

### **RECEIVED**

By dehloptoxic at 1:39 pm, Oct 09, 2006

Denis L. Brown

Jerry Wickham Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 Shell Oil Products US

HSE – Environmental Services 20945 S. Wilmington Ave. Carson, CA 90810-1039 Tel (707) 865 0251 Fax (707) 865 2542 Email denis.1.brown@shell.com

Re:

Shell-branded Service Station

1601 Webster Street Alameda, California SAP Code 135032 Incident No. 97564701 ACHCSA No. 13-503

Dear Mr. Wickham:

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

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

Sincerely,

Denis L. Brown Project Manager Mr. Jerry Wickham Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Site Investigation Report

Shell-branded Service Station 1601 Webster Street Alameda, California Incident No. 97564701 SAP Code 135032 ACHCSA No. 13-503



Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent site investigation activities at the above referenced site. The purposes of the investigation were to (1) assess potential vapor migration in utility conduits and inside the kiosk by screening with field equipment; (2) delineate the extent of shallow groundwater impact upgradient of S-7; and (3) investigate MTBE concentrations in the deeper groundwater near well S-4. Cambria followed the scope of work and procedures presented in our May 17, 2006 Risk Evaluation and Work Plan, which was approved by the Alameda Health Care Services Agency in their May 30, 2006 letter.

#### **EXECUTIVE SUMMARY**

- The screening of utility vault boxes and the kiosk did not indicate the presence of volatile organic vapors. Only two monitoring wells reported detectable volatile organic vapors at 3.9 parts per million by volume (ppmv).
- Three monitoring wells were constructed during this investigation: S-8, S-9, and S-4B.
- Soil analytical data indicate that TPHg and BTEX are present in the 5 foot below grade (fbg) samples in S-8 and S-9; but soil from 11.5 fbg were below detection limits for these constituents at both locations.
- MTBE was detected only in one sample in boring S-4B at 19.5 fbg, which is below the water table.

Cambria Environmental Technology, Inc.

270 Perkins Street Sonoma, CA 95476 Tel (707) 935-4850 Fax (707) 935-6649

#### SITE DESCRIPTION AND BACKGROUND

The subject property is an operating Shell-branded service station located on the northwest corner of Webster Street and Lincoln Avenue in Alameda, California (Figure 1). The station layout includes three underground storage tanks (USTs), a former waste oil UST, two current dispensers and two former dispenser islands, a station building, and a kiosk (Figure 2). The local topography is flat with a site elevation at approximately 13 feet above mean sea level. The site is surrounded by a mix of commercial and residential development.

A summary of previous work performed at the site and additional background information is contained in Attachment A.



#### **INVESTIGATION RESULTS**

Permit: A drilling permit was obtained from the Alameda County Public

Works Agency (Attachment B).

PID Screening: On July 13, 2006, geologist Kevin Taylor performed vapor

screening of well vault boxes, utility vault boxes, inside the onsite commercial buildings, and around the site to assess potential migration of vapors. Screening was performed using a photo-ionization detector (PID). The PID was calibrated prior to use and continuous measurements were collected from each location for approximately 30 seconds to a minute. The maximum measurement was recorded for each location

(Figure 3).

**Drilling Dates:** July 17, 2006.

**Drilling Company:** Gregg Drilling.

**Personnel:** Geologist John Gerbrandt directed the drilling activities under

the supervision of California Professional Geologist Ana Friel.

**Drilling Method:** Hollow Stem Auger.

Number of Well Borings: Three wells (S-8, S-9, and S-4B) were drilled during this

investigation. The boring specifications and soil types encountered are described on the boring logs contained in Attachment C. The boring locations are shown on Figure 2.

**Boring Depths:** 12 fbg (S-8 and S-9) and 20 fbg (S-4B).

Groundwater Depths: Groundwater was first encountered 5 to 10 fbg.

Soil Disposal: Six-55 gallon drums of soil were generated during field

activities, stored onsite, sampled and profiled for disposal. After the soil has been profiled it will be transported to Allied Waste Industries' Forward Landfill in Manteca, California for disposal.

Waste disposal manifests are included in Attachment D.

Well Development/Sampling: Blaine Tech Services Inc., (Blaine) will develop the new wells

and incorporate them into the existing monitoring schedule. The development data will be included with the third quarter

monitoring report, to be issued under separate cover.

Wellhead Survey: On August 17, 2006, Virgil Chavez Land Surveying (licensed

land surveyor No. 6323) of Vallejo, California surveyed the top of casing elevations of the new wells relative to mean sea level and surveyed the wells for longitudes and latitudes. The survey

report is included as Attachment E.

