RO 145

CAMBRIA

November 15, 2005

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

Re: **Site Investigation Report**
Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California
SAP Code 129449
Incident No. 97093397

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 performed at the referenced site. The purpose of the investigation was to further assess the extent of gasoline constituents previously identified in soil and groundwater beneath the site. Cambria followed the scope of work presented in our October 11, 2004 *Groundwater Monitoring Report - Third Quarter 2004 and Soil Vapor Investigation Work Plan.* The work was performed in accordance with Alameda County Public Works Agency (ACPWA), Alameda County Health Care Services Agency (ACHCSA) and Central Valley Regional Water Quality Control Board (RWQCB) guidelines.

SITE LOCATION AND DESCRIPTION

The site is a former service station located on the northwest corner of Martin Luther King Jr. Way and 27th Street in a commercial and residential area of Oakland, California (Figure 1). The site layout consisted of a service station building, two dispenser islands, three underground fuel storage tanks (USTs), associated product piping, and a waste oil UST (Figure 2). The station building is currently being used as a repair shop and has two service bays.

SITE BACKGROUND

Site Use: A Shell service station operated on the property from approximately 1959 to 1979. Three fuel underground storage tanks (USTs) associated with the former Shell service station were removed after Shell terminated operations at the site.

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In 1979, Acme West Ambulance Company (Acme) purchased the site and installed a 2,000-gallon UST for gasoline storage. Acme sold the property to Auto-Tech West (ATW) in 1986. According to an August 25, 1986 ACHCSA inspector's report, ATW reportedly never used the UST, although a 150-gallon aboveground waste oil tank, a 15-gallon carburetor cleaner tank, and a parts cleaning tank with solvent were reportedly in use.

Currently, the site is occupied by ATW and is utilized as an automotive repair shop. The current site operator uses the northwest corner of the property and the wooden car port for storage of such things as non-operational automobiles, portable gasoline containers, tires, and drums which are possibly used for waste oil collection and storage.

1994 UST Removal: The 2,000-gallon UST was removed on October 11, 1994 by KTW & Associates on behalf of ATW. Two soil samples (TP-1-N and TP-2-S) were collected from beneath the tank (Figure 2). Chemical analysis of the soil samples identified the presence of total petroleum hydrocarbons as gasoline (TPHg) at concentrations ranging from 870 parts per million (ppm) to 18,000 ppm. Benzene concentrations in these samples ranged from 2.9 ppm to 100 ppm. The tank pit remained open until March 19, 1996 when the excavation was back-filled subsequent to over-excavation by a Shell contractor.

1995 Phase I Environmental Site Assessment (ESA): In August and September 1995, Enviros Inc. (Enviros) performed a Phase I ESA for this site. Available information collected during this ESA indicates that the subject property was occupied by residential housing prior to approximately 1959. A building permit to erect a building was obtained for Shell Oil Company in February 1959. A building permit to "close lube bays with sheet metal panels" was secured for Shell Oil Company in July 1976.

In 1979, several building permits were secured for Acme to modify existing site structures. Two building permits were secured in 1979 related to the installation of a fuel pump at the site.

During a site survey in conjunction with the Phase I ESA, an excavation was observed near the southwest corner of the service building. The excavation was covered by a blue tarp. This excavation's location is consistent with that of the 2,000-gallon UST removed in 1994 by ATW, and with a large concrete slab observed in aerial photographs taken in 1971 and 1973, and a smaller concrete slab observed in aerial photographs taken in 1981 and 1985. The larger concrete slab observed in the aerial photographs was likely covering the USTs operated by Shell, and the smaller slab was likely covering the UST operated by Acme, confirming that the same location was used for both UST complexes.

1995 Subsurface Investigation: A site assessment was performed by ACC Environmental Consultants on May 23, 1995. This included drilling nine soil borings (B-1 through B-9) using a pneumatic sampling tool in the vicinity of the excavation (which formerly housed both Shell's and Acme's USTs) and the product dispenser islands, and collecting soil and groundwater samples for chemical analysis (Figure 2). TPHg concentrations in soil samples ranged from <20.0 ppm to 830 ppm. Benzene concentrations ranged from <1.0 ppm to 1.8 ppm. Separate phase hydrocarbons (SPH) were identified in water samples collected from four of the soil borings (B-1, B-5, B-6 and B-9). TPHg concentrations in the non-SPH grab groundwater samples submitted for chemical analysis ranged from <50 parts per billion (ppb) to 89,000 ppb. Benzene concentrations in the grab groundwater samples ranged from <0.5 ppb to 21,000 ppb.

Over-excavation and back-filling of Acme's former UST excavation were performed on March 19, 1996. The excavation, originally left open to 9 fbg, was over-excavated to approximately 11 fbg. Two soil samples (TP-3-W and TP-4-E) were collected from the bottom of the over-excavated former UST area. Soil sample TP-3-W, collected from the western end of the excavation, contained 560 ppm TPHg and 3.1 ppm benzene. Soil sample TP-4-E, collected from the eastern end of the excavation, contained 2,700 ppm TPHg and <3.0 ppm benzene. The excavation was back-filled with clean imported fill material. Soil sampling and back-filling activities are documented in Enviros' May 10, 1996 correspondence.

1996 Subsurface Investigation: In July 1996, Enviros performed additional site assessment activities. Six exploratory borings (B-10, B-11, B-12, B-13, V-1, and V-2) were drilled and sampled on July 17 and 19, 1996 using a hollow-stem auger drill rig (Figure 2). Borings B-11 and B-12 were completed as groundwater monitoring wells MW-1 and MW-2, and borings V-1 and V-2 were completed as soil vapor extraction wells V-1 and V-2, respectively. Soil sampling was not performed in boring V-1 due to the fact that it was installed into the back-fill material within the former UST excavation. A soil sample from below the saturated zone in boring V-2 was submitted for physical parameter analyses (porosity, permeability, fractional organic carbon content, and dry bulk density).

TPHg and benzene were not detected in soil samples collected from MW-1 (B-11), MW-2 (B-12), and B-13. TPHg was detected in soil samples collected from B-10 and V-2 at concentrations of 1.7 ppm and 110 ppm, respectively. Benzene concentrations in soil samples from B-10 and V-2 were <0.0050 ppm and 0.29 ppm, respectively.

Grab groundwater samples were collected from borings B-10, B-12 (MW-2), and B-13 at the depth of first encountered groundwater (approximately 8 to 11 fbg) for chemical analysis. Boring B-11 (MW-1) did not yield sufficient groundwater for grab groundwater sample collection. Monitoring wells MW-1 and MW-2 were developed and sampled on August 2, 1999

by Blaine Tech Services (Blaine) of San Jose, CA. TPHg concentrations in the groundwater samples ranged from <50 ppb to 290,000 ppb. Benzene concentrations ranged from <0.50 ppb to 34,000 ppb.

1997 Modified Phase I ESA: In February 1997, Enviros performed a modified Phase I ESA for the subject facility. A review of aerial photographs (1952 to 1994), city directories (1967 to 1993) and Sanborn maps (1912 to 1970) did not reveal evidence of an off-site source of petroleum hydrocarbons which would have impacted groundwater onsite. The properties located north and west of the subject facility appear to have been occupied by residential houses from at least 1912 to the present. The nearest gasoline stations identified in the vicinity of the subject facility were a former Chevron station (740 27th Street at West) approximately 450 feet to the west, a former station (26th Street and Martin Luther King, Jr. Way) approximately 300 feet to the south, and a former Mobil station (554 27th Street) approximately 950 feet to the east.

2000 Sensitive Receptor Survey: In late 2000, Cambria performed a sensitive receptor survey which attempted to identify wells and underground utility conduits. Cambria obtained utility conduit maps from the City of Oakland Engineering Department to locate and map underground utility conduits which may act as preferential pathways for contaminant migration from the site. These conduit trenches are typically back-filled with materials which are more permeable than the surrounding native soils, therefore providing a path of least resistance for petroleum hydrocarbon migration within the local groundwater. Using these maps, Cambria identified the sanitary and storm sewer systems as the only utility conduits in the site vicinity which may act as preferential pathways. All other utilities are typically buried at depths which are shallower than those of the sewer systems. Conduits identified in the area are located at depths of approximately 3.5 to 9 fbg. Therefore, the potential does exist for groundwater to flow within these conduit trenches. Groundwater depth onsite historically ranges from approximately 4.5 to 10 fbg. However, since the typical groundwater flow direction onsite has generally been to the south, it is likely that any contaminant migration within the utility conduits would be limited, since the utility conduits located to the south of the site are the shallowest of all the conduits identified adjacent to the site at depths of 3.5 to 5.5 fbg. Cambria obtained well installation and destruction records from the California Department of Water Resources (DWR) in order to identify any active water producing wells in the vicinity of the site which may be at risk to petroleum hydrocarbon impact due to contaminant migration from the subsurface of the site. DWR records did not identify any existing wells within a ½-mile radius of the site.

2000 Subsurface Investigation: In November 2000, Cambria installed three soil borings (B-17, B-18 and B-19) and three groundwater monitoring wells (MW-3, MW-4 and MW-5) (Figure 2). Up to 2,100 ppm TPHg and 3.3 ppm benzene were reported in soil samples collected. No TPHg

or benzene was detected in soil samples collected from well MW-3. Except for 0.0070 ppm detected in soil sample B-18-7.0, no methyl tertiary butyl ether (MTBE) was detected in any of the analyzed soil samples. Tertiary butyl alcohol (TBA) was detected in soil samples MW-4-5.0 and B-19-5.0 at concentrations of 0.0079 and 0.0059 ppm, respectively.

Grab groundwater samples were collected from borings B-17 through B-19 at first encountered groundwater for analyses during the investigation. TPHg concentrations in grab water samples collected from the borings ranged from 58,000 to 190,000 micrograms per liter (µg/l or ppb). Benzene concentrations ranged from 4,400 to 13,000 ppb. MTBE was detected in groundwater at concentrations of 16 ppb and 300 ppb from B-19 and B-17, respectively, and TBA was detected at 240 ppb in B-19 only. No SPH was observed during the investigation.

2001 Oxygen Releasing Compound (ORC) Installation: As approved by the (ACHCSA), Blaine installed ORCs in wells V-1 and V-2 during the second quarter monitoring event on May 2, 2001. ORCs were removed during the fourth quarter 2001 monitoring event. MTBE has not been detected in these two wells since the ORCs were installed.

2002 Site Investigation: In April 2002, Cambria installed borings B-20 through B-22. Groundwater was first encountered in the borings between 8.0 fbg (B-20) and 8.8 fbg (B-21 and B-22). The maximum TPHg and benzene concentrations detected in soil were 380 ppm and 0.17 ppm, respectively, in the soil sample collected from 8.0 fbg in boring B-22, located behind the station building. No TPHg was detected in soil samples collected from boring B-21. No MTBE was detected in any of the analyzed soil samples collected from borings B-20, B-21, or B-22. Up to 160,000 ppb TPHg and 18,000 ppb benzene were reported in grab groundwater samples collected from borings B-20, B-21, and B-22. No MTBE was detected in grab groundwater samples collected from the borings. The complete report of findings was included in Cambria's June 21, 2002 *Site Investigation Report*. This document included recommendations for additional activities; however, a response from ACHCSA was never received.

2003 - 2005 Oxygen Releasing Compound (ORC) Installation: Although agency approval was not received, Shell proactively installed ORC in wells MW-5 and V-2 during first quarter of 2003. The ORCs were replaced on a semi-annual basis. The use of ORC was discontinued during the first quarter 2005, at Shell's request.

1996 to Present - Groundwater Monitoring: Quarterly groundwater monitoring has been ongoing at the site since August 1996. No TPHg or benzene has been reported in groundwater samples collected from monitoring wells MW-1 and MW-2 since monitoring began. Although these wells are used for determining gradient, they have not been sampled since January 2004. Well V-1, installed within the former UST excavation, has had decreasing TPHg and benzene

concentrations since 1997. Well V-2, located downgradient of the former UST excavation, has had concentrations of up to 90,000 ppb TPHg and 10,200 ppb benzene.

Wells MW-3, MW-4, and MW-5 were added to the quarterly monitoring program in May 2001. No TPHg or benzene has been reported in well MW-3 since monitoring began and it has not been sampled since January 2004. Up to 16,000 ppb TPHg and 4,100 ppb benzene have been reported in well MW-4, and up to 160,000 ppb TPHg and 12,000 ppb benzene have been reported in well MW-5.

MTBE has not been detected in any samples collected from the site wells that were analyzed by EPA Method 8260. No MTBE has been reported in samples collected from well MW-1 since monitoring began, except for 2.36 ppb by EPA Method 8020 on January 18, 1999. MTBE has been reported in well MW-2 at 6.3 ppb on January 9, 1998 and at 2.47 ppb on January 18, 1999 (by EPA method 8020) only. Several samples from well V-1 have had reported MTBE concentrations when analyzed by EPA Method 8020, while results have been below detection limits when analyzed by EPA Method 8260. This includes a sample with a reported MTBE concentration of 1,900 ppb (by EPA Method 8020) on October 24, 1997, which had a result of <200 ppb when confirmed by EPA Method 8260 analysis. During two sampling events (July 2, 1997 and October 24, 1997), well V-2 samples had MTBE results reported as 530 ppb and 120 ppb, respectively, when analyzed by EPA Method 8020; however, both were found to be below detection limits when the samples were analyzed by EPA Method 8260. No MTBE has been reported in samples from wells MW-3, MW-4 or MW-5 since monitoring began. Wells MW-4 and MW-5 are sampled for fuel oxygenates on an annual basis.

