..: 09/06/05
Prep Batch #...: 5250358
Dilution Factor: 1
Analyst ID.....: 101605 Instrument ID..: MSB
Method.....: EPA-19 TO-14A

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Propane	**21**	**9.0**	**ug/m3**
Dichlorodifluoromethane	ND	9.9	ug/m3
Chloromethane	ND	8.2	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	14	ug/m3
Vinyl chloride	ND	5.1	ug/m3
Bromomethane	ND	7.8	ug/m3
Chloroethane	ND	11	ug/m3
Trichlorofluoromethane	ND	11	ug/m3
1,1-Dichloroethene	ND	7.9	ug/m3
Carbon disulfide	ND	31	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	15	ug/m3
Acetone	**26**	**24**	**ug/m3**
Methylene chloride	ND	6.9	ug/m3
trans-1,2-Dichloroethene	ND	7.9	ug/m3
1,1-Dichloroethane	ND	8.1	ug/m3
Vinyl acetate	ND	35	ug/m3
cis-1,2-Dichloroethene	ND	7.9	ug/m3
2-Butanone (MEK)	ND	29	ug/m3
Chloroform	ND	9.7	ug/m3
1,1,1-Trichloroethane	ND	11	ug/m3
Carbon tetrachloride	ND	13	ug/m3
Benzene	ND	6.4	ug/m3
1,2-Dichloroethane	ND	8.1	ug/m3
Trichloroethene	ND	11	ug/m3
1,2-Dichloropropane	ND	9.2	ug/m3
Bromodichloromethane	ND	13	ug/m3
cis-1,3-Dichloropropene	ND	9.1	ug/m3
4-Methyl-2-pentanone (MIBK)	ND	41	ug/m3
Toluene	ND	7.5	ug/m3
trans-1,3-Dichloropropene	ND	9.1	ug/m3
1,1,2-Trichloroethane	ND	11	ug/m3
Tetrachloroethene	ND	14	ug/m3
2-Hexanone	ND	41	ug/m3
Dibromochloromethane	ND	17	ug/m3

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Client Sample ID: SV-E-5.0 DUP

GC/MS Volatiles

Lot-Sample #...: E5H300181-006 Work Order #...: HJH9N1AE Matrix.....: AE

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,2-Dibromoethane (EDB)	ND	15	ug/m3
Chlorobenzene	ND	9.2	ug/m3
Ethylbenzene	ND	8.7	ug/m3
Xylenes (total)	ND	8.7	ug/m3
m-Xylene & p-Xylene	ND	8.7	ug/m3
o-Xylene	ND	8.7	ug/m3
Styrene	ND	8.5	ug/m3
Bromoform	ND	7.8	ug/m3
1,1,2,2-Tetrachloroethane	ND	14	ug/m3
Benzyl chloride	ND	52	ug/m3
4-Ethyltoluene	ND	9.8	ug/m3
1,3,5-Trimethylbenzene	ND	9.8	ug/m3
1,2,4-Trimethylbenzene	ND	9.8	ug/m3
1,3-Dichlorobenzene	ND	12	ug/m3
1,4-Dichlorobenzene	ND	12	ug/m3
1,2-Dichlorobenzene	ND	12	ug/m3
1,2,4-Trichloro-benzene	ND	37	ug/m3
Hexachlorobutadiene	ND	43	ug/m3
Isopropanol	**130**	**24**	**ug/m3**

STL SAN FRANCISCO

Client Sample ID: SV-E-5.0 DUP

GC Volatiles

Lot-Sample #...:	E5H300181-006	Work Order #...:	HJH9N1AD	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	09/02/05	Analysis Date..:	09/02/05		
Prep Batch #...:	5245520				
Dilution Factor:	2.04				
Analyst ID.....:	101605	Instrument ID..:	GC3		
		Method.....:	ASTM D1946		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Carbon dioxide	130000000	370000	ug/m3
Methane	7300	2700	ug/m3
Oxygen	140000000	5300000	ug/m3

STL SAN FRANCISCO

Client Sample ID: SV-E-5.0 DUP

GC Volatiles

Lot-Sample #...:	E5H300181-006	Work Order #...:	HJH9N1AF	Matrix.....:	AE
Date Sampled...:	08/24/05	Date Received..:	08/26/05		
Prep Date.....:	08/31/05	Analysis Date..:	08/31/05		
Prep Batch #...:	5244231				
Dilution Factor:	2.05				
Analyst ID.....:	402431	Instrument ID..:	GC7		
		Method.....:	EPA-19 TO-3		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
TPH (as Gasoline)	10	8.4	mg/m3

NOTE(S):

This sample has GC/FID characteristics for which reliable identification of a product could not be achieved.