#### **FINDINGS**

Soil Vapor Results: The PID screening results are summarized on Figure 4.

**Soil:** The soil chemical analytical data are summarized in Table 1 and TPHg, benzene, and MTBE analytical results are presented on Figure 4. Laboratory analytical reports are presented in Attachment F.

Cross Sections: An update of a previously submitted geologic cross section (A-A') and an additional geologic cross section in the direction of groundwater flow were requested in ACHCSA's May 30, 2006 letter. These cross sections are currently being prepared with current and historical soil boring data, and will be submitted under separate cover.

#### **DISCUSSION**



Cambria's May 17, 2006 Risk Evaluation and Work Plan presented historical site soil and groundwater data in relation to the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFBRWQCB ESLs). A review of the current soil data shows that none of the new soil data exceeds the ESLs for protection of onsite Commercial Workers by migration of indoor air, except for 1.0 mg/kg of benzene (S-8 at 8 fbg), which exceeded the 0.51 mg/kg ESL. The TPHg concentration in this same sample was elevated, and, according to the ESLs, would warrant further investigation for possible vapor intrusion.

In an effort to assess whether organic vapors were migrating from subsurface soil and groundwater at this site into utility conduits and the kiosk, screening of utility vault boxes and the breathing zone in the kiosk was performed. The field screening did not find the presence of any organic vapors within any of the utility conduits or the kiosk.

#### **CONCLUSIONS**

Based on the results of the PID screening, it does not appear that significant migration or collection of petroleum vapors is occurring in any of the utility conduits. Further, even though this is an operating service station, the breathing zone of the commercial workers within the kiosk building located in the immediate vicinity of the fuel dispensers does not contain measurable concentrations of organic vapors. Thus, Shell and Cambria conclude that the onsite commercial workers are not at risk of inhalation of petroleum vapors present in the subsurface.

#### **CLOSING**

The newly installed wells will be added to the existing monitoring program and will be reported in accordance with the reporting schedule for this site. The geologic cross sections will be submitted upon their completion, within 30 days of this document.

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



Sincerely,

Cambria Environmental Technology, Inc.

Susan Lukaszewicz Staff Geologist

Ana Friel, PG Associate Geologist

Figures:

1 - Vicinity Map

2 - Site Plan

3 - PID Screening Results – July 2006

4 - Soil Chemical Concentration Map - July 2006

Tables:

1 - Soil Analytical Data

Attachments:

A - Site History

B - Permits

C - Boring Logs

D - Waste Disposal Manifests

E - Survey Data

F - Certified Analytical Reports

cc: Denis Brown, Shell Oil Products US

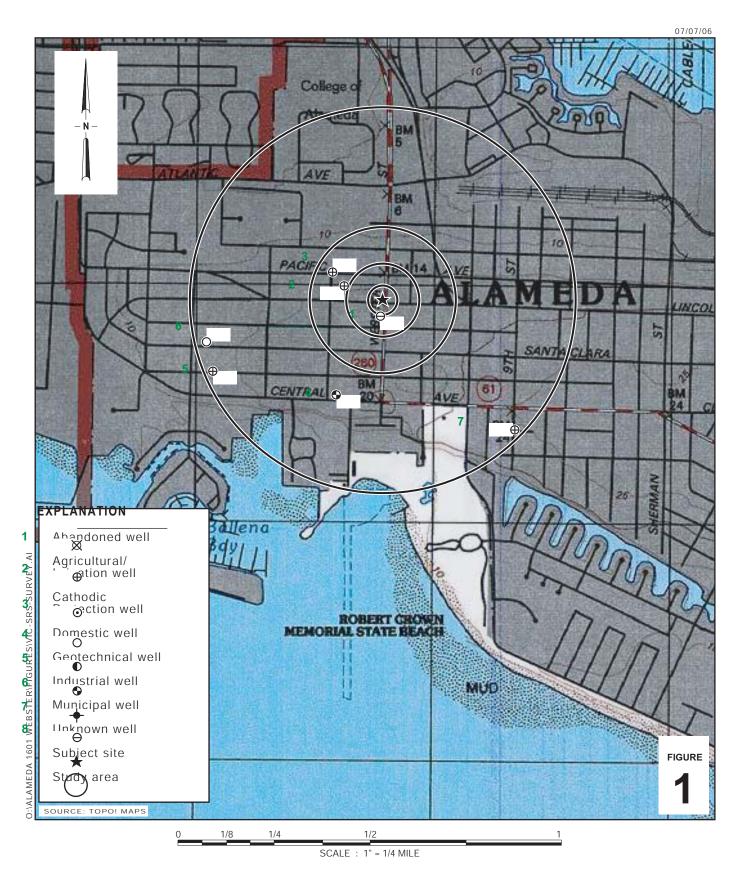
Thomas H., Kosel, ConocoPhilips Risk Management & Remediation, 76 Broadway, Sacramento, CA 95818