2004 Groundwater Monitoring Report – Third Quarter 2004 and Soil Vapor Investigation Work Plan: Since no agency response was received to the June 2002 *Site Investigation Report* that contained recommendations for additional investigation, and since monitoring continued to indicate elevated concentrations of volatile constituents in groundwater, Shell authorized Cambria to prepare a work plan to investigate subsurface soil, groundwater, and soil vapor conditions along the property boundaries, and at select locations on site. Following a meeting with ACHCSA, technical comments and work plan approval were received in correspondence dated June 6, 2005. On August 15, 2005, Cambria submitted correspondence providing responses to the technical comments, and notification of field work, and a request for extension for the report of findings. In correspondence dated August 19, 2005, ACHCSA granted the extension.

The results of the investigation, conclusions, and recommendations are presented below.

INVESTIGATION RESULTS

Personnel Present: Geologist Scott Lewis directed the field sampling, working under the supervision of California Professional Geologist Ana Friel.

Permit: Cambria obtained a soil boring permit No W2005-0697 from the Alameda County Public Works Agency (Appendix A).

Drilling Company: Gregg Drilling, Inc. of Martinez, California (C57 License No. 485165).

Drilling Date: August 28 through 31, 2005.

Drilling Method: Geoprobe and hand auger.

Number of Borings: Ten soil borings (GP-1 through GP-10). Boring specifications are described in Table 1 and their locations are shown on Figure 3.

Boring Depths: Borings GP-2, GP-4, GP-5, GP-8 through GP-10 were drilled to 4.5 feet below grade (fbg), boring GP-7 to 10 fbg, borings GP-1 and GP-3 to 12 fbg, and boring GP-6 to 20 fbg.

Soil Sampling Methods: Cambria logged soils from the borings using the Unified Soil Classification System and Munsell Soil Color Charts. Encountered soils are described on the exploratory boring logs presented in Appendix B. Soil samples from the borings were collected continuously for soil description, potential chemical analysis, and head-space analysis. Soil samples were screened for the presence of organic vapors using a photo-ionization detector (PID). PID readings are recorded on the boring logs.

Vapor Sampling Methods: Soil vapor was extracted using Geoprobe Systems post-run tubing (PRT) methodology. The tubing was replaced after collecting each sample to prevent possible cross contamination. In borings GP-7 and GP-8, a temporary well with a 6-inch long screen was installed and allowed to equalize prior to purging.

Soil Classification: Soils were classified as silt (ML) interbeded with layers of varying thicknesses of silty sand with gravel, and silty sand (SM) to the total explored depth of 12 fbg (Appendix B). Although boring SB-6 was extended to 20 fbg, no samples were collected for observing lithology.

Chemical Analyses: Soil and groundwater samples collected from the borings were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B.

Soil vapor samples were analyzed for TPHg by Modified EPA Method TO-3 GC/FID and BTEX by Modified EPA Method TO-14A.

Groundwater Depths: Cambria observed groundwater at depths of 9 fbg in boring GP-3, 10 fbg in GP-7, 10.5 fbg in GP-1, and 20 fbg in GP-6.

Soil Disposal: Soil generated during field activities was stored in one 55-gallon drum, sampled, and profiled for disposal. Manley and Sons Trucking, Inc. of Sacramento, California transported one drum of soil to Allied Waste Industries' Forward Landfill in Manteca, California for disposal on October 11, 2005 (Appendix C).

Distribution of Hydrocarbons in Soil

TPHg was detected in soil samples collected from borings GP-1 at 10.0 fbg, GP-2 at 4.5 fbg, GP-3 at 5.0 and 8.5 fbg, GP-6 at 9.5 fbg, and GP-7 at 9.5 fbg at concentrations ranging from 1.5 to 3,300 parts per million (ppm). Benzene was detected in soil samples collected from borings GP-2 at 4.5 fbg, and GP-3 at 5.0 and 8.5 fbg at concentrations ranging from 0.027 to 15 ppm. The soil analytical results are presented on Table 2 and the TPHg and benzene concentrations are presented on Figure 2. The complete laboratory analytical report is included in Appendix D.

Distribution of Hydrocarbons in Groundwater

TPHg was detected in all four groundwater samples collected from borings GP-1, GP-3, GP-6, and GP-7 at concentrations ranging from 9,100 to 140,000 parts per billion (ppb). Benzene was also detected in all four groundwater samples at concentrations ranging from 320 to 17,000 parts per billion (ppb). The groundwater analytical data are presented on Table 3 and TPHg and benzene results are depicted on Figure 2. The complete laboratory analytical report is included in Appendix D.

Distribution of Hydrocarbons in Soil Vapor

TPHg was detected in soil vapor samples collected from borings GP-1 through GP-10 at concentrations ranging from 350 to 71,000,000 micrograms per cubic meter (ug/m^3). Benzene was detected in soil samples collected from borings GP-1 through GP-3 and GP-5 through GP-10 at concentrations ranging from <4.1 to 170,000 ug/m^3. The laboratory results are presented on Table 4 and the TPHg and benzene results are presented on Figure 3. The complete laboratory analytical report is included in Appendix E.

CONCLUSIONS

The objectives of this investigation were to further assess the conditions along the property boundaries, to assess groundwater conditions at additional locations, and to evaluate whether volatile petroleum constituents are present in the soil gas in the subsurface. To meet these objectives, borings GP-1 through GP-10 were drilled and soil, soil vapor, and (at four locations) grab groundwater samples were collected. Another objective was to perform a geophysical survey to investigate whether another UST was present at this site; however, due to the amount of metal stored at the site a geophysical survey was not performed at the site.

Soil Impacts: From each of the 10 boring locations, a soil sample was obtained from depths of 4.5 to 5.0 fbg. This shallow interval was unimpacted at 8 of the 10 locations. GP-2 and GP-3 contained very low concentrations of gasoline constituents. At four locations (GP-1, GP-3, GP-6, and GP-7) a deeper soil sample was obtained from near the soil/water interface at approximately 8.5 to 10 fbg. All four of these samples indicated some TPHg impact, with the maximum impact found at GP-3. Based on the data, there is not significant residual impact in the unsaturated soils at these locations.

Groundwater Impacts: TPHg and BTEX were detected in the water samples collected from GP-1, GP-3, GP-6, and GP-7 with the highest concentrations occurring in boring GP-7, along the northern property boundary. Based on the data, an upgradient source of gasoline appears to be present near GP-7. Significant concentrations of petroleum constituents exist in groundwater along the northern and western property boundaries.

Soil Vapor Impacts: Concentrations of hydrocarbons in the soil vapor were detected in all borings at 4 fbg. Boring GP-3 had the highest concentrations of hydrocarbons in the soil vapor. A review of the boring log at this location shows a sandy interval that is not found in the other borings. Thus, the petroleum vapors are concentrated in this sandy lens. A comparison of the soil vapor results with the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Environmental Screening Levels (ESLs) for soil gas indicates that TPHg vapors in the shallow soil beneath the site exceed the ESLs for protection of indoor commercial air at borings GP-2, GP-3, GP-6, and GP-10. The ESL for protection of indoor residential air was exceeded at each of these locations and also at GP-7. Benzene concentrations in soil gas exceeded the ESLs for protection of indoor air at commercial and residential sites at borings GP-2, GP-3, GP-6, and GP-7. The ESLs are presented on Table 4. Based on the data, significant concentrations of petroleum constituents are present as vapors in the shallow soils. The

distribution correlates with the impacted groundwater, not necessarily residual impacted soil. Vapors are at higher concentrations in sandy lenses, although the silty soils contain elevated soil gas concentrations.

RECOMMENDATIONS

Based on the results of this investigation, additional investigation and interim remediation is warranted. Cambria recommends the following:

1. Conduct a door-to-door survey of residential properties within 300 feet of the site for wells, basements, and foundation type to identify building construction and potential vapor receptors. The survey will also include questions regarding buried underground storage tanks and private wells to assist with identification of other potential sources and groundwater receptors. The survey should be focused to the north, west, and south of the site.
2. Prepare a work plan to perform a dual-phase (soil vapor and groundwater) extraction (DPE) test and for plume delineation. The scope will include appropriately placed wells and piezometers for performing an adequate test, and the installation of offsite wells and soil vapor sampling probes for delineation of the groundwater and soil-gas plumes.
3. Proceed with permitting and scheduling the installation of the wells for testing, and complete the field work as soon as feasible.
4. Because permitting with the Bay Area Air Quality Management District (BAAQMD) has taken more than six months at some sites, Cambria recommends initiating the permit process in anticipation of implementing DPE as a remedial option at this site, following completion of the pilot test and design of an appropriate system.

Cambria suggests that recommendation #1 and #2 be initiated without delay. Following agency approval or comment on recommendation #3 and #4, Cambria would initiate the permitting process for installation of onsite wells for the testing, scheduling the testing, initiate access negotiations for proposed offsite plume delineation locations, and initiate the permitting process with the BAAQMD.

CLOSING

If you have any questions regarding the contents of this document, please call Ana Friel at (707) 268-3812.

Sincerely,
Cambria Environmental Technology, Inc.

Scott Lewis
Senior Staff Geologist

Ana Friel
Senior Project Geologist
PG 6452

Attachments:

Table 1.	Well/Boring Data
Table 2.	Soil Analytical Data
Table 3.	Groundwater Analytical Data
Table 4.	Soil Vapor Analytical Data
Figure 1.	Site Vicinity/Receptor Survey Map
Figure 2.	Soil and Groundwater Chemical Concentration Map
Figure 3.	Soil Vapor Chemical Concentration Map
Appendix A.	Permit
Appendix B.	Exploratory Boring Logs
Appendix C.	Disposal Documentation
Appendix D.	Soil and Groundwater Certified Analytical Report
Appendix E.	Soil Vapor Certified Analytical Report

cc: Denis Brown, Shell
Rodney & Janet Kwan, property owners

Table 1. Well/Boring Data, Former Shell Service Station, 2703 Martin Luther King Jr. way, Oakland, California

Name	Type	Date Installed	TOC Elev (ft msl)	Total Depth (ft)	Soil Sample (ft) Incr. or	Depth(s)	First Encountered GW Depth (ft)	Elev (ft msl)	Screen Diam. (In)	Screen Depth (ft) Top	Bottom	Comments
MW-1	Well (HSA)	19-Jul-96	29.53	21	5	-	9	20.53	2	6	21	Logged as B-11
MW-2	Well (HSA)	19-Jul-96	28.47	21	5	-	11	17.47	2	6	21	Logged as B-12
MW-3	Well (HSA)	19-Jul-96	28.30	20	5	-	15	13.30	4	5	20	
MW-4	Well (HSA)	21-Nov-00	28.51	20	5	-	15	13.51	4	5	20	
MW-5	Well (HSA)	21-Nov-00	29.54	20	5	-	15	14.54	4	5	20	
V-1	Well (HSA)	17-Jul-96	23.26	13	5	-	10	13.26	2	3	13	
V-2	Well (HSA)	19-Jul-96	28.80	13	5	-	8	20.80	2	3	13	
B-1	Boring (Direct push)	23-May-95	-	9	C	-	8	-	-	-	-	
B-2	Boring (Direct push)	23-May-95	-	7	C	-	7.5	-	-	-	-	
B-3	Boring (Direct push)	23-May-95	-	12	C	-	-	-	-	-	-	
B-4	Boring (Direct push)	23-May-95	-	12	C	-	-	-	-	-	-	
B-5	Boring (Direct push)	23-May-95	-	15	C	-	14.5	-	-	-	-	
B-6	Boring (Direct push)	23-May-95	-	15	C	-	10.5	-	-	-	-	
B-7	Boring (Direct push)	23-May-95	-	15	C	-	9.5	-	-	-	-	
B-8	Boring (Direct push)	23-May-95	-	15	C	-	13.5	-	-	-	-	
B-9	Boring (Direct push)	23-May-95	-	14	C	-	-	-	-	-	-	
B-10	Boring (Direct push)	19-Jul-96	-	9.5	5	-	-	-	-	-	-	
B-13	Boring (Direct push)	19-Jul-96	-	16	5	-	10	-	-	-	-	
B-17	Boring (Direct push)	22-Nov-00	-	15	C	-	13	-	-	-	-	
B-18	Boring (Direct push)	22-Nov-00	-	15	C	-	14.6	-	-	-	-	
B-19	Boring (Direct push)	22-Nov-00	-	20	C	-	15	-	-	-	-	
GP-1	**Boring (Hand auger)**	**29-Aug-05**	-	**12**	**C**	-	**10.5**	-	-	-	-	
GP-2	**Boring (Hand auger)**	**29-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	
GP-3	**Boring (Hand auger)**	**29-Aug-05**	-	**12**	**C**	-	**9**	-	-	-	-	
GP-4	**Boring (Hand auger)**	**31-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	
GP-5	**Boring (Hand auger)**	**30-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	
GP-6	**Boring (Hand auger)**	**30-Aug-05**	-	**20**	**C**	-	**20**	-	-	-	-	
GP-7	**Boring (Hand auger)**	**30-Aug-05**	-	**10**	**C**	-	**10**	-	-	-	-	

Table 1. Well/Boring Data, Former Shell Service Station, 2703 Martin Luther King Jr. way, Oakland, California

Name	Type	Date Installed	TOC Elev (ft msl)	Total Depth (ft)	Soil Sample (ft) Incr. or	Soil Sample (ft) Depth(s)	First Encountered GW Depth (ft)	First Encountered GW Elev (ft msl)	Screen Diam. (In)	Screen Depth (ft) Top	Screen Depth (ft) Bottom	Comments
GP-8	**Boring (Hand auger)**	**30-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	
GP-9	**Boring (Hand auger)**	**31-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	
GP-10	**Boring (Hand auger)**	**31-Aug-05**	-	**4.5**	**C**	-	-	-	-	-	-	

Abbreviations:

C = Continuous

TOC = Top of Casing referenced to mean sea level

HSA = Hollow-stem auger

Table 2. Soil Analytical Data, Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California

Sample	Depth (fbg)	Date Sampled	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
GP-1-5.0'	5.0	29-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-1-10.0'	10.0	29-Aug-05	**190***	<0.50	<0.50	<0.50	<0.50
GP-2-4.5'	4.5	29-Aug-05	**1.5**	**0.035**	<0.0050	**0.0063**	<0.0050
GP-3-5.0'	5.0	29-Aug-05	**7.5**	**0.027**	<0.0050	**0.085**	**0.11**
GP-3-8.5'	8.5	29-Aug-05	**3,300**	**15**	**2.7**	**91**	**230**
GP-4-4.5'	4.5	31-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-5-4.5'	4.5	30-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-6-5.0'	5.0	29-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-6-9.5'	9.5	29-Aug-05	**260**	<0.50	<0.50	**2.1**	**6.8**
GP-7-5.0'	5.0	30-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-7-9.5'	9.5	30-Aug-05	**440**	<0.50	**1.8**	**10**	**59**
GP-8-4.5'	4.5	30-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-9-4.5'	4.5	31-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
GP-10-4.5'	4.5	31-Aug-05	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

Abbreviations:

fbg = Feet below grade

mg/kg = Milligrams per kilogram (parts per million)

<x = Not detected at reporting limit x.