SEVERN TRENT STL

QA/QC

QC DATA ASSOCIATION SUMMARY

E5H300181

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AE	EPA-19 TO-14A		5250358	
	AE	ASTM D1946		5245201	
	AE	EPA-19 TO-3		5244231	
002	AE	EPA-19 TO-14A		5251240	
	AE	ASTM D1946		5245201	
	AE	EPA-19 TO-3		5244231	
003	AE	EPA-19 TO-14A		5250358	
	AE	ASTM D1946		5245520	
	AE	EPA-19 TO-3		5244231	
004	AE	EPA-19 TO-14A		5250358	
	AE	ASTM D1946		5245201	
	AE	EPA-19 TO-3		5245477	
005	AQ	EPA-19 TO-14A		5251240	
	AQ	ASTM D1946		5245201	
	AQ	EPA-19 TO-3		5244231	
006	AE	EPA-19 TO-14A		5250358	
	AE	ASTM D1946		5245520	
	AE	EPA-19 TO-3		5244231	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 Work Order #...: HJ4AV1AA Matrix.....: AIR
MB Lot-Sample #: M5I070000-358

Prep Date.....: 09/06/05 Instrument ID..: MSB
Analysis Date..: 09/06/05 Prep Batch #...: 5250358
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Propane	ND	9.0	ug/m3	EPA-19 TO-14A
Dichlorodifluoromethane	ND	9.9	ug/m3	EPA-19 TO-14A
Chloromethane	ND	8.2	ug/m3	EPA-19 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	14	ug/m3	EPA-19 TO-14A
Vinyl chloride	ND	5.1	ug/m3	EPA-19 TO-14A
Bromomethane	ND	7.8	ug/m3	EPA-19 TO-14A
Chloroethane	ND	11	ug/m3	EPA-19 TO-14A
Trichlorofluoromethane	ND	11	ug/m3	EPA-19 TO-14A
1,1-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
Carbon disulfide	ND	31	ug/m3	EPA-19 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	15	ug/m3	EPA-19 TO-14A
Acetone	ND	24	ug/m3	EPA-19 TO-14A
Methylene chloride	ND	6.9	ug/m3	EPA-19 TO-14A
trans-1,2-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
1,1-Dichloroethane	ND	8.1	ug/m3	EPA-19 TO-14A
Vinyl acetate	ND	35	ug/m3	EPA-19 TO-14A
cis-1,2-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
2-Butanone (MEK)	ND	29	ug/m3	EPA-19 TO-14A
Chloroform	ND	9.7	ug/m3	EPA-19 TO-14A
1,1,1-Trichloroethane	ND	11	ug/m3	EPA-19 TO-14A
Carbon tetrachloride	ND	13	ug/m3	EPA-19 TO-14A
Benzene	ND	6.4	ug/m3	EPA-19 TO-14A
1,2-Dichloroethane	ND	8.1	ug/m3	EPA-19 TO-14A
Trichloroethene	ND	11	ug/m3	EPA-19 TO-14A
1,2-Dichloropropane	ND	9.2	ug/m3	EPA-19 TO-14A
Bromodichloromethane	ND	13	ug/m3	EPA-19 TO-14A
cis-1,3-Dichloropropene	ND	9.1	ug/m3	EPA-19 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	41	ug/m3	EPA-19 TO-14A
Toluene	ND	7.5	ug/m3	EPA-19 TO-14A
trans-1,3-Dichloropropene	ND	9.1	ug/m3	EPA-19 TO-14A
1,1,2-Trichloroethane	ND	11	ug/m3	EPA-19 TO-14A
Tetrachloroethene	ND	14	ug/m3	EPA-19 TO-14A
2-Hexanone	ND	41	ug/m3	EPA-19 TO-14A
Dibromochloromethane	ND	17	ug/m3	EPA-19 TO-14A
1,2-Dibromoethane (EDB)	ND	15	ug/m3	EPA-19 TO-14A
Chlorobenzene	ND	9.2	ug/m3	EPA-19 TO-14A
Ethylbenzene	ND	8.7	ug/m3	EPA-19 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 **Work Order #...:** HJ4AV1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	8.7	ug/m3	EPA-19 TO-14A
m-Xylene & p-Xylene	ND	8.7	ug/m3	EPA-19 TO-14A
o-Xylene	ND	8.7	ug/m3	EPA-19 TO-14A
Styrene	ND	8.5	ug/m3	EPA-19 TO-14A
Bromoform	ND	7.8	ug/m3	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	ND	14	ug/m3	EPA-19 TO-14A
Benzyl chloride	ND	52	ug/m3	EPA-19 TO-14A
4-Ethyltoluene	ND	9.8	ug/m3	EPA-19 TO-14A
1,3,5-Trimethylbenzene	ND	9.8	ug/m3	EPA-19 TO-14A
1,2,4-Trimethylbenzene	ND	9.8	ug/m3	EPA-19 TO-14A
1,3-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,4-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,2-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,2,4-Trichloro-benzene	ND	37	ug/m3	EPA-19 TO-14A
Hexachlorobutadiene	ND	43	ug/m3	EPA-19 TO-14A
Isopropanol	ND	24	ug/m3	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 **Work Order #...:** HJ7QR1AA **Matrix.....:** AIR
MB Lot-Sample #: M5I080000-240