James C. Kirschner, ATC Associates, Inc. 6602 Owens Drive, Suite 100, Pleasanton, CA, 94588 (consultant for ConocoPhillips)

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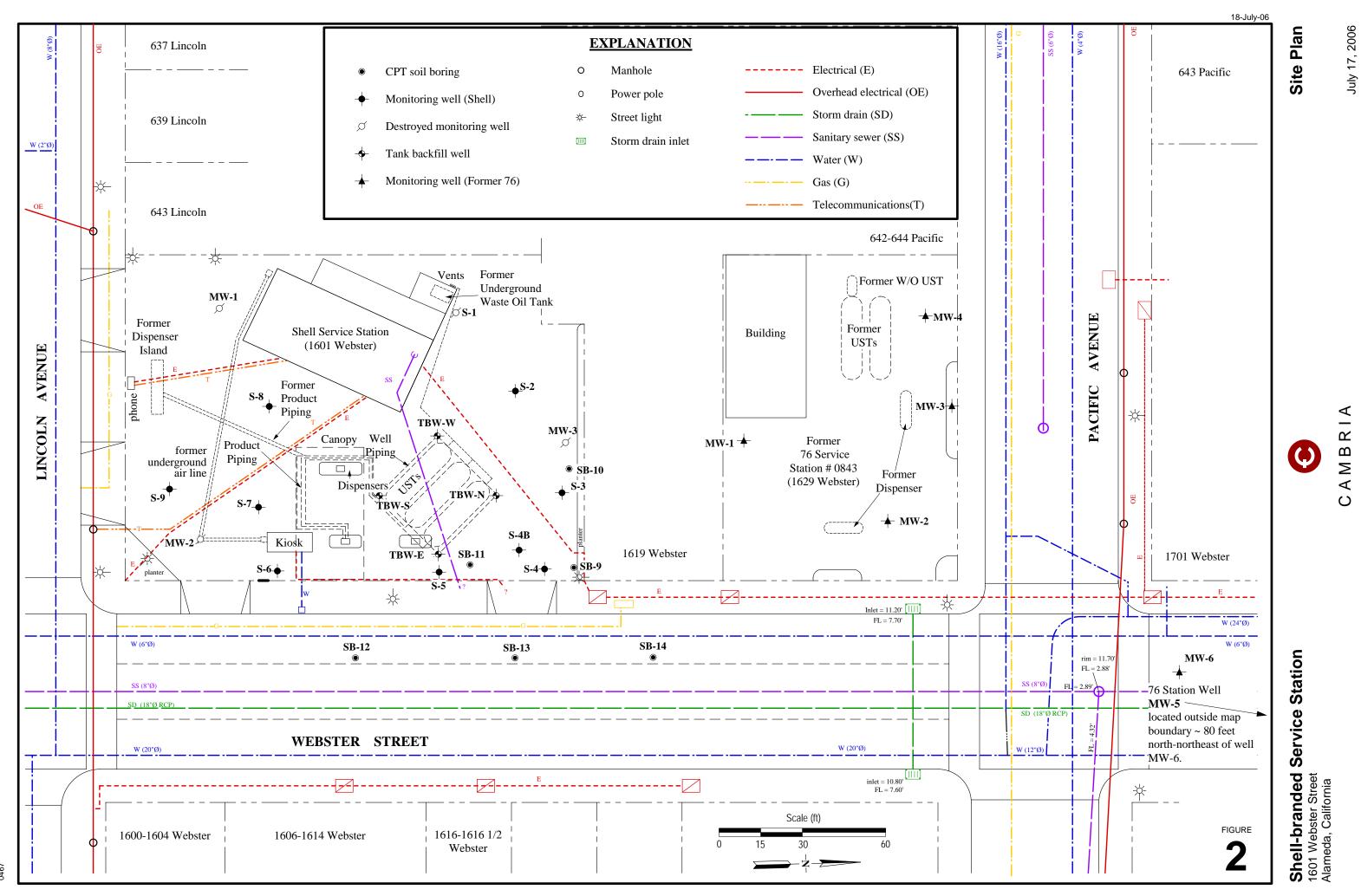
### **Shell-branded Service Station**