* = Quantity of unknown hydrocarbons in sample based on gasoline

The following constituents were analyzed by EPA Method 8260B:

TPHg = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and xylenes

Table 3. Groundwater Analytical Data, Former Shell Service Station, 2800 Telegraph Avenue, Oakland, California

Sample	Depth (fbg)	Date Sampled	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
GP-1-10.5'W	10.5	29-Aug-05	**47,000**	**330**	<50	**680**	**140**
GP-3-10'W	10	29-Aug-05	**79,000**	**5,200**	**13,000**	**1,400**	**7,800**
GP-6-20'W	20	29-Aug-05	**9,100**	**320**	**34**	**380**	**750**
GP-7-10'W	10	30-Aug-05	**140,000**	**17,000**	**4,600**	**7,600**	**45,000**

Abbreviations:

fbg = Feet below grade

µg/L = Micrograms per liter (parts per billion)

<x = Not detected at reporting limit x.

The following constituents were analyzed by EPA Method 8260B:

TPHg = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and xylenes

Table 4. Soil Vapor Analytical Data, Former Shell Service Station, 2703 Martin Luther King Jr. Way, Oakland, California

Sample ID	Sample Depth (fbg)	Date Sampled	TPHg (µg/L)	TPHg (µg/m^3)	B (µg/m^3)	T (µg/m^3)	E (µg/m^3)	X (µg/m^3)
GP-1-4.0	4.0	29-Aug-05	1.2	1,200	12	5.1	<5.5	9.8
GP-2-4.0	4.0	29-Aug-05	180	**180,000**	**2,900**	<22	<26	<26
GP-3-4.0	4.0	29-Aug-05	**71,000**	**71,000,000**	**170,000**	<2,100	<2,400	<2,400
GP-4-4.0	4.0	31-Aug-05	0.35	350	<4.1	8.9	<5.6	6.2
GP-5-4.0	4.0	30-Aug-05	3.1	3,100	5.4	5.4	<5.6	8.4
GP-6-4.0	4.0	29-Aug-05	**340**	**340,000**	**780**	<22	<25	<25
GP-7-4.0	4.0	30-Aug-05	**37**	**37,000**	**340**	1,100	200	452
GP-8-4.0	4.0	30-Aug-05	1.6	1,600	8.4	5.0	<5.6	<5.6
GP-9-4.0	4.0	31-Aug-05	3.7	3,700	4.6	5.6	<6.0	6.9
GP-10-4.0	4.0	31-Aug-05	99	**99,000**	32	22	6.4	22
Environmental Screening Levels SFBRWQCB, February 2005		**Commercial**	**72**	**72,000**	**290**	**180,000**	**1,200,000**	**410,000**
		Residential	**26**	**26,000**	**85**	**63,000**	**420,000**	**150,000**

Abbreviations and Notes:

Results in **bold** exceed Environmental Screening Level

fbg = Feet below grade

µg/L = micrograms per liter

µg/m^3 = micrograms per cubic meter

<x = Not detected at reporting limit x

TPHg = Total petroleum hydrocarbons as gasoline by Modified EPA Method TO-3 GC/FID

BTEX = Benzene, toluene, ethylbenzene, and xylenes by Modified EPA Method TO-14A

0781

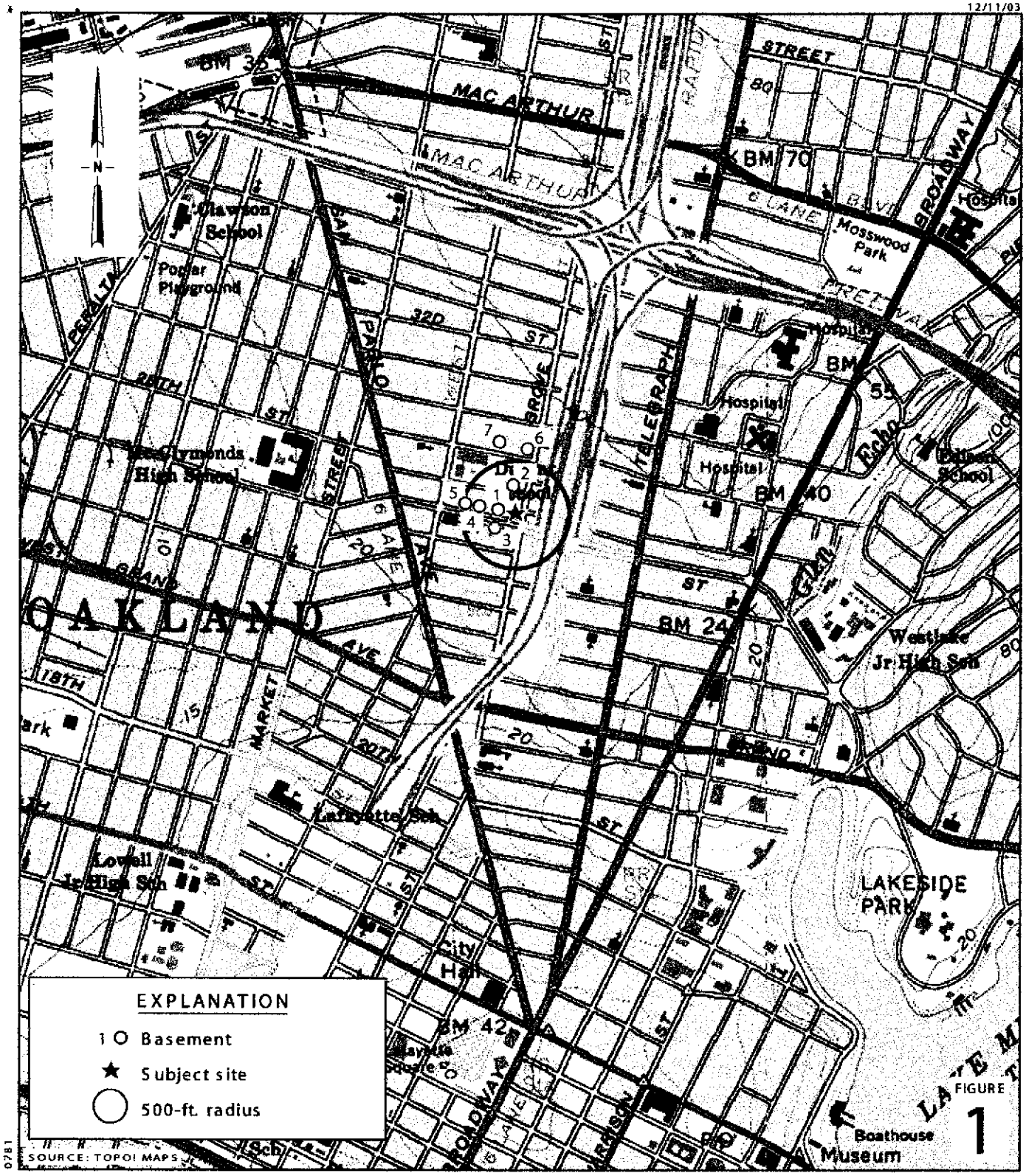

FIGURE 1

Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California

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Site Vicinity/Receptor Survey Map

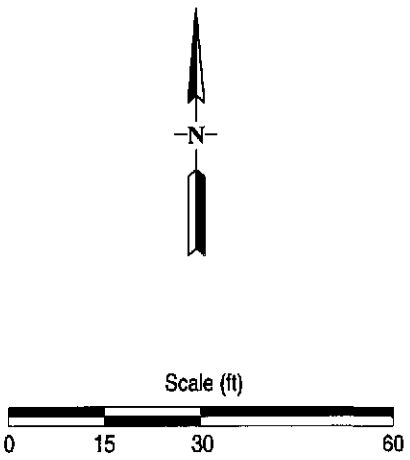

FIGURE
2

0781

Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California

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Soil and Groundwater Chemical Concentration Map

August 28-31, 2005

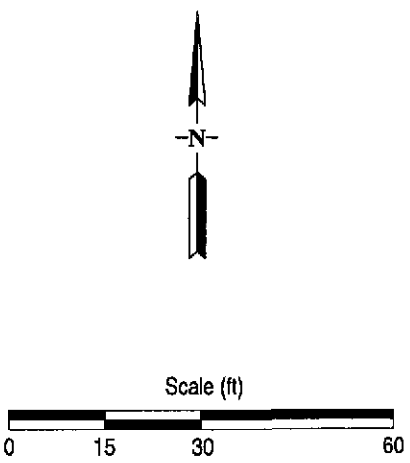

FIGURE
3

0781

Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California

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Soil Vapor Chemical Concentration Map

August 28-31, 2005

Boring/Well Log Legend

KEY TO SYMBOLS/ABBREVIATIONS

- First encountered groundwater
- Static groundwater
- Soils logged by hand-auger or air-knife cuttings
- Soils logged by drill cuttings or disturbed sample
- Undisturbed soil sample interval
- Soil sample retained for submittal to analytical laboratory
- No recovery within interval
- Hydropunch or vapor sample screen interval

PID = Photo-ionization detector or organic vapor meter reading in parts per million (ppm)

fbg = Feet below grade

Blow Counts = Number of blows required to drive a California-modified split-spoon sampler using a 140-pound hammer falling freely 30 inches, recorded per 6-inch interval of a total 18-inch sample interval

(10YR 4/4) = Soil color according to Munsell Soil Color Charts

msl = Mean sea level

Soils logged according to the USCS.

UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

Major Divisions			Graphic	Group Symbol	Typical Description
Coarse-Grained Soils (>50% Sands and/or Gravels)	Gravel and Gravelly Soils	Clean Gravels (≤5% fines)		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		Gravels with Fines (≥15% fines)		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	Sand and Sandy Soils	Clean Sands (≤5% fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sand, little or no fines
		Sands with Fines (≥15% fines)		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (>50% Silts and/or Clays)	Silts and Clays			ML	Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays			MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity
				OH	Organic clays of medium to high plasticity, organic silts
Highly Organic Soils				PT	Peat, humus, swamp soils with high organic contents

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-1
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	29-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	29-Aug-05
PROJECT NUMBER	0781	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	10.5 ft (29-Aug-05) ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); brown (10YR 5/2); moist; 5% clay, 15% silt, 35% fine to coarse sand, 45% fine gravel.	0.8	
		GP-1-4.0'V					**SILT (ML)** ; very dark grayish brown (10YR 3/2); moist; 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		
6.4		GP-1-5.0		5	ML		@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.		◄ Portland Type I/II
							@ 5' - dark greenish gray (5GY 4/1).		
							▽	10.5	
10.0		GP-1-10.0		10	SM		**Silty SAND (SM)** ; brown (10YR 4/3); wet; 30% silt, 70% fine to coarse sand.	12.0	Bottom of Boring @ 12 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/27/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-2
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	29-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	29-Aug-05
PROJECT NUMBER	0781	**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	3"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); strong brown (7.5Y 4/6); moist; 25% silt, 50% fine to coarse sand, 25% fine to coarse sand.	0.8	Portland Type I/II
					ML		**SILT (ML)** ; dark greenish gray (10Y 3/1); moist; 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		
14.0		GP-2-4.0'V GP-2-4.5'					@ 2' - greenish black (10Y 2.5/1). @ 3' - mottled with greenish gray (5G 5/1). @ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	4.5	Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-3
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	29-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	29-Aug-05
PROJECT NUMBER	0781	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	9.0 ft (29-Aug-05)
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
					ML		**Silty SAND with Gravel (SM)**; yellowish brown (10YR 5/4); moist; 25% silt, 60% fine to coarse sand, 15% fine to coarse gravel.	1.0	
					SM		**SILT with Sand and Gravel (ML)**; dark greenish gray (10Y 3/1); moist; 30% clay, 40% silt, 15% fine to coarse sand, 15% fine gravel; low to medium plasticity.	3.0	
		GP-3-4.0'V					**Silty SAND (SM)**; dark greenish gray (10Y 3/1); moist; 20% silt, 80% fine to medium sand.	5.0	
678		GP-3-5.0'		5			@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.		Portland Type I/II
					ML		**SILT (ML)**; dark greenish gray (10Y 3/1); moist; 30% clay, 55% silt, 10% fine to medium sand, 5% fine gravel; low to medium plasticity.		
942		GP-3-8.5'					▽	9.0	
					SM		**Silty SAND (SM)**; dark greenish gray (10Y 3/1); wet; 30% silt, 70% fine to medium sand.	10.0	
		GP-3-10'W		10			A hydropunch sample was collected from 10 to 12 feet below grade.		Bottom of Boring @ 12 ft