Prep Date.....: 09/07/05 **Instrument ID..:** MSA
Analysis Date..: 09/07/05 **Prep Batch #...:** 5251240
Dilution Factor: 1

Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Propane	ND	9.0	ug/m3	EPA-19 TO-14A
Dichlorodifluoromethane	ND	9.9	ug/m3	EPA-19 TO-14A
Chloromethane	ND	8.2	ug/m3	EPA-19 TO-14A
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	14	ug/m3	EPA-19 TO-14A
Vinyl chloride	ND	5.1	ug/m3	EPA-19 TO-14A
Bromomethane	ND	7.8	ug/m3	EPA-19 TO-14A
Chloroethane	ND	11	ug/m3	EPA-19 TO-14A
Trichlorofluoromethane	ND	11	ug/m3	EPA-19 TO-14A
1,1-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
Carbon disulfide	ND	31	ug/m3	EPA-19 TO-14A
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	15	ug/m3	EPA-19 TO-14A
Acetone	ND	24	ug/m3	EPA-19 TO-14A
Methylene chloride	ND	6.9	ug/m3	EPA-19 TO-14A
trans-1,2-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
1,1-Dichloroethane	ND	8.1	ug/m3	EPA-19 TO-14A
Vinyl acetate	ND	35	ug/m3	EPA-19 TO-14A
cis-1,2-Dichloroethene	ND	7.9	ug/m3	EPA-19 TO-14A
2-Butanone (MEK)	ND	29	ug/m3	EPA-19 TO-14A
Chloroform	ND	9.7	ug/m3	EPA-19 TO-14A
1,1,1-Trichloroethane	ND	11	ug/m3	EPA-19 TO-14A
Carbon tetrachloride	ND	13	ug/m3	EPA-19 TO-14A
Benzene	ND	6.4	ug/m3	EPA-19 TO-14A
1,2-Dichloroethane	ND	8.1	ug/m3	EPA-19 TO-14A
Trichloroethene	ND	11	ug/m3	EPA-19 TO-14A
1,2-Dichloropropane	ND	9.2	ug/m3	EPA-19 TO-14A
Bromodichloromethane	ND	13	ug/m3	EPA-19 TO-14A
cis-1,3-Dichloropropene	ND	9.1	ug/m3	EPA-19 TO-14A
4-Methyl-2-pentanone (MIBK)	ND	41	ug/m3	EPA-19 TO-14A
Toluene	ND	7.5	ug/m3	EPA-19 TO-14A
trans-1,3-Dichloropropene	ND	9.1	ug/m3	EPA-19 TO-14A
1,1,2-Trichloroethane	ND	11	ug/m3	EPA-19 TO-14A
Tetrachloroethene	ND	14	ug/m3	EPA-19 TO-14A
2-Hexanone	ND	41	ug/m3	EPA-19 TO-14A
Dibromochloromethane	ND	17	ug/m3	EPA-19 TO-14A
1,2-Dibromoethane (EDB)	ND	15	ug/m3	EPA-19 TO-14A
Chlorobenzene	ND	9.2	ug/m3	EPA-19 TO-14A
Ethylbenzene	ND	8.7	ug/m3	EPA-19 TO-14A