1601 Webster Street Alameda, California Incident No.97437680



### **Vicinity Map**

(200, 500, and 1,000 Ft., and 1/2 Mile Radii)





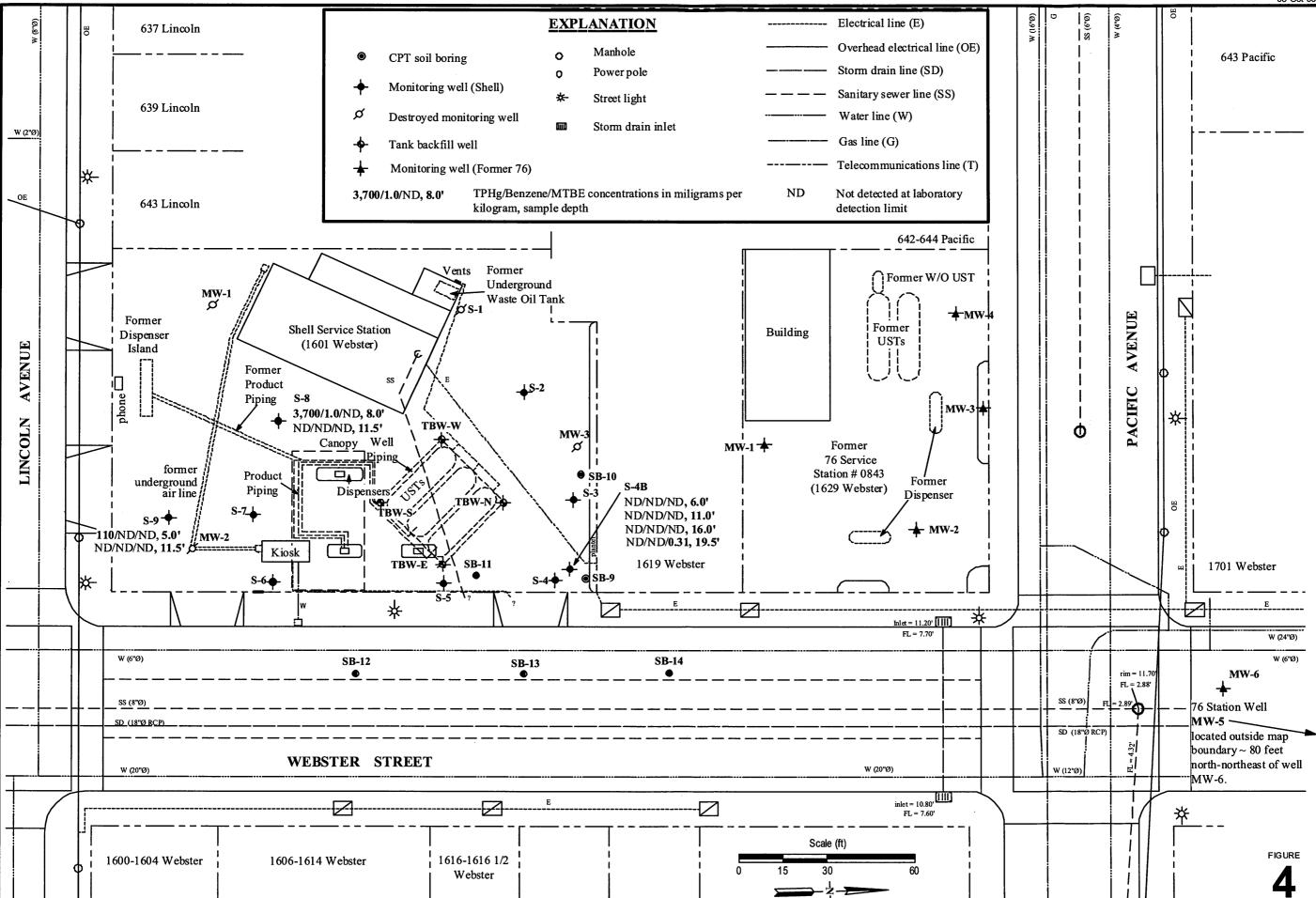


Table 1. Soil Analytical Data - Shell-branded Service Station, 1601 Webster Street, Alameda, California