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-4
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	31-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	31-Aug-05
PROJECT NUMBER	0781	**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	3"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); pale brown (10YR 6/3); moist; 15% silt, 60% fine to coarse sand, 25% fine to coarse gravel.	1.0	
					ML		**SILT (ML)** ; dark greenish gray (10Y 3/1); moist; 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		Portland Type I/II
6.4		GP-4-4.0'V GP-4-4.5'					@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	4.5	Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-5
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	30-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	30-Aug-05
PROJECT NUMBER	0781	**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	3"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); yellowish brown (10YR 5/4); moist; 15% silt, 60% fine to coarse sand, 25% fine gravel.	1.0	
					ML		**SILT (ML)** ; very dark grayish brown (10YR 3/2); moist; 30% clay, 65% silt, 5% fine to medium sand, medium plasticity.		Portland Type I/II
0.0		GP-5-4.0'V GP-5-4.5'					@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	4.5	Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-6
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	29-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	30-Aug-05
PROJECT NUMBER	0781	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	20.0 ft (30-Aug-05) ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); pale brown (10YR 6/3); moist; 20% silt, 50% fine to coarse sand, 30% fine gravel.	1.0	
							SILT (ML) ; dark grayish brown (10YR 4/2); moist; 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		
		GP-6-4.0'V					@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.		
0.0		GP-6-5.0'		5	ML		@ 5' - dark greenish gray (10Y 3/1).		
0.0		GP-6-9.5		10				10.0	Portland Type I/II
							A hydropunch sample was collected from 10 to 20 feet below grade.		
				15					
		GP-6-20'W		20			▽		Bottom of Boring @ 20 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-7
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	30-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	30-Aug-05
PROJECT NUMBER	0781	**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	3"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	10.0 ft (30-Aug-05) ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); pale brown (10YR 6/3); dry to moist; 25% silt, 50% fine to coarse sand, 25% fine gravel.	1.5	
							SILT (ML) ; very dark grayish brown (10YR 3/2); moist 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		
		GP-7-4.0'V					@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.		
0.0		GP-7-5.0'		5	ML		@ 6' - dark greenish gray (10Y 3/1).		◄ Portland Type I/II
3,000									
5,200		GP-7-9.5'		10			▽	10.0	Bottom of Boring @ 10 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-8
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	30-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	30-Aug-05
PROJECT NUMBER	0781	**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	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM		**ASPHALT**	0.2	
							Silty SAND with Gravel (SM); pale brown (10YR 6/3); moist; 25% silt, 60% fine to coarse sand, 15% fine gravel.	1.5	
					ML		**SILT (ML)** ; very dark grayish brown (10YR 3/2); moist; 30% clay, 65% silt, 5% fine to medium sand; medium plasticity.		Portland Type I/II
1.7		GP-8-4.0'V GP-8-4.5'					@ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	4.5	Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

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BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-9
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	31-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	31-Aug-05
PROJECT NUMBER	0781	**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	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							CONCRETE	0.4	Portland Type I/II
0.0		GP-9-4.0'V GP-9-4.5'			SM		**Silty SAND with Gravel (SM)**; yellowish brown (10YR 5/4); moist; 15% silt, 60% fine to coarse sand, 25% fine gravel. @ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	4.5	Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/26/05

Cambria Environmental Technology, Inc.
270 Perkins Street
Sonoma, CA 95476
Telephone: 707-935-4850
Fax: 707-935-6649

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	GP-10
JOB/SITE NAME	Former Shell Station	**DRILLING STARTED**	31-Aug-05
LOCATION	2703 Martin Luther King Jr. Way, Oakland, CA	**DRILLING COMPLETED**	31-Aug-05
PROJECT NUMBER	0781	**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	3"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Lewis	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	A. Friel, PG 6452	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0.0		GP-10-4.0'V GP-10-4.5'			SM ML		**ASPHALT** **Silty SAND with Gravel (SM)**; yellowish brown (10YR 5/4) moist; 15% silt, 60% fine to coarse sand, 25% fine gravel. **SILT (ML)** ; dark greenish gray (10Y 3/1); moist; 30% clay, 65% silt, 56% fine sand; medium plasticity. @ 3.5' - A vapor sample was collected from 3.5 to 4 feet below grade.	0.2 1.0 4.5	Portland Type I/II Bottom of Boring @ 4.5 ft

WELL LOG (PID) I:\OAKLAN~1\GINT\0781.GPJ DEFAULT.GDT 10/28/05

Appendix C

Disposal Documentation

Hazardous Waste Hauler (Registration # 2843)
P.O. Box 292547 * Sacramento, CA 95829 * FAX 916-381-1573

Disposal Confirmation

Request for Transportation Received: 10/05/05

Consultant Information

Company:	Cambria
Contact:	Tom Magney
Phone:	707-933-2366
Fax:	707-935-6649

Site Information

PO #	
Street Address:	2703 Martin Luther King Drive
City, State, ZIP:	OAkland, Ca
Customer:	Shell Oil Company RESA-0023-LDC
RIPR #:	47479
SAP # / Location:	NA
Incident #:	97093397
Location / WIC #:	NA
Environmental Engineer:	Denis Brown
Material Description:	Soil
Estimated Quantity:	1 Drum (D-1)
Service Requested Date:	As soon as possible- owner is putting
Disposal Facility:	Forward Landfill
Contact:	Scott
Phone:	800 204-4242
Approval #:	5857
Date of Disposal:	10/11/05
Actual Tonnage	.21 Tons
Transporter:	Manley & Sons Trucking, Inc.
Contact:	Jennifer Rogers
Phone:	916 381-6864
Fax:	916 381-1573
Invoice:	200510-15
Date of Invoice:	10/17/05

SEVERN TRENT STL

Submission#: 2005-09-0025

Cambria Environmental Sonoma

September 15, 2005

270 Perkins Street
Sonoma, CA 95476

Attn.: Ana Friel

Project#: 247-0781
Project: 97093397
Site: 2703 Martin Luther King Jr Way, Oakland

Attached is our report for your samples received on 09/01/2005 12:30
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 10/16/2005 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: 2005-09-0025

Total Lead

Cambria Environmental Sonoma
Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SP-1	08/29/2005 12:00	Soil	1

Total Lead

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Prep(s): 3050B Test(s): 6010B

Sample ID: SP-1 Lab ID: 2005-09-0025 - 1

Sampled: 08/29/2005 12:00 Extracted: 9/8/2005 10:26

Matrix: Soil QC Batch#: 2005/09/08-02.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	17	1.0	mg/Kg	1.00	09/09/2005 09:25	

Total Lead

Cambria Environmental Sonoma
Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Batch QC Report

Prep(s): 3050B — Test(s): 6010B

Method Blank — Soil — QC Batch #: 2005/09/08.02.15

MB: 2005/09/08.02.15.0014 — Date Extracted: 09/08/2005 10:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	09/09/2005 07:40	

Total Lead

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Batch QC Report

Prep(s): 3050B Test(s): 6010B

Laboratory Control Spike Soil QC Batch #: 2005/09/08-02.15

LCS 2005/09/08-02.15-002 Extracted: 09/08/2005 Analyzed: 09/09/2005 07:43

LCSD 2005/09/08-02.15-003 Extracted: 09/08/2005 Analyzed: 09/09/2005 07:46

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	106	103	100.0	106.0	103.0	2.9	80-120	20		

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SP-1	08/29/2005 12:00	Soil	1

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	SP-1	Lab ID:	2005-09-0025-13
Sampled:	08/29/2005 12:00	Extracted:	09/12/2005 18:49
Matrix:	Soil	QC Batch#:	2005/09/12-3A.62
Analysis Flag:	[2] See Legend and Note Section		

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	240	50	mg/Kg	1.00	09/12/2005 18:49	
Benzene	ND	0.50	mg/Kg	1.00	09/12/2005 18:49	
Toluene	ND	0.50	mg/Kg	1.00	09/12/2005 18:49	
Ethyl benzene	2.3	0.50	mg/Kg	1.00	09/12/2005 18:49	
Total xylenes	3.1	0.50	mg/Kg	1.00	09/12/2005 18:49	
Surrogate(s)						
1,2-Dichloroethane-d4	89.6	53-129	%	1.00	09/12/2005 18:49	
Toluene-d8	95.8	47-136	%	1.00	09/12/2005 18:49	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Batch QC Report

Prep(S): 5030B — Test(S): 8260B
Method Blank — Soil — QC Batch #: 2005/09/12-3A.62
MB: 2005/09/12-3A.62-011 — Date Extracted: 09/12/2005 20:11

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	mg/Kg	09/12/2005 20:11	
Benzene	ND	0.50	mg/Kg	09/12/2005 20:11	
Toluene	ND	0.50	mg/Kg	09/12/2005 20:11	
Ethyl benzene	ND	0.50	mg/Kg	09/12/2005 20:11	
Total xylenes	ND	0.50	mg/Kg	09/12/2005 20:11	
Surrogates(s)					
1,2-Dichloroethane-d4	92.0	53-129	%	09/12/2005 20:11	
Toluene-d8	100.4	47-136	%	09/12/2005 20:11	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Batch QC Report

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

Laboratory Control Spike Soil QC Batch #: 2005/09/12-3A.62

LCS 2005/09/12-3A.62-037 Extracted: 09/12/2005 Analyzed: 09/12/2005 20:37

LCSD 2005/09/12-3A.62-003 Extracted: 09/12/2005 Analyzed: 09/12/2005 21:05

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	9.20	9.13	10	92.0	91.3	0.8	69-129	20		
Toluene	9.19	8.80	10	91.9	88.0	4.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	207	206	250	82.8	82.4		53-129			
Toluene-d8	261	242	250	104.4	96.8		47-136			

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr Way, Oakland

Legend and Notes

Analysis Flag

L2

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

Calscience
Environmental
Laboratories, Inc.

September 22, 2005

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

Subject: **Calscience Work Order No.:** **05-09-0726**
Client Reference: **2005-09-0025 / 247-0781 / 97093397**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/14/2005 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. 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: 09/14/05
Work Order No: 05-09-0726
Preparation: DHS LUFT
Method: DHS LUFT

Project: 2005-09-0025 / 247-0781 / 97093397

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
SP-1	05-09-0726-1	09/29/05	Solid	09/19/05	09/19/05	050919L06

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

Method Blank	099-10-020-465	N/A	Solid	09/19/05	09/19/05	050919L06

Parameter	Result	RL	DF	Qual	Units
Organic Lead	ND	1.00	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: 09/14/05
Work Order No: 05-09-0726
Preparation: DHS LUFT
Method: DHS LUFT

Project 2005-09-0025 / 247-0781 / 97093397

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
05-09-0819-1	Solid	FLAA	09/19/05	09/19/05	050919S08

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Organic Lead	69	68	22-148	2	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:	05-09-0726
Pleasanton, CA 94566-4756	Preparation:	DHS LUFT
	Method:	DHS LUFT

Project: 2005-09-0025 / 247-0781 / 97093397

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-020-465	Solid	FLAA	09/19/05	NONE	050919L08

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Organic Lead	25.0	25.0	100	72-128	

RPD - Relative Percent Difference CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 05-09-0726

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

0726

Date Shipped: 9/13/2005

2005-09-0025 - 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 #: 2005-09-0025
CL PO #:

Project #: 247-0781
Project Name: 97093397
EDF Global ID: T0600101876

SP-1	1	8/29/2005 12:00:00PM	Soil	
EDF Field ID: SP-1				
Subcontract - Organic Lead			LUFT	5 Day

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

Due 9-21-05

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [illegible] Time: 1500	Signature: Time:	Signature: Time:
Printed Name: Steven Thomas Date: 9/15/05	Printed Name: Date:	Printed Name: Date:
Company: STL-SF	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature: [illegible] Time: 1000	Signature: Time:	Signature: Time:
Printed Name: J. PATEL Date: 9/14/05	Printed Name: Date:	Printed Name: Date:
Company: CEL	Company:	Company:

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 05 - 09 - 0726

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: GTL DATE: 9/14/05

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: [illegible]

CUSTODY SEAL INTACT:

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

Initial: [illegible]

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: [illegible]

COMMENTS:

STL-San Francisco

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

SHELL Chain Of Custody Record

97114

Shell Project Manager to be invoiced:
☒ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Denis Brown

2005-09-0025

INCIDENT NUMBER (S&E ONLY): 9 7 0 9 3 3 9 7

SAP or CRMT NUMBER (TS/CRMT):

DATE: 8-29-05
PAGE: 1 of 1

SAMPLING COMPANY: Cambria Environmental Technology, Inc.	LOG CODE: CETS	SITE ADDRESS (Street and City): 2703 Martin Luther King Jr Way, Oakland	GLOBAL ID NO.: T0600101876
ADDRESS: 270 Perkins Street, Sonoma, CA 95476		EDF DELIVERABLE TO (Responsible Party or Designee): Susan Lukaszewicz	PHONE NO.: 707-933-7576
PROJECT CONTACT (Hardcopy or PDF Report to): Ana Friel		E-MAIL: sonomaedf@cambria-env.com	CONSULTANT PROJECT NO.: 247-0781
TELEPHONE: 707-268-3812	FAX: 707-935-6649	E-MAIL: afriel@cambria-env.com	SAMPLER NAME(S) (Print): Scott Lewis

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 ☐

cc: Tom Magney at
tmagney@cambria-env.com

REQUESTED ANALYSIS

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: per attached sheet						FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
SP-1A through SP-1D	8/25	1200	SO	4															X						TEMPERATURE ON RECEIPT C°: 2

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Scott Lewis	Sonoma Office	8/31/05	1800
Sonoma Office	[signature]	9/1/05	1230
[signature]	[signature]	9/01/05	1450