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 **Work Order #...:** HJ7QR1AA **Matrix.....:** AIR

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Xylenes (total)	ND	8.7	ug/m3	EPA-19 TO-14A
m-Xylene & p-Xylene	ND	8.7	ug/m3	EPA-19 TO-14A
o-Xylene	ND	8.7	ug/m3	EPA-19 TO-14A
Styrene	ND	8.5	ug/m3	EPA-19 TO-14A
Bromoform	ND	7.8	ug/m3	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	ND	14	ug/m3	EPA-19 TO-14A
Benzyl chloride	ND	52	ug/m3	EPA-19 TO-14A
4-Ethyltoluene	ND	9.8	ug/m3	EPA-19 TO-14A
1,3,5-Trimethylbenzene	ND	9.8	ug/m3	EPA-19 TO-14A
1,2,4-Trimethylbenzene	ND	9.8	ug/m3	EPA-19 TO-14A
1,3-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,4-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,2-Dichlorobenzene	ND	12	ug/m3	EPA-19 TO-14A
1,2,4-Trichloro-benzene	ND	37	ug/m3	EPA-19 TO-14A
Hexachlorobutadiene	ND	43	ug/m3	EPA-19 TO-14A
Isopropanol	ND	24	ug/m3	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5H300181
MB Lot-Sample #: M5I020000-201
Work Order #...: HJT6Q1AA
Matrix.....: AIR
Prep Date.....: 09/01/05
Instrument ID..: GC3
Analysis Date..: 09/01/05
Prep Batch #...: 5245201
Dilution Factor: 1
Analyst ID.....: 101605

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Carbon dioxide	ND	180000	ug/m3	ASTM D1946
Methane	ND	1300	ug/m3	ASTM D1946
Oxygen	ND	2600000	ug/m3	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5H300181
MB Lot-Sample #: MSI020000-520

Work Order #...: HJXDP1AA
Prep Date.....: 09/02/05
Prep Batch #...: 5245520
Analyst ID.....: 101605

Matrix.....: AIR
Instrument ID..: GC3

Analysis Date..: 09/02/05
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Carbon dioxide	ND	180000	ug/m3	ASTM D1946
Methane	ND	1300	ug/m3	ASTM D1946
Oxygen	ND	2600000	ug/m3	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5H300181
MB Lot-Sample #: M5I010000-231
Work Order #...: HJPJQ1AA
Matrix.....: AIR
Prep Date.....: 08/31/05
Instrument ID..: GC7
Analysis Date..: 08/31/05
Prep Batch #...: 5244231
Dilution Factor: 1
Analyst ID.....: 402431

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Gasoline)	ND	4.1	mg/m3	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E5H300181 **Work Order #...:** HJW2T1AA **Matrix.....:** AIR
MB Lot-Sample #: M5I020000-477

Prep Date.....: 09/01/05 **Instrument ID..:** GC7
Analysis Date..: 09/01/05 **Prep Batch #...:** 5245477
Dilution Factor: 1