Sample ID	Depth	Date	TPHg	В	T	Е	X	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
	(fbg)		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Site Investigation 20	<u>906</u>													
S-4B-6.0	6.0	17-Jul-06	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
S-4B-11.0	11.0	17-Jul-06	<1.0	<0.0050	< 0.0050	< 0.0050	< 0.010	< 0.0050	0.56	< 0.010	< 0.0050	< 0.0050	< 0.0050	< 0.0050
S-4B-16.0	16.0	17-Jul-06	<1.0	<0.0050	< 0.0050	<0.0050	< 0.010	< 0.0050	0.30 *	< 0.010	< 0.0050	< 0.0050	< 0.0050	<0.0050
S-4B-19.5	19.5	17-Jul-06	<1.0	<0.0050	<0.0050	<0.0050	<0.010	0.31 *	0.13 *	<0.010	<0.0050	<0.0050	<0.0050	<0.0050
S-8-8.0	8.0	17-Jul-06	3700	1.0	<0.25	90	310 *	<0.25	<2.5	<0.50	<0.25	<0.25	<0.25	<0.25
S-8-11.5	11.5	17-Jul-06	<50	<0.25	<0.25	0.89	2.5	<0.25	<2.5	<0.50	<0.25	<0.25	<0.25	<0.25
S-9-5.0	5.0	17-Jul-06	110	<0.25	<0.25	2.0	3.5	<0.25	<2.5	<0.50	<0.25	<0.25	<0.25	<0.25
S-9-11.5	11.5	17-Jul-06	<1.0	<0.0050	<0.0050	<0.0050	0.010	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050

#### Notes and Abbreviations:

fbg = feet below grade

mg/kg = milligrams per kilogram

< x =Not detected at reporting limit x

All constituents analyzed by EPA Method 8260B

TPHg = Total petroleum hydrocarbons as gasoline

BTEX = Benzene, toluene, ethylbenzene, and xylenes

MTBE = Methyl tertiary butyl ether

TBA = Tertiary-butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = Ethylene dibromide

# Attachment A Site History

#### ATTACHMENT A

# SUMMARY: Site Background & Previous Investigations/Activities Shell-branded Service Station 1601 Webster Street, Alameda, California

#### SITE BACKGROUND

#### **Site Conditions**

Site Location and Topography: The site is located at the northwest corner of Webster Street and Lincoln Avenue in Alameda, California in a mixed commercial and residential area. The site is located approximately ½ mile from the San Francisco Bay. The site's address is known to Shell as 1601 Webster Street; however, the Alameda County Assessor's office lists the property address as 1607 Webster Street. Local topography is flat, and the site's elevation is approximately 13 ft above mean sea level.

**Property Owner:** As requested in the ACHCSA's September 3, 2004 Notice of Responsibility letter the current fee title owner of the referenced property is identified on behalf of Shell in compliance with section 25297.15(a) of Chapter 6.7 of the Health Safety Code. The property owner is Shell (Equilon Enterprises LLC). Shell's address for tax purposes is P.O. Box 4369, Houston, TX 77210. Shell's address for environmental correspondence is: Denis Brown, Shell Oil Products US, 20945 South Wilmington Avenue, Carson, California 90810.

Nearby Leaking Underground Fuel Tank (LUFT) Sites: According to the Geotracker database, several LUFT sites are present in the area near the site. These include:

- Former 76 Service Station 0843 at 1629 Webster Street, north of the site. According to the Geotracker database, this case is currently open due to a gasoline release, and is located downgradient of the subject Shell site.
- BP Oil Service Station #11104 at 1716 Webster Street, northeast of the site. Open case, gasoline, downgradient of the site.
- Chevron station at 1802 Webster Street, northeast of the site. Open case, gasoline, downgradient of the site.
- Devon Home Center, 1701 Webster Street, south of the site. Case closed on March 9, 1996, gasoline release, upgradient of the site.
- Ogden Service Corporation, 1700 Webster Street, southeast of the site. Case closed on June 24, 1992, waste oil/used oil release, upgradient of the site.
- Pacific Properties, 1628 Webster Street, southeast of the site. Case closed on August 28, 1996, gasoline release, upgradient of the site.
- Jiffy Lube, 1435 Webster Street, south of the site. Open case, upgradient of the site.

- Bank of America, 1528 Webster Street, south of the site. Case closed January 6, 1997, diesel release.
- Alameda Fire Station #2, 635 Pacific Avenue, north-northwest of the site. Case closed February 28, 1994, gasoline release.