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

10/16/00 Revision

Appendix D

Soil and Groundwater Certified Analytical Report

SEVERN TRENT STL

Submission#: 2005-09-0072

Cambria Environmental Sonoma

September 20, 2005

270 Perkins Street
Sonoma, CA 95476

Attn.: Ana Friel

Project#: 247-0781
Project: 97093397
Site: 2703 Martin Luther King Jr. Way, Oakland

Attached is our report for your samples received on 09/01/2005 12:30
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 10/16/2005 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: 2005-09-0072

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

Cambria Environmental Sonoma
Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
GP-1-5.0`	08/29/2005 11:26	Soil	1
GP-1-10.5`W	08/29/2005 11:40	Water	3
GP-2-4.5`	08/29/2005 13:40	Soil	4
GP-3-5.0`	08/29/2005 15:08	Soil	5
GP-3-10`W	08/29/2005 15:21	Water	7
GP-6-5.0`	08/29/2005 17:00	Soil	8
GP-6-20`W	08/29/2005 11:50	Water	10
GP-7-5.0`	08/30/2005 13:20	Soil	11
GP-7-10`W	08/30/2005 14:00	Water	13
GP-8-4.5`	08/30/2005 14:50	Soil	14
GP-5-4.5`	08/30/2005 15:40	Soil	15
GP-4-4.5`	08/31/2005 11:00	Soil	16
GP-9-4.5`	08/31/2005 12:21	Soil	17
GP-10-4.5`	08/31/2005 14:00	Soil	18

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

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B
Test(s): 8260B
Sample ID: GP-1-5.0
Lab ID: 2005-09-0072-1
Sampled: 08/29/2005 11:26
Extracted: 9/10/2005 16:51
Matrix: Soil
QC Batch#: 2005/09/10-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/10/2005 16:51	
Benzene	ND	0.0050	mg/Kg	1.00	09/10/2005 16:51	
Toluene	ND	0.0050	mg/Kg	1.00	09/10/2005 16:51	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/10/2005 16:51	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/10/2005 16:51	
Surrogate(s)						
1,2-Dichloroethane-d4	82.6	76-124	%	1.00	09/10/2005 16:51	
Toluene-d8	95.0	75-116	%	1.00	09/10/2005 16:51	

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

Cambria Environmental Sonoma
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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-1-10.5 W | Batch ID: I2005-09-0072-58
Sampled: 08/29/2005 11:40 | Extracted: 9/11/2005 03:58
Matrix: Water | QC Batch#: 2005/09/10-2A.04
Analysis Flag: L2-pH<7 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	47000	5000	ug/L	100.00	09/11/2005 03:58	
Benzene	330	50	ug/L	100.00	09/11/2005 03:58	
Toluene	ND	50	ug/L	100.00	09/11/2005 03:58	
Ethylbenzene	680	50	ug/L	100.00	09/11/2005 03:58	
Total xylenes	140	100	ug/L	100.00	09/11/2005 03:58	
Surrogate(s)						
1,2-Dichloroethane-d4	104.4	73-130	%	100.00	09/11/2005 03:58	
Toluene-d8	104.7	81-114	%	100.00	09/11/2005 03:58	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B
Test(s): 8260B
Sample ID: GP-2-45'
Lab ID: 2005-09-0072-4
Sampled: 08/29/2005 13:40
Extracted: 09/10/2005 17:17
Matrix: Soil
QC Batch#: 2005/09/10-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	1.5	1.0	mg/Kg	1.00	09/10/2005 17:17	
Benzene	0.035	0.0050	mg/Kg	1.00	09/10/2005 17:17	
Toluene	ND	0.0050	mg/Kg	1.00	09/10/2005 17:17	
Ethyl benzene	0.0063	0.0050	mg/Kg	1.00	09/10/2005 17:17	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/10/2005 17:17	
Surrogate(s)						
1,2-Dichloroethane-d4	86.2	76-124	%	1.00	09/10/2005 17:17	
Toluene-d8	97.6	75-116	%	1.00	09/10/2005 17:17	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-3 5.0 | Lab ID: 6-092005-09-0072-6
Sampled: 08/29/2005 15:08 | Extracted: 9/10/2005 17:43
Matrix: Soil | QC Batch#: 2005/09/10-1A.02

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	7.5	1.0	mg/Kg	1.00	09/10/2005 17:43	
Benzene	0.027	0.0050	mg/Kg	1.00	09/10/2005 17:43	
Toluene	ND	0.0050	mg/Kg	1.00	09/10/2005 17:43	
Ethyl benzene	0.085	0.0050	mg/Kg	1.00	09/10/2005 17:43	
Total xylenes	0.11	0.0050	mg/Kg	1.00	09/10/2005 17:43	
Surrogate(s)						
1,2-Dichloroethane-d4	82.1	76-124	%	1.00	09/10/2005 17:43	
Toluene-d8	98.7	75-116	%	1.00	09/10/2005 17:43	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B Test(s): 8260B
Sample ID: GP-8-16-W Lab ID: 2005-09-0072-7
Sampled: 08/29/2005 15:24 Extracted: 9/12/2005 19:58
Matrix: Water QC Batch#: 2005/09/12-2A.68
Analysis Flag: L2 pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	79000	20000	ug/L	400.00	09/12/2005 19:58	
Benzene	5200	200	ug/L	400.00	09/12/2005 19:58	
Toluene	13000	200	ug/L	400.00	09/12/2005 19:58	
Ethylbenzene	1400	200	ug/L	400.00	09/12/2005 19:58	
Total xylenes	7800	400	ug/L	400.00	09/12/2005 19:58	
Surrogate(s)						
1,2-Dichloroethane-d4	101.4	73-130	%	400.00	09/12/2005 19:58	
Toluene-d8	103.9	81-114	%	400.00	09/12/2005 19:58	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	GP-6 5.0	Lab ID:	2005-09-0072 - 8
Sampled:	08/29/2005 17:00	Extracted:	09/10/2005 18:09
Matrix:	Soil	QC Batch#:	2005/09/10-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/10/2005 18:09	
Benzene	ND	0.0050	mg/Kg	1.00	09/10/2005 18:09	
Toluene	ND	0.0050	mg/Kg	1.00	09/10/2005 18:09	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/10/2005 18:09	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/10/2005 18:09	
Surrogate(s)						
1,2-Dichloroethane-d4	90.2	76-124	%	1.00	09/10/2005 18:09	
Toluene-d8	96.1	75-116	%	1.00	09/10/2005 18:09	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B
Test(s): 8260B
Sample ID: GP-6-20 W
Lab ID: 2005-09-0072-010
Sampled: 08/29/2005 11:50
Extracted: 09/12/2005 20:29
Matrix: Water
QC Batch#: 2005/09/12-2A.68
Analysis Flag: L2, pH: <2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	9100	2000	ug/L	40.00	09/12/2005 20:29	
Benzene	320	20	ug/L	40.00	09/12/2005 20:29	
Toluene	34	20	ug/L	40.00	09/12/2005 20:29	
Ethylbenzene	380	20	ug/L	40.00	09/12/2005 20:29	
Total xylenes	750	40	ug/L	40.00	09/12/2005 20:29	
Surrogate(s)						
1,2-Dichloroethane-d4	102.4	73-130	%	40.00	09/12/2005 20:29	
Toluene-d8	100.8	81-114	%	40.00	09/12/2005 20:29	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B
Test(s): 8260B
Sample ID: GP-7-5.0
Lab ID: 2005-09-0072-11
Sampled: 08/30/2005 13:20
Extracted: 09/12/2005 23:32
Matrix: Soil
QC Batch#: 2005/09/12-1A.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/12/2005 23:32	
Benzene	ND	0.0050	mg/Kg	1.00	09/12/2005 23:32	
Toluene	ND	0.0050	mg/Kg	1.00	09/12/2005 23:32	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/12/2005 23:32	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/12/2005 23:32	
Surrogate(s)						
1,2-Dichloroethane-d4	110.0	76-124	%	1.00	09/12/2005 23:32	
Toluene-d8	87.5	75-116	%	1.00	09/12/2005 23:32	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

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

Sample ID: GP-7-10 W | Lab ID: 2005-09-0072-13

Sampled: 08/30/2005 14:00 | Extracted: 9/15/2005 02:29

Matrix: Water | QC Batch#: 2005/09/14-2C.65

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	140000	5000	ug/L	100.00	09/15/2005 02:29	
Benzene	17000	50	ug/L	100.00	09/15/2005 02:29	
Toluene	4600	50	ug/L	100.00	09/15/2005 02:29	
Ethylbenzene	7600	50	ug/L	100.00	09/15/2005 02:29	
Total xylenes	45000	100	ug/L	100.00	09/15/2005 02:29	
Surrogate(s)						
1,2-Dichloroethane-d4	93.3	73-130	%	100.00	09/15/2005 02:29	
Toluene-d8	92.8	81-114	%	100.00	09/15/2005 02:29	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B Test(s): 8260B
Sample ID: GP-4 5'
Sampled: 08/30/2005 14:50
Matrix: Soil
Lab ID: 2005-09-0072-14
Extracted: 9/11/2005 11:52
QC Batch#: 2005/09/11-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/11/2005 11:52	
Benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:52	
Toluene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:52	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:52	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/11/2005 11:52	
Surrogate(s)						
1,2-Dichloroethane-d4	101.9	76-124	%	1.00	09/11/2005 11:52	
Toluene-d8	97.5	75-116	%	1.00	09/11/2005 11:52	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B
Test(s): 8260B
Sample ID: GP-5-4.5
Lab ID: 2005-09-0072-016
Sampled: 08/30/2005 15:40
Extracted: 09/11/2005 11:49
Matrix: Soil
QC Batch#: 2005/09/11-1A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/11/2005 11:49	
Benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:49	
Toluene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:49	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 11:49	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/11/2005 11:49	
Surrogate(s)						
1,2-Dichloroethane-d4	98.5	76-124	%	1.00	09/11/2005 11:49	
Toluene-d8	105.0	75-116	%	1.00	09/11/2005 11:49	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-3,4,5 | Lab ID: 17-2005-09-0072-16
Sampled: 08/31/2005 11:00 | Extracted: 9/11/2005 20:10
Matrix: Soil | QC Batch#: 2005/09/11-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/11/2005 20:10	
Benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:10	
Toluene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:10	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:10	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/11/2005 20:10	
Surrogate(s)						
1,2-Dichloroethane-d4	89.9	76-124	%	1.00	09/11/2005 20:10	
Toluene-d8	99.8	75-116	%	1.00	09/11/2005 20:10	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-9 4.5 | Lab ID: 2005090072-17
Sampled: 08/31/2005 12:21 | Extracted: 9/11/2005 20:36
Matrix: Soil | QC Batch#: 2005/09/11-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/11/2005 20:36	
Benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:36	
Toluene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:36	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/11/2005 20:36	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/11/2005 20:36	
Surrogate(s)						
1,2-Dichloroethane-d4	86.4	76-124	%	1.00	09/11/2005 20:36	
Toluene-d8	97.8	75-116	%	1.00	09/11/2005 20:36	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-10-4.5 | Lab ID: 2005-09-0072-18
Sampled: 08/31/2005 14:00 | Extracted: 09/12/2005 19:40
Matrix: Soil | QC Batch#: 2005/09/12-1A.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	09/12/2005 19:40	
Benzene	ND	0.0050	mg/Kg	1.00	09/12/2005 19:40	
Toluene	ND	0.0050	mg/Kg	1.00	09/12/2005 19:40	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	09/12/2005 19:40	
Total xylenes	ND	0.0050	mg/Kg	1.00	09/12/2005 19:40	
Surrogate(s)						
1,2-Dichloroethane-d4	107.7	76-124	%	1.00	09/12/2005 19:40	
Toluene-d8	86.5	75-116	%	1.00	09/12/2005 19:40	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — Soil — **QC Batch # 2005/09/10-1A.62**

MB: 2005/09/10-1A.62-029 — Date Extracted: 09/10/2005 09:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	09/10/2005 09:29	
Benzene	ND	0.0050	mg/Kg	09/10/2005 09:29	
Toluene	ND	0.0050	mg/Kg	09/10/2005 09:29	
Ethyl benzene	ND	0.0050	mg/Kg	09/10/2005 09:29	
Total xylenes	ND	0.0050	mg/Kg	09/10/2005 09:29	
Surrogates(s)					
1,2-Dichloroethane-d4	80.6	76-124	%	09/10/2005 09:29	
Toluene-d8	94.6	75-116	%	09/10/2005 09:29	

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

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Method Blank | Water | QC Batch # 2005/09/10-2A.64

MB: 2005/09/10-2A.64-046 | Date Extracted: 09/10/2005 20:46

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/10/2005 20:46	
Benzene	ND	0.5	ug/L	09/10/2005 20:46	
Toluene	ND	0.5	ug/L	09/10/2005 20:46	
Ethylbenzene	ND	0.5	ug/L	09/10/2005 20:46	
Total xylenes	ND	1.0	ug/L	09/10/2005 20:46	
Surrogates(s)					
1,2-Dichloroethane-d4	91.4	73-130	%	09/10/2005 20:46	
Toluene-d8	103.4	81-114	%	09/10/2005 20:46	

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

Cambria Environmental Sonoma

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Method Blank Soil **QC Batch # 2005/09/11-1A.62**

MB: 2005/09/11-1A.62-051 Date Extracted: 09/11/2005 10:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	09/11/2005 10:51	
Benzene	ND	0.0050	mg/Kg	09/11/2005 10:51	
Toluene	ND	0.0050	mg/Kg	09/11/2005 10:51	
Ethyl benzene	ND	0.0050	mg/Kg	09/11/2005 10:51	
Total xylenes	ND	0.0050	mg/Kg	09/11/2005 10:51	
Surrogates(s)					
1,2-Dichloroethane-d4	91.2	76-124	%	09/11/2005 10:51	
Toluene-d8	96.8	75-116	%	09/11/2005 10:51	