Analyst ID.....: 402431

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
TPH (as Gasoline)	ND	4.1	mg/m3	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 Work Order #...: HJ4AV1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I070000-358 HJ4AV1AD-LCSD
Prep Date.....: 09/06/05 Analysis Date..: 09/06/05
Prep Batch #...: 5250358
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	84	(70 - 125)			EPA-19 TO-14A
	84	(70 - 125)	0.63	(0-20)	EPA-19 TO-14A
Methylene chloride	98	(75 - 120)			EPA-19 TO-14A
	97	(75 - 120)	0.83	(0-20)	EPA-19 TO-14A
Trichloroethene	97	(70 - 125)			EPA-19 TO-14A
	98	(70 - 125)	1.5	(0-20)	EPA-19 TO-14A
Toluene	104	(75 - 125)			EPA-19 TO-14A
	96	(75 - 125)	7.4	(0-20)	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	90	(65 - 130)			EPA-19 TO-14A
	90	(65 - 130)	0.48	(0-20)	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 Work Order #...: HJ4AV1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I070000-358 HJ4AV1AD-LCSD
Prep Date.....: 09/06/05 Analysis Date..: 09/06/05
Prep Batch #...: 52S0358
Dilution Factor: 1 Instrument ID..: MSB
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	200	169	ug/m3	84		EPA-19 TO-14A
	200	168	ug/m3	84	0.63	EPA-19 TO-14A
Methylene chloride	189	185	ug/m3	98		EPA-19 TO-14A
	189	183	ug/m3	97	0.83	EPA-19 TO-14A
Trichloroethene	265	256	ug/m3	97		EPA-19 TO-14A
	265	260	ug/m3	98	1.5	EPA-19 TO-14A
Toluene	186	194	ug/m3	104		EPA-19 TO-14A
	186	180	ug/m3	96	7.4	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	343	307	ug/m3	90		EPA-19 TO-14A
	343	309	ug/m3	90	0.48	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 Work Order #...: HJ7QR1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I080000-240 HJ7QR1AD-LCSD
Prep Date.....: 09/07/05 Analysis Date..: 09/07/05
Prep Batch #...: 5251240
Dilution Factor: 1 Instrument ID..: MSA
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	105	(70 - 125)			EPA-19 TO-14A
	105	(70 - 125)	0.0	(0-20)	EPA-19 TO-14A
Methylene chloride	106	(75 - 120)			EPA-19 TO-14A
	106	(75 - 120)	0.62	(0-20)	EPA-19 TO-14A
Trichloroethene	105	(70 - 125)			EPA-19 TO-14A
	103	(70 - 125)	1.3	(0-20)	EPA-19 TO-14A
Toluene	105	(75 - 125)			EPA-19 TO-14A
	103	(75 - 125)	1.8	(0-20)	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	98	(65 - 130)			EPA-19 TO-14A
	98	(65 - 130)	0.99	(0-20)	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E5H300181 Work Order #...: HJ7QR1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I080000-240 HJ7QR1AD-LCSD
Prep Date.....: 09/07/05 Analysis Date..: 09/07/05
Prep Batch #...: 5251240
Dilution Factor: 1 Instrument ID..: MSA
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,1-Dichloroethene	200	210	ug/m3	105		EPA-19 TO-14A
	200	210	ug/m3	105	0.0	EPA-19 TO-14A
Methylene chloride	189	201	ug/m3	106		EPA-19 TO-14A
	189	200	ug/m3	106	0.62	EPA-19 TO-14A
Trichloroethene	265	278	ug/m3	105		EPA-19 TO-14A
	265	274	ug/m3	103	1.3	EPA-19 TO-14A
Toluene	186	196	ug/m3	105		EPA-19 TO-14A
	186	193	ug/m3	103	1.8	EPA-19 TO-14A
1,1,2,2-Tetrachloroethane	343	337	ug/m3	98		EPA-19 TO-14A
	343	334	ug/m3	98	0.99	EPA-19 TO-14A