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

Cambria Environmental Sonoma

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — Soil — QC Batch # 2005/09/11-1A.64

MB: 2005/09/11-1A.64-048 — Date Extracted: 09/11/2005 10:48

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	09/11/2005 10:48	
Benzene	ND	0.0050	mg/Kg	09/11/2005 10:48	
Toluene	ND	0.0050	mg/Kg	09/11/2005 10:48	
Ethyl benzene	ND	0.0050	mg/Kg	09/11/2005 10:48	
Total xylenes	ND	0.0050	mg/Kg	09/11/2005 10:48	
Surrogates(s)					
1,2-Dichloroethane-d4	99.0	76-124	%	09/11/2005 10:48	
Toluene-d8	102.8	75-116	%	09/11/2005 10:48	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B-GC/MS
Method Blank
MB-2005/09/12-1A.65-003-1

Soil

Test(s): 8260B
QC Batch # 2005/09/12-1A.65
Date Extracted: 09/12/2005 10:03

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	09/12/2005 10:03	
Benzene	ND	0.0050	mg/Kg	09/12/2005 10:03	
Toluene	ND	0.0050	mg/Kg	09/12/2005 10:03	
Ethyl benzene	ND	0.0050	mg/Kg	09/12/2005 10:03	
Total xylenes	ND	0.0050	mg/Kg	09/12/2005 10:03	
Surrogates(s)					
1,2-Dichloroethane-d4	101.9	76-124	%	09/12/2005 10:03	
Toluene-d8	90.1	75-116	%	09/12/2005 10:03	

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

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Method Blank | Water | QC Batch # 2005/09/12-2A.68

MB: 2005/09/12-2A.68-055 | Date Extracted: 09/12/2005 18:55

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/12/2005 18:55	
Benzene	ND	0.5	ug/L	09/12/2005 18:55	
Toluene	ND	0.5	ug/L	09/12/2005 18:55	
Ethylbenzene	ND	0.5	ug/L	09/12/2005 18:55	
Total xylenes	ND	1.0	ug/L	09/12/2005 18:55	
Surrogates(s)					
1,2-Dichloroethane-d4	102.4	73-130	%	09/12/2005 18:55	
Toluene-d8	99.6	81-114	%	09/12/2005 18:55	

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — Water — QC Batch #: 2005/09/14-2C.65

MB: 2005/09/14-2C.65-045 — Date Extracted: 09/14/2005 18:45

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/14/2005 18:45	
Benzene	ND	0.5	ug/L	09/14/2005 18:45	
Toluene	ND	0.5	ug/L	09/14/2005 18:45	
Ethylbenzene	ND	0.5	ug/L	09/14/2005 18:45	
Total xylenes	ND	1.0	ug/L	09/14/2005 18:45	
Surrogates(s)					
1,2-Dichloroethane-d4	93.8	73-130	%	09/14/2005 18:45	
Toluene-d8	88.2	81-114	%	09/14/2005 18:45	

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Laboratory Control Spike Soil QC Batch # 2005/09/10-1A.62

LCS: 2005/09/10-1A.62-008 Extracted: 09/10/2005 Analyzed: 09/10/2005 09:03

LCSD:

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0602		0.05	120.4			69-129	20		
Toluene	0.0522		0.05	104.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	401		500	80.2			76-124			
Toluene-d8	486		500	97.2			75-116			

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

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Batch QC Report

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

Laboratory Control Spike **Water** **QC Batch #: 2005/09/10-2A.64**

LCS: 2005/09/10-2A.64.025 Extracted: 09/10/2005 Analyzed: 09/10/2005 20:25
LCSD:

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	25.9		25	103.6			69-129	20		
Toluene	25.5		25	102.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	446		500	89.2			73-130			
Toluene-d8	526		500	105.2			81-114			

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

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — Soil — QC Batch # 2005/09/11-1A.62

LCS 2005/09/11-1A.62-925 — Extracted: 09/11/2005 — Analyzed: 09/11/2005 10:25

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0603		0.05	120.6			69-129	20		
Toluene	0.0539		0.05	107.8			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	403		500	80.6			76-124			
Toluene-d8	478		500	95.6			75-116			

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

Cambria Environmental Sonoma

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Laboratory Control Spike Soil QC Batch # 2005/09/11-1A.64

LCS: 2005/09/11-1A.64-027 Extracted: 09/11/2005 Analyzed: 09/11/2005 10:27

LCSD:

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0513		0.05	102.6			69-129	20		
Toluene	0.0532		0.05	106.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	461		500	92.2			76-124			
Toluene-d8	517		500	103.4			75-116			

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

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Batch QC Report

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

Laboratory Control Spike Soil QC Batch # 2005/09/12-1A.65

LCS 2005/09/12-1A.65-001 Extracted: 09/12/2005 Analyzed: 09/12/2005 09:36

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0557		0.05	111.4			69-129	20		
Toluene	0.0518		0.05	103.6			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	481		500	96.2			76-124			
Toluene-d8	456		500	91.2			75-116			

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

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Laboratory Control Spike Water **QC Batch# 2005/09/12-2A.68**

LCS 2005/09/12-2A.68-023 Extracted: 09/12/2005 Analyzed: 09/12/2005 18:23
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	23.2		25	92.8			69-129	20		
Toluene	25.7		25	102.8			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	445		500	89.0			73-130			
Toluene-d8	533		500	106.6			81-114			

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

Cambria Environmental Sonoma

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Laboratory Control Spike Water QC Batch # 2005/09/14-2C.65

LCS: 2005/09/14-2C.65-019 Extracted: 09/14/2005 Analyzed: 09/14/2005 18:19

LCSD:

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	26.1		25	104.4			69-129	20		
Toluene	27.6		25	110.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	395		500	79.0			73-130			
Toluene-d8	464		500	92.8			81-114			

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

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Matrix Spike (MS / MSD) Soil QC Batch # 2005/09/10-1A.62

MS/MSD Lab ID: 2005-08-0895-001

MS: 2005/09/10-1A.62-055 Extracted: 09/10/2005 Analyzed: 09/10/2005 09:55

Dilution: 100

MSD: 2005/09/10-1A.62-021 Extracted: 09/10/2005 Analyzed: 09/10/2005 10:20

Dilution: 100

Compound	Conc. mg/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	0.0579	0.0648	ND	0.049800	116.3	131.4	12.2	69-129	20		M4
Toluene	0.0513	0.0565	ND	0.049800	103.0	114.6	10.7	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	406	415		500	81.2	83.0		76-124			
Toluene-d8	489	473		500	97.8	94.6		75-116			

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

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) Water **QC Batch # 2005/09/10-2A.64**

MS/MSD

MS: 2005/09/10-2A.64-020 Extracted: 09/10/2005 Lab ID: 2005-08-0755 - 002

Analyzed: 09/10/2005 21:20

Dilution: 1.00

MSD: 2005/09/10-2A.64-041 Extracted: 09/10/2005

Analyzed: 09/10/2005 21:41

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	34.7	33.3	7.86	25	107.4	101.8	5.4	69-129	20		
Toluene	26.9	25.0	ND	25	107.6	100.0	7.3	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	540	522		500	108.0	104.4		73-130			
Toluene-d8	524	535		500	104.8	107.0		81-114			

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

Cambria Environmental Sonoma

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B S

Test(s): 8260B

Matrix Spike (MS / MSD) Soil QC Batch # 2005/09/11-1A.62

QC Sample: MS Lab ID: 2005-09-0072,001A

MS: 2005/09/11-1A.62-018 Extracted: 09/11/2005 Analyzed: 09/11/2005 12:18

MSD: 2005/09/11-1A.62-044 Extracted: 09/11/2005 Analyzed: 09/11/2005 12:44

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	0.0577	0.0523	ND	0.049212	117.2	119.5	1.9	69-129	20		
Toluene	0.0501	0.0452	ND	0.049212	101.8	103.2	1.4	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	393	394		500	78.6	78.8		76-124			
Toluene-d8	472	485		500	94.4	97.0		75-116			

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD): Soil

QC Batch # 2005/09/11-1A.64

SP-5475 >> MS

Lab ID: 2005-09-0072-015

MS: 2005/09/11-1A.64-009

Extracted: 09/11/2005

Analyzed: 09/11/2005 12:09

Dilution: 1.00

MSD: 2005/09/11-1A.64-030

Extracted: 09/11/2005

Analyzed: 09/11/2005 12:30

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	0.0441	0.0483	ND	0.044802	98.4	101.2	2.8	69-129	20		
Toluene	0.0461	0.0494	ND	0.044802	102.9	103.5	0.6	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	460	473		500	92.0	94.6		76-124			
Toluene-d8	518	513		500	103.6	102.6		75-116			

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Matrix Spike (MS / MSD) Soil QC Batch #: 2005/09/12-1A.65

MS/MSD Lab ID: 2005-09-0210 - 06

MS: 2005/09/12-1A.65-036 Extracted: 09/12/2005 Analyzed: 09/12/2005 11:36

Dilution: 1.00

MSD: 2005/09/12-1A.65-002 Extracted: 09/12/2005 Analyzed: 09/12/2005 12:02

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	0.0528	0.0521	ND	0.049407	106.9	105.9	0.9	69-129	20		
Toluene	0.0496	0.0483	ND	0.049407	100.4	98.1	2.3	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	506	510		500	101.2	102.0		76-124			
Toluene-d8	444	447		500	88.8	89.4		75-116			

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

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Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Matrix Spike (MS / MSD) | **Water** | **QC Batch # 2005/09/12-2A.68**

GP-6-20'W >> MS | Lab ID: 2005-09-0072 - 010

MS: 2005/09/12-2A.68-056 | Extracted: 09/12/2005 | Analyzed: 09/12/2005 21:00 | Dilution: 40.00

MSD: 2005/09/12-2A.68-057 | Extracted: 09/12/2005 | Analyzed: 09/12/2005 21:32 | Dilution: 40.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	1270	1230	324	1000	94.6	90.6	4.3	69-129	20		
Toluene	1010	996	34.1	1000	97.6	96.2	1.4	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	441	438		500	88.2	87.6		73-130			
Toluene-d8	543	546		500	108.6	109.2		81-114			

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Matrix Spike (MS / MSD) Water QC Batch #: 2005/09/14-2C.65

MS/MSD Lab ID: 2005-09-0156 - 004

MS: 2005/09/14-2C.65-010 Extracted: 09/14/2005 Analyzed: 09/14/2005 21:05

MSD: 2005/09/14-2C.65-011 Extracted: 09/14/2005 Analyzed: 09/14/2005 22:41

Dilution: 20.00 Dilution: 20.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	26.2	23.5	ND	25	104.8	94.0	10.9	69-129	20		
Toluene	25.7	23.3	ND	25	102.8	93.2	9.8	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	463	461		500	92.6	92.2		73-130			
Toluene-d8	456	450		500	91.2	90.0		81-114			

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

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Legend and Notes

Analysis Flag

L2

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

Result Flag

M4

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

SEVERN TRENT STL

Submission: 2005-09-0072

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

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Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
GP-1-10.0`	08/29/2005 11:35	Soil	2
GP-3-8.5`	08/29/2005 15:13	Soil	6
GP-6-9.5`	08/29/2005 17:05	Soil	9
GP-7-9.5`	08/30/2005 13:48	Soil	12

Gas/BTEXFuel Oxygenates by 8260B (High Level)

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Project: 247-0781
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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260B
Sample ID: GP-1-10.0 | Lab ID: 2005-09-0072-2
Sampled: 08/29/2005 11:35 | Extracted: 9/12/2005 19:15
Matrix: Soil | Prep Batch#: 2005/09/12-03B2
Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	190	50	mg/Kg	1.00	09/12/2005 19:15	Q1
Benzene	ND	0.50	mg/Kg	1.00	09/12/2005 19:15	
Toluene	ND	0.50	mg/Kg	1.00	09/12/2005 19:15	
Ethyl benzene	ND	0.50	mg/Kg	1.00	09/12/2005 19:15	
Total xylenes	ND	0.50	mg/Kg	1.00	09/12/2005 19:15	
Surrogate(s)						
1,2-Dichloroethane-d4	91.3	53-129	%	1.00	09/12/2005 19:15	
Toluene-d8	82.8	47-136	%	1.00	09/12/2005 19:15	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

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Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Prep(s): 5030B | Test(s): 8260BT
Sample ID: GP-3-6.5 | Lab ID: 2005-09-0072-6.2
Sampled: 08/29/2005 15:13 | Extracted: 09/10/2005 05:00
Matrix: Soil | QC Batch#: 2005/09/09-3A.62
Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	3300	130	mg/Kg	2.50	09/10/2005 05:00	
Benzene	15	1.3	mg/Kg	2.50	09/10/2005 05:00	
Toluene	2.7	1.3	mg/Kg	2.50	09/10/2005 05:00	
Ethyl benzene	91	1.3	mg/Kg	2.50	09/10/2005 05:00	
Total xylenes	230	1.3	mg/Kg	2.50	09/10/2005 05:00	
Surrogate(s)						
1,2-Dichloroethane-d4	85.6	53-129	%	2.50	09/10/2005 05:00	
Toluene-d8	111.1	47-136	%	2.50	09/10/2005 05:00	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

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

Sample ID: GP-6 9.5 Lab ID: 2005090072 - 9

Sampled: 08/29/2005 17:05 Extracted: 09/12/2005 21:43

Matrix: Soil QC Batch#: 2005/09/12-03.62

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	260	50	mg/Kg	1.00	09/12/2005 21:43	
Benzene	ND	0.50	mg/Kg	1.00	09/12/2005 21:43	
Toluene	ND	0.50	mg/Kg	1.00	09/12/2005 21:43	
Ethyl benzene	2.1	0.50	mg/Kg	1.00	09/12/2005 21:43	
Total xylenes	6.8	0.50	mg/Kg	1.00	09/12/2005 21:43	
Surrogate(s)						
1,2-Dichloroethane-d4	110.6	53-129	%	1.00	09/12/2005 21:43	
Toluene-d8	118.8	47-136	%	1.00	09/12/2005 21:43	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

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270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

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

Sample ID: GP-7-9.5 | Lab ID: 2005-09-0072-3612

Sampled: 08/30/2005 13:48 | Extracted: 9/13/2005 03:24

Matrix: Soil | QC Batch#: 2005/09/12-03.62

Analysis Flag: J2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	440	50	mg/Kg	1.00	09/13/2005 03:24	
Benzene	ND	0.50	mg/Kg	1.00	09/13/2005 03:24	
Toluene	1.8	0.50	mg/Kg	1.00	09/13/2005 03:24	
Ethyl benzene	10	0.50	mg/Kg	1.00	09/13/2005 03:24	
Total xylenes	59	0.50	mg/Kg	1.00	09/13/2005 03:24	
Surrogate(s)						
1,2-Dichloroethane-d4	78.7	53-129	%	1.00	09/13/2005 03:24	
Toluene-d8	99.0	47-136	%	1.00	09/13/2005 03:24	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma
Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B Test(s): 8260B
Method Blank Soil QC Batch #: 2005/09/09-3A.62
MB: 2005/09/09-3A.62-058 Date Extracted: 09/10/2005 01:58

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	mg/Kg	09/10/2005 01:58	
Benzene	ND	0.50	mg/Kg	09/10/2005 01:58	
Toluene	ND	0.50	mg/Kg	09/10/2005 01:58	
Ethyl benzene	ND	0.50	mg/Kg	09/10/2005 01:58	
Total xylenes	ND	0.50	mg/Kg	09/10/2005 01:58	
Surrogates(s)					
1,2-Dichloroethane-d4	110.4	53-129	%	09/10/2005 01:58	
Toluene-d8	119.2	47-136	%	09/10/2005 01:58	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Method Blank Soil **QC Batch # 2005/09/12-03.02**

MB: 2005/09/12-03.62-011 Date Extracted: 09/12/2005 20:11

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50000	ug/Kg	09/12/2005 20:11	
Benzene	ND	500	ug/Kg	09/12/2005 20:11	
Toluene	ND	500	ug/Kg	09/12/2005 20:11	
Ethyl benzene	ND	500	ug/Kg	09/12/2005 20:11	
Total xylenes	ND	500	ug/Kg	09/12/2005 20:11	
Surrogates(s)					
1,2-Dichloroethane-d4	92.0	53-129	%	09/12/2005 20:11	
Toluene-d8	100.4	47-136	%	09/12/2005 20:11	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

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

Laboratory Control Spike Soil QC Batch #: 2005/09/09-3A.62

LCS 2005/09/09-3A.62-005 Extracted: 09/10/2005 Analyzed: 09/10/2005 01:05

LCSD 2005/09/09-3A.62-032 Extracted: 09/10/2005 Analyzed: 09/10/2005 01:32

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	12.5	12.6	10	125.0	126.0	0.8	69-129	20		
Toluene	11.1	10.8	10	111.0	108.0	2.7	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	233	244	250	93.2	97.6		53-129			
Toluene-d8	281	274	250	112.4	109.6		47-136			

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike Soil **QC Batch #: 2005/09/12-03.62**

LCS: 2005/09/12-03.62-037 Extracted: 09/12/2005 Analyzed: 09/12/2005 20:57

LCSD: 2005/09/12-03.62-003 Extracted: 09/12/2005 Analyzed: 09/12/2005 21:03

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	9200	9130	10000	92.0	91.3	0.8	69-129	20		
Toluene	9190	8800	10000	91.9	88.0	4.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	207	206	250	82.8	82.4		53-129			
Toluene-d8	261	242	250	104.4	96.8		47-136			

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Sonoma

Attn.: Ana Friel

270 Perkins Street
Sonoma, CA 95476
Phone: (707) 268-3812 Fax: (707) 268-8180

Project: 247-0781
97093397

Received: 09/01/2005 12:30

Site: 2703 Martin Luther King Jr. Way, Oakland

Legend and Notes

Analysis Flag

L2

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

Result Flag

Q1

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

STL-San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

(925) 484-1919 (925) 484-1096 fax

SHELL Chain Of Custody Record

97112

Shell Project Manager to be invoiced:

☒ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Denis Brown

2005-09-0072

9 7 0 9 3 3 9 7

DATE: 8-29-05

PAGE: 1 of 2

SAMPLING COMPANY: Cambria Environmental Technology, Inc.

LOG CODE: CETS

ADDRESS: 270 Perkins Street, Sonoma, CA 95476

PROJECT CONTACT (Hardcopy or PDF Report to): Ana Friel

TELEPHONE: 707-268-3812

FAX: 707-935-6649

EMAIL: afriel@cambria-env.com

SITE ADDRESS (Street and City): 2703 Martin Luther King Jr Way Oakland

GLOBAL ID NO.: T0600101876

EDF DELIVERABLE TO (Responsible Party or Designee): Susan Lukasiewicz

PHONE NO.: 707-933-2376

E-MAIL: sonomaedf@cambria-env.com

CONSULTANT PROJECT NO.: 247-0781

SAMPLER NAME(S) (Print): Scott Lewis

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 ☐

REQUESTED ANALYSIS

Field Sample Identification	Sampling Date	Sampling Time	Matrix	No. of Cont.	TPH - Purgeable 8260B	TPH - Extractable (8015m)	BTEX 8260B	MTBE	TBA	5 Oxygenates	1,2 DCA and EDB	Ethanol	Methanol	VOCs by 8260B	Semi-Volatiles by 8270C	Lead ☐ Total ☐ STLC ☐ TCLP	LUFTS ☐ Total ☐ STLC ☐ TCLP	CAM17 ☐ Total ☐ STLC ☐ TCLP	Test for Disposal	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
																				TEMPERATURE ON RECEIPT C°: 2
GP-1-5.0'	8/29	1126	SO	1	X		X													
GP-1-10.0'	8/29	1135	SO	1	X		X													
GP-1-10.5' W	8/29	1140	GW	3	X		X													
GP-2-4.5'	8/29	1340	SO	1	X		X													
GP-3-5.0'	8/29	1508	SO	1	X		X													
GP-3-8.5'	8/29	1513	SO	1	X		X													
GP-3-10' W	8/29	1524	~~SO~~ GW	3	X		X													
GP-6-5.0'	8/29	1700	SO	1	X		X													
GP-6-9.5'	8/29	1705	[illegible]	[illegible]	X		X													
GP-6-20W	8/29	1850	GW	3	X		X													

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Scott Lewis	Sonoma office	8/31/05	1600
Sonoma office	[signature]	9/01/05	1236
[signature]	[signature]	9/01/05	1451

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Q&Q Graphic (714) 898-9702

10/16/00 Revision

STL-San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

(925) 484-1919 (925) 484-1096 fax

SHELL Chain Of Custody Record

Shell Project Manager to be Invoiced: Denis Brown

☒ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ GMT HOUSTON

INCIDENT NUMBER (FSC USE ONLY): 97093397

DATE: 8-29-05

PAGE: 2 of 2

CONSULTANT COMPANY: Cambria Environmental Technology, Inc.

ADDRESS: 270 Perkins Street, Sonoma, CA 95476

PROJECT CONTACT (Hardcopy or PDF Required): Ann Friel

TELEPHONE: 707-268-3812 FAX: 707-935-6649 E-MAIL: afriel@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: _____

GCMS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

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

COST CODE: OETS

SITE ADDRESS (Street and City): 7703 Martin Luther King Jr. Way, Oakland

GLOBAL ID: T0600101876

CONSULTANT PROJECT NO.: 247-0781

PROJECT MANAGER (Hardcopy or PDF Required): Susan Lukaszewicz

PHONE NO.: 707-933-2871

E-MAIL: sonomaadf@cambria-env.com

SAMPLER NAME(S) (Print): Scott Lewis

LAB USE ONLY

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Purgeable 8260	TPH - Extractable (8015m)	BTEX 8260	MTBE	IBA	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							
	GP-7-5.0'	8/30	1320	SO	1	X		X																			
	GP-7-9.5'	8/30	1348	SO	1	X		X																			
	GP-7-10'W	8/30	1400	GW	3	X		X																			
	GP-8-4.5'	8/30	1450	SO	1	X		X																			
	GP-5-4.5'	8/30	1540	SO	1	X		X																			
	GP-4-4.5'	8/31	1100	SO	1	X		X																			
	GP-9-4.5'	8/31	1221	SO	1	X		X																			
	GP-10-9.5'	8/31	1400	SO	1	X		X																			

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

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Scott Lewis	Sonoma Office	8-31-05	1600
Sonoma Office		9/1/05	1230
		9/1/05	1450

DISTRIBUTION: White with Analytical, Copies to File, Yellow and Pink to Client.

10/1999 Revision

Appendix E

Soil Vapor Certified Analytical Report

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

@ AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0509035A

Work Order Summary

CLIENT:	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476	**BILL TO:**	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476
PHONE:	707-935-4854	**P.O. #**	247-0781
FAX:		**PROJECT #**	247-0781 2703 Martin Luther King Jr., Oakland, CA
DATE RECEIVED:	09/01/2005	**CONTACT:**	Nicole Danbacher
DATE COMPLETED:	09/16/2005		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	GP-1-4.0'	Modified TO-14A	6.0 "Hg
02A	GP-2-4.0'	Modified TO-14A	9.5 "Hg
03A	GP-3-4.0'	Modified TO-14A	8.5 "Hg
04A	GP-6-4.0'	Modified TO-14A	9.0 "Hg
05A	GP-8-4.0'	Modified TO-14A	6.5 "Hg
06A	GP-7-4.0'	Modified TO-14A	7.5 "Hg
07A	GP-5-4.0'	Modified TO-14A	6.5 "Hg
08A	GP-4-4.0'	Modified TO-14A	6.5 "Hg
09A	GP-9-4.0'	Modified TO-14A	8.0 "Hg
10A	GP-10-4.0'	Modified TO-14A	7.5 "Hg
10AA	GP-10-4.0' Duplicate	Modified TO-14A	7.5 "Hg
11A	Lab Blank	Modified TO-14A	NA
11B	Lab Blank	Modified TO-14A	NA
11C	Lab Blank	Modified TO-14A	NA
12A	CCV	Modified TO-14A	NA
12B	CCV	Modified TO-14A	NA
12C	CCV	Modified TO-14A	NA

Continued on next page

WORK ORDER #: 0509035A

Work Order Summary

CLIENT:	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476	**BILL TO:**	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476
PHONE:	707-935-4854	**P.O. #**	247-0781
FAX:		**PROJECT #**	247-0781 2703 Martin Luther King Jr., Oakland, CA
DATE RECEIVED:	09/01/2005	**CONTACT:**	Nicole Danbacher
DATE COMPLETED:	09/16/2005		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
13A	LCS	Modified TO-14A	NA
13B	LCS	Modified TO-14A	NA
13C	LCS	Modified TO-14A	NA

CERTIFIED BY: Linda J. Fruman DATE: 09/17/05

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/05, Expiration date: 06/30/06
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-14A
Cambria Environmental Technology
Workorder# 0509035A

Ten 1 Liter Summa Canister samples were received on September 01, 2005. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-14A/TO-15*	*ATL Modifications*
Continuing Calibration criteria	+- 30% Difference	</= 30% Difference with two allowed out to </= 40% Difference; flag and narrate outliers
Initial Calibration criteria	RSD<30% (TO-14A)	RSD</=30%, two compounds allowed up to 40%.
Moisture control	Nafion Dryer (TO-14A)	Multisorbent trap
Blank acceptance criteria	<0.20 ppbv (TO-14A)	<Reporting Limit
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91, Vinyl Acetate: 43, 2-Butanone: 43, 4-Methyl-2-Pentanone: 43.	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106, Vinyl Acetate: 86, 2-Butanone: 72, 4-Methyl-2-Pentanone: 58.
Dilutions for Initial Calibration	Dynamic dilutions or static using canisters	Syringe dilutions
BFB absolute abundance criteria	Within 10% of that from previous day. (TO-14A)	CCV internal standard area counts are compared to ICAL, corrective action for > 40% D.
Sample Load Volume	400 mL (TO-14A)	Varied to 200 mL
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Concentration of IS Spike.	10 ppbv (TO-15)	25 ppbv.
BFB Abundance	CLP Protocol (TO-15)	SW-846 Protocol
IS Recoveries.	Within 40% of mean over ICAL for blanks, and within 40% of daily CCV for samples. (TO-15)	Within 40% of CCV recoveries for blanks and samples.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample(s) GP-2-4.0', GP-3-4.0' and GP-6-4.0' due to the presence of high level non-target species.