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJT6Q1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I020000-201 HJT6Q1AD-LCSD
Prep Date.....: 09/01/05 Analysis Date..: 09/01/05
Prep Batch #...: 5245201
Dilution Factor: 1 Instrument ID..: GC3
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Carbon dioxide	99	(80 - 120)			ASTM D1946
	98	(80 - 120)	1.1	(0-20)	ASTM D1946
Methane	98	(80 - 120)			ASTM D1946
	99	(80 - 120)	0.30	(0-20)	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...:	E5H300181	**Work Order #...:**	HJT6Q1AC-LCS	**Matrix.....:**	AIR
LCS Lot-Sample#:	M5I020000-201		HJT6Q1AD-LCSD		
Prep Date.....:	09/01/05	**Analysis Date..:**	09/01/05		
Prep Batch #...:	5245201				
Dilution Factor:	1	**Instrument ID..:**	GC3		
Analyst ID.....:	101605				

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Carbon dioxide	**1800000017900000**		**ug/m3**	**99**		**ASTM D1946**
	1800000017700000		**ug/m3**	**98**	**1.1**	**ASTM D1946**
Methane	**327000**	**321000**	**ug/m3**	**98**		**ASTM D1946**
	327000	**322000**	**ug/m3**	**99**	**0.30**	**ASTM D1946**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJXDP1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I020000-520 HJXDP1AD-LCSD
Prep Date.....: 09/02/05 Analysis Date..: 09/02/05
Prep Batch #...: 5245520
Dilution Factor: 1 Instrument ID..: GC3
Analyst ID.....: 101605

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Carbon dioxide	99	(80 - 120)			ASTM D1946
	99	(80 - 120)	0.020	(0-20)	ASTM D1946
Methane	98	(80 - 120)			ASTM D1946
	98	(80 - 120)	0.090	(0-20)	ASTM D1946

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJXDP1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I020000-520 HJXDP1AD-LCSD
Prep Date.....: 09/02/05 Analysis Date..: 09/02/05
Prep Batch #...: 5245520
Dilution Factor: 1 Instrument ID..: GC3
Analyst ID.....: 101605

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Carbon dioxide	**1800000**	**17900000**	**ug/m3**	**99**		**ASTM D1946**
	1800000	**17900000**	**ug/m3**	**99**	**0.020**	**ASTM D1946**
Methane	**327000**	**321000**	**ug/m3**	**98**		**ASTM D1946**
	327000	**320000**	**ug/m3**	**98**	**0.090**	**ASTM D1946**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJPJQ1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I010000-231 HJPJQ1AD-LCSD
Prep Date.....: 08/31/05 Analysis Date..: 08/31/05
Prep Batch #...: 5244231
Dilution Factor: 1 Instrument ID..: GC7
Analyst ID.....: 402431

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**99**	**(80 - 130)**			**EPA-19 TO-3**
	98	**(80 - 130)**	**0.40**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJPJQ1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I010000-231 HJPJQ1AD-LCSD
Prep Date.....: 08/31/05 Analysis Date..: 08/31/05
Prep Batch #...: 5244231
Dilution Factor: 1 Instrument ID..: GC7
Analyst ID.....: 402431

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	42.0	41.5	mg/m3	99		EPA-19 TO-3
	42.0	41.3	mg/m3	98	0.40	EPA-19 TO-3

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...:	E5H300181	**Work Order #...:**	HJW2T1AC-LCS	**Matrix.....:**	AIR
LCS Lot-Sample#:	M5I020000-477		HJW2T1AD-LCSD		
Prep Date.....:	09/01/05	**Analysis Date..:**	09/01/05		
Prep Batch #...:	5245477				
Dilution Factor:	1	**Instrument ID..:**	GC7		
Analyst ID.....:	402431				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
TPH (as Gasoline)	**101**	**(80 - 130)**			**EPA-19 TO-3**
	96	**(80 - 130)**	**4.9**	**(0-20)**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: E5H300181 Work Order #...: HJW2T1AC-LCS Matrix.....: AIR
LCS Lot-Sample#: M5I020000-477 HJW2T1AD-LCSD
Prep Date.....: 09/01/05 Analysis Date..: 09/01/05
Prep Batch #...: 5245477
Dilution Factor: 1 Instrument ID..: GC7
Analyst ID.....: 402431

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
TPH (as Gasoline)	**42.0**	**42.5**	**mg/m3**	**101**		**EPA-19 TO-3**
	42.0	**40.5**	**mg/m3**	**96**	**4.9**	**EPA-19 TO-3**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