The recovery of surrogate 1,2-Dichloroethane-d4 in sample(s) GP-3-4.0' and GP-6-4.0' was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: GP-1-4.0'

Lab ID#: 0509035A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	3.6	4.0	12
Toluene	1.3	1.3	4.8	5.1
m,p-Xylene	1.3	2.3	5.5	9.8

Client Sample ID: GP-2-4.0'

Lab ID#: 0509035A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	5.9	910	19	2900

Client Sample ID: GP-3-4.0'

Lab ID#: 0509035A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	560	54000	1800	170000

Client Sample ID: GP-6-4.0'

Lab ID#: 0509035A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	5.8	240	18	780

Client Sample ID: GP-8-4.0'

Lab ID#: 0509035A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	2.6	4.1	8.4
Toluene	1.3	1.3	4.9	5.0

Client Sample ID: GP-7-4.0'

Lab ID#: 0509035A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	100	4.3	340
Toluene	1.3	290	5.1	1100
Ethyl Benzene	1.3	46	5.8	200
m,p-Xylene	1.3	83	5.8	360

Client Sample ID: GP-7-4.0'

Lab ID#: 0509035A-06A

o-Xylene	1.3	21	5.8	92

Client Sample ID: GP-5-4.0'

Lab ID#: 0509035A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	1.7	4.1	5.4
Toluene	1.3	1.4	4.9	5.4
m,p-Xylene	1.3	1.9	5.6	8.4

Client Sample ID: GP-4-4.0'

Lab ID#: 0509035A-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Toluene	1.3	2.4	4.9	8.9
m,p-Xylene	1.3	1.4	5.6	6.2

Client Sample ID: GP-9-4.0'

Lab ID#: 0509035A-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.4	1.4	4.4	4.6
Toluene	1.4	1.5	5.2	5.6
m,p-Xylene	1.4	1.6	6.0	6.9

Client Sample ID: GP-10-4.0'

Lab ID#: 0509035A-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	10	4.3	32
Toluene	1.3	5.9	5.1	22
Ethyl Benzene	1.3	1.5	5.8	6.4
m,p-Xylene	1.3	5.1	5.8	22

Client Sample ID: GP-10-4.0' Duplicate

Lab ID#: 0509035A-10AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.8	11	5.7	34
Toluene	1.8	6.0	6.8	22
m,p-Xylene	1.8	5.0	7.8	22

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Client Sample ID: GP-1-4.0'

Lab ID#: 0509035A-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	3.6	4.0	12
Toluene	1.3	1.3	4.8	5.1
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	2.3	5.5	9.8
o-Xylene	1.3	Not Detected	5.5	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: GP-2-4.0'

Lab ID#: 0509035A-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	5.9	910	19	2900
Toluene	5.9	Not Detected	22	Not Detected
Ethyl Benzene	5.9	Not Detected	26	Not Detected
m,p-Xylene	5.9	Not Detected	26	Not Detected
o-Xylene	5.9	Not Detected	26	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: GP-3-4.0'

Lab ID#: 0509035A-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	560	54000	1800	170000
Toluene	560	Not Detected	2100	Not Detected
Ethyl Benzene	560	Not Detected	2400	Not Detected
m,p-Xylene	560	Not Detected	2400	Not Detected
o-Xylene	560	Not Detected	2400	Not Detected

Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	162 Q	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: GP-6-4.0'

Lab ID#: 0509035A-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	5.8	240	18	780
Toluene	5.8	Not Detected	22	Not Detected
Ethyl Benzene	5.8	Not Detected	25	Not Detected
m,p-Xylene	5.8	Not Detected	25	Not Detected
o-Xylene	5.8	Not Detected	25	Not Detected

Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	137 Q	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: GP-8-4.0'

Lab ID#: 0509035A-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	2.6	4.1	8.4
Toluene	1.3	1.3	4.9	5.0
Ethyl Benzene	1.3	Not Detected	5.6	Not Detected
m,p-Xylene	1.3	Not Detected	5.6	Not Detected
o-Xylene	1.3	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: GP-7-4.0'

Lab ID#: 0509035A-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	100	4.3	340
Toluene	1.3	290	5.1	1100
Ethyl Benzene	1.3	46	5.8	200
m,p-Xylene	1.3	83	5.8	360
o-Xylene	1.3	21	5.8	92

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: GP-5-4.0'

Lab ID#: 0509035A-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	1.7	4.1	5.4
Toluene	1.3	1.4	4.9	5.4
Ethyl Benzene	1.3	Not Detected	5.6	Not Detected
m,p-Xylene	1.3	1.9	5.6	8.4
o-Xylene	1.3	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

Client Sample ID: GP-4-4.0'

Lab ID#: 0509035A-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.1	Not Detected
Toluene	1.3	2.4	4.9	8.9
Ethyl Benzene	1.3	Not Detected	5.6	Not Detected
m,p-Xylene	1.3	1.4	5.6	6.2
o-Xylene	1.3	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

Client Sample ID: GP-9-4.0'

Lab ID#: 0509035A-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.4	1.4	4.4	4.6
Toluene	1.4	1.5	5.2	5.6
Ethyl Benzene	1.4	Not Detected	6.0	Not Detected
m,p-Xylene	1.4	1.6	6.0	6.9
o-Xylene	1.4	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

Client Sample ID: GP-10-4.0'

Lab ID#: 0509035A-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	10	4.3	32
Toluene	1.3	5.9	5.1	22
Ethyl Benzene	1.3	1.5	5.8	6.4
m,p-Xylene	1.3	5.1	5.8	22
o-Xylene	1.3	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: GP-10-4.0' Duplicate

Lab ID#: 0509035A-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.8	11	5.7	34
Toluene	1.8	6.0	6.8	22
Ethyl Benzene	1.8	Not Detected	7.8	Not Detected
m,p-Xylene	1.8	5.0	7.8	22
o-Xylene	1.8	Not Detected	7.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

Client Sample ID: Lab Blank

Lab ID#: 0509035A-11A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: Lab Blank

Lab ID#: 0509035A-11B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

Client Sample ID: Lab Blank

Lab ID#: 0509035A-11C

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: CCV

Lab ID#: 0509035A-12A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	101
Toluene	102
Ethyl Benzene	103
m,p-Xylene	108
o-Xylene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

Client Sample ID: CCV

Lab ID#: 0509035A-12B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	86
Toluene	95
Ethyl Benzene	93
m,p-Xylene	89
o-Xylene	90

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

Client Sample ID: CCV

Lab ID#: 0509035A-12C

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	84
Toluene	94
Ethyl Benzene	90
m,p-Xylene	86
o-Xylene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

Client Sample ID: LCS

Lab ID#: 0509035A-13A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	90
Toluene	95
Ethyl Benzene	100
m,p-Xylene	105
o-Xylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

Client Sample ID: LCS

Lab ID#: 0509035A-13B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	72
Toluene	85
Ethyl Benzene	84
m,p-Xylene	81
o-Xylene	80

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

Client Sample ID: LCS

Lab ID#: 0509035A-13C

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Compound	%Recovery
Benzene	71
Toluene	84
Ethyl Benzene	80
m,p-Xylene	78
o-Xylene	77

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	100	70-130

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This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

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WORK ORDER #: 0509035B

Work Order Summary

CLIENT:	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476	**BILL TO:**	Mr. Scott Lewis Cambria Environmental Technology 270 Perkins Street Sonoma, CA 95476
PHONE:	707-935-4854	**P.O. #**	247-0781
FAX:		**PROJECT #**	247-0781 2703 Martin Luther King Jr., Oakland, CA
DATE RECEIVED:	09/01/2005	**CONTACT:**	Nicole Danbacher
DATE COMPLETED:	09/16/2005		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	GP-1-4.0'	Modified TO-3	6.0 "Hg
02A	GP-2-4.0'	Modified TO-3	9.5 "Hg
03A	GP-3-4.0'	Modified TO-3	8.5 "Hg
03AA	GP-3-4.0' Duplicate	Modified TO-3	8.5 "Hg
04A	GP-6-4.0'	Modified TO-3	9.0 "Hg
05A	GP-8-4.0'	Modified TO-3	6.5 "Hg
06A	GP-7-4.0'	Modified TO-3	7.5 "Hg
07A	GP-5-4.0'	Modified TO-3	6.5 "Hg
08A	GP-4-4.0'	Modified TO-3	6.5 "Hg
09A	GP-9-4.0'	Modified TO-3	8.0 "Hg
10A	GP-10-4.0'	Modified TO-3	7.5 "Hg
11A	Lab Blank	Modified TO-3	NA
12A	LCS	Modified TO-3	NA

CERTIFIED BY: Linda J. Fruman DATE: 09/16/05

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/05, Expiration date: 06/30/06
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE
Modified TO-3
Cambria Environmental Technology
Workorder# 0509035B

Ten 1 Liter Summa Canister samples were received on September 01, 2005. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with photo ionization and flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline and correspond to the range of hydrocarbons from C5 to C10. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppmv result to ug/L. See the data sheets for the reporting limits for each compound.

Requirement	*TO-3*	*ATL Modifications*
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch </= 20 samples
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Fluorobenzene in samples GP-2-4.0', GP-3-4.0', GP-6-4.0' and GP-7-4.0' was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.

E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-3 GC/FID

Client Sample ID: GP-1-4.0'

Lab ID#: 0509035B-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.063	0.26	0.28	1.2

Client Sample ID: GP-2-4.0'

Lab ID#: 0509035B-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.20	0.81	45	180

Client Sample ID: GP-3-4.0'

Lab ID#: 0509035B-03A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	110	460	17000	71000

Client Sample ID: GP-3-4.0' Duplicate

Lab ID#: 0509035B-03AA

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	110	460	17000	70000

Client Sample ID: GP-6-4.0'

Lab ID#: 0509035B-04A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.19	0.79	84	340

Client Sample ID: GP-8-4.0'

Lab ID#: 0509035B-05A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.064	0.26	0.40	1.6

Client Sample ID: GP-7-4.0'

Lab ID#: 0509035B-06A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)

Client Sample ID: GP-7-4.0'

Lab ID#: 0509035B-06A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.067	0.28	9.1	37

Client Sample ID: GP-5-4.0'

Lab ID#: 0509035B-07A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.064	0.26	0.77	3.1

Client Sample ID: GP-4-4.0'

Lab ID#: 0509035B-08A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.064	0.26	0.085	0.35

Client Sample ID: GP-9-4.0'

Lab ID#: 0509035B-09A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.069	0.28	0.90	3.7

Client Sample ID: GP-10-4.0'

Lab ID#: 0509035B-10A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.13	0.55	24	99

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CHAIN-OF-CUSTODY RECORD

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Project Info: Global ID: T0600101876
P.O. #: 247-0781
Project #: 247-0781 2703 Martin Luther King
Project Name: JR, Oakland, CA

Turn Around Time: ☒ Normal ☐ Rush _____ specify

Lab Use Only: Pressurized by: AA Date: 9/2/05 Pressurization Gas: (N) He

Lab I.D.	Field Sample I.D. (Location)	Date	Time	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psig)
01A	GP-1-4.0'	8/29/05	1030	TPHg, BTEX (TO-3 TO-14A)	30	8	160"Hg	15.0 psig
02A	GP-2-4.0'	8/29/05	1226	TPHg, BTEX	30	10	9.5"Hg	
03A	GP-3-4.0'	8/29/05	1424	TPHg, BTEX	29	8	8.5"Hg	
04A	GP-6-4.0'	8/29/05	1600	TPHg, BTEX	30	10	9.0"Hg	
05A	GP-8-4.0'	8/30/05	1135	TPHg, BTEX	29.5	7.5	6.5"Hg	
06A	GP-7-4.0'	8/30/05	1242	TPHg, BTEX	30	7	7.5"Hg	
07A	GP-5-4.0'	8/30/05	1500	TPHg, BTEX	29	7	6.5"Hg	
08A	GP-4-4.0'	8/31/05	0948	TPHg, BTEX	30	8	6.5"Hg	
09A	GP-9-4.0'	8/31/05	1138	TPHg, BTEX	30	7	8.0"Hg	
10A	GP-10-4.0'	8/31/05		TPHg, BTEX	29.5	7	7.5"Hg	

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Scott Lewis	9-1-05 1715	Cindy Watkins	9/1/05 1715

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Drop off	—	—	good	Yes No None	0509035

Form 1283 Rev. 1C

AIR TOXICS LTD.

Client Sample ID: LCS

Lab ID#: 0509035B-12A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	%Recovery
TPH (Gasoline Range)	108

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	123	75-150

AIR TOXICS LTD.

Client Sample ID: Lab Blank

Lab ID#: 0509035B-11A

MODIFIED EPA METHOD TO-3 GC/FID

[redacted]

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	102	75-150

AIR TOXICS LTD.

Client Sample ID: GP-10-4.0'

Lab ID#: 0509035B-10A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.13	0.55	24	99

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	111	75-150

AIR TOXICS LTD.

Client Sample ID: GP-9-4.0'

Lab ID#: 0509035B-09A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.069	0.28	0.90	3.7

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	107	75-150

AIR TOXICS LTD.

Client Sample ID: GP-4-4.0'

Lab ID#: 0509035B-08A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.064	0.26	0.085	0.35

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	103	75-150

AIR TOXICS LTD.

Client Sample ID: GP-5-4.0'

Lab ID#: 0509035B-07A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.064	0.26	0.77	3.1

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	104	75-150

AIR TOXICS LTD.

Client Sample ID: GP-6-4.0'

Lab ID#: 0509035B-04A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.19	0.79	84	340

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	266 Q	75-150

AIR TOXICS LTD.

Client Sample ID: GP-3-4.0' Duplicate

Lab ID#: 0509035B-03AA

MODIFIED EPA METHOD TO-3 GC/FID

[redacted]

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	110	460	17000	70000

Q = Exceeds Quality Control limits, due to matrix effects. Matrix effects confirmed by re-analysis.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	161 Q	75-150

AIR TOXICS LTD.

Client Sample ID: GP-3-4.0'

Lab ID#: 0509035B-03A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	110	460	17000	71000

Q = Exceeds Quality Control limits, due to matrix effects. Matrix effects confirmed by re-analysis.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	164 Q	75-150

AIR TOXICS LTD.

Client Sample ID: GP-2-4.0'

Lab ID#: 0509035B-02A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.20	0.81	45	180

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	187 Q	75-150

AIR TOXICS LTD.

Client Sample ID: GP-1-4.0'

Lab ID#: 0509035B-01A

MODIFIED EPA METHOD TO-3 GC/FID

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
TPH (Gasoline Range)	0.063	0.26	0.28	1.2

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	102	75-150