STL-San Francisco

1220 Quarry Lane
Pleasanton, CA 94566
(925) 484-1919 (925) 484-1096 fax

SHELL Chain Of Custody Record

96892

Shell Project Manager to be Invoiced:

☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

2005-08-0720

Denis Brown

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT):

DATE: 8-24-05

PAGE: 1 of 1

SAMPLING COMPANY: Cambria Environmental Technology, Inc.	LOG CODE: CETS
ADDRESS: 5900 Hollis Street, Suite A, Emeryville, CA 94608	
PROJECT CONTACT (Hardcopy or PDF Report to): Cynthia Vasko	
TELEPHONE: 510-420-3344	FAX: 510-420-9170
E-MAIL: cvasko@cambria-env.com	

SITE ADDRESS (Street and City): 2120 Montana Street, Oakland	GLOBAL ID NO.: T0600102236
EDF DELIVERABLE TO (Responsible Party or Designee): Cynthia Vasko	PHONE NO.: 510-420-3344
E-MAIL: shell.em.edf@cambria-env.com	CONSULTANT PROJECT NO.: 247-0753-007
SAMPLER NAME(S) (Print): BARONE	LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ______

GC/MS MTBE CONFIRMATION: HIGHEST ______ HIGHEST per BORING ______ ALL ______

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

* TO-14A list to include propane, isopropanol, BTEX & all other standard constituents

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Purgeable	TPH - Extractable (8015m)	BTEX	MTBE	TBA	5 Oxygenates	1,2 DCA and EDB	Ethanol	Methanol	VOCs by 8260B	Semi-Volatiles by 8270C	Lead □ Total □ STLC □ TCLP	LUFT5 □ Total □ STLC □ TCLP	CAM17 □ Total □ STLC □ TCLP	Test for Disposal	TPHg (vapor) by TO-3	VOCs by TO-14A*	O_2, CO_2, CH_4 by ASTM D1946			FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes (TEMPERATURE ON RECEIPT °C: 3A)
	SV-D-5.0	8/24/05	1154	VA	1																X	X	X			6L Summa Canister.
	SV-D-10.0	↓	1232	VA	1																X	X	X			6L Summa Canister.
	SV-E-5.0		1521	VA	1																X	X	X			6L Summa Canister.
	SV-E-10.0		1455	VA	1																X	X	X			6L Summa Canister.
	Trip Blank			VA	1																X	X	X			6L Summa Canister.
	~~DUP~~	↓		VA	-																~~X~~	~~X~~	~~X~~			6L Summa Canister.
	SV-E-5.0 Dup	↓	1551	VA	1																X	X	X			6L Summa

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	8-24-05	1600
Marc Suarez	[signature]	8-25-05	1100
	[signature]	8-25-05	1157

ATTACHMENT G

Soil Disposal Confirmation

MANLEY & SONS TRUCKING, INC.
ROCK
SAND
DEMO
FILL DIRT
TOP SOIL
CA009430
(916) 381-6864

Hazardous Waste Hauler (Registration #2843)

8896 Elder Creek Rd. • Sacramento, CA 95828 • FAX (916) 381-1573

FAXED

Disposal Confirmation

Request for Transportation Received: 07/08/05

Consultant Information

Company:	Cambria
Contact:	Ron Barone
Phone:	510-420-3308
Fax:	510-420-3394

Site Information

PO #	
Street Address:	2120 Montana
City, State, ZIP:	Oakland, Ca
Customer:	Shell Oil Company RESA-0023-LDC
RIPR #:	45997
SAP # / Location:	NA
Incident #:	98995740
Location / WIC #:	NA
Environmental Engineer:	Denis Brown
Material Description:	Soil
Estimated Quantity:	1 cy
Service Requested Date:	ASAP
Disposal Facility:	Forward Landfill
Contact:	Scott
Phone:	800 204-4242
Approval #:	5621
Date of Disposal:	07/30/05
Actual Tonnage	1.28 tons
Transporter:	Manley & Sons Trucking, Inc.
Contact:	Alayna A Rowe
Phone:	916 381-6864
Fax:	916 381-1573
Invoice:	200507-15
Date of Invoice:	07/31/05