Subsurface Geology: Boring logs from previous site investigations at the site and the nearby former 76 site indicate that the site is underlain by sand and silty sands to 21.5 feet below ground (fbg). Some prior reports identified the sediments as the Merritt Sand, an unconsolidated Pleistocene beach and near shore deposit. Review of the boring logs shows consistent poorly sorted sand to silty sand in the shallow water bearing zone.

Groundwater Depth: The historical depth to groundwater has previously ranged from approximately 4.5 fbg to 10.5 fbg. During August 2004 upgrade activities and emergency response actions, the depth to water in the tank backfill wells was measured at approximately 6 fbg before pumping of the wells.

Groundwater Flow Direction: Based on previous groundwater monitoring data at the site and the adjacent former 76 site, groundwater generally flows northerly to northeasterly. Review of the groundwater elevation contour maps indicates a consistent north to northeastern groundwater gradient.

#### PREVIOUS SITE INVESTIGATIONS AND ACTIVITIES

1987 Waste Oil Tank Removal: In June 1987, a 550-gallon underground waste oil tank that was originally installed in 1962 was removed from the site (Figure A). Blaine Tech Services (Blaine) of San Jose, California reported that the tank contained more than 77 holes and that hydrocarbon sheen was observed on the water in the excavation. Soil samples from 9.5 fbg in the excavation contained 133 parts per million (ppm) petroleum oil and grease (POG), 14 ppm total petroleum hydrocarbons (TPH), and 29 ppm 1,1,1-trichloroethane (TCA). A grab water sample collected from the water surface at about 12.5 fbg contained 244 ppm POG, 132 ppm TPH, 11 ppm TCA, and 59 ppm methyl chloride. These results were reported in Blaine's July 16, 1987 Field Sampling at Shell Station letter report, and Blaine's June 26, 1989 letter report summarizing previously unpublished notes.

1987 Well S-1 Installation: In September 1987, Pacific Environmental Group (PEG) of Santa Clara, California drilled one soil boring and installed groundwater monitoring well S-1 immediately down gradient of the former waste oil tank to assess whether hydrocarbons detected during the excavation were in groundwater (Figure A). TOG was detected in the boring from 3.5 and 15.5 fbg at a maximum concentration of 130 ppm at about 5 fbg. TPH as gasoline (TPHg) was detected at 50 ppm in soil at about 4 fbg. No halogenated volatile organic compounds

(HVOCs) were detected in soil or groundwater. These results were reported in PEG's October 23, 1987 letter report.

1990 Well MW-1 and MW-2 Installation: In April 1990, Weiss Associates (WA) installed wells MW-1 and MW-2 (Figure A). TPHg was detected at a maximum concentration in soils of 32 ppm in the boring for well MW-2, with the highest concentration detected below the water table. Unsaturated soil samples from the two borings contained less than 0.1 ppm benzene, ethylbenzene, toluene, and/or xylenes (BTEX). No POG or HVOCs were detected in soil from either boring. These results were reported in WA's July 6, 1990 Subsurface Investigation at Shell Service Station report.

1992-1993 Subsurface Investigation: On October 12 and 22, 1992 and February 19, 1993, WA installed eight soil borings, BH-C through BH-J, ranging from 12.5 to 21.5 fbg, and one monitoring well, MW-3 (Figure A). TPHg was detected at a maximum concentration in soil of 170 ppm from 10.5 fbg in boring BH-E. Benzene was detected at a maximum concentration in soil of 0.11 ppm from boring BH-E at 13.5 fbg. Grab groundwater samples from each boring resulted in a maximum TPHg concentration of 26,000 parts per billion (ppb), and a maximum benzene concentration of 6,900 ppb. These results were reported in WA's April 16, 1993 Subsurface Investigation Report.

1997 Pipeline and Dispenser Upgrades: On August 27, 1997, Cambria conducted soil sampling under the product piping and below dispenser locations on-site at approximately 5 fbg (Figure A). The highest concentrations in soil were found in sample D-2 at a depth of 5 fbg with 11,000 ppm TPHg, 6.3 ppm benzene, 7.8 ppm toluene, 96 ppm ethylbenzene and 440 ppm total xylenes. TPHg concentrations for the same location at a depth of 10-fbg decreased to 760 ppm. No MTBE was detected in the analytical samples. Cambria's October 8, 1997 Pipeline and Dispenser Soil Sampling Report presented the results.

1998 Waste Oil Remote Fill Pipe Removal: Paradiso Mechanical Inc., of San Leandro, California upgraded the site's waste oil system and removed the remote fill pipe associated with the waste oil tank. Cambria confirmed with ACHCSA regulator Rob Weston prior to the upgrade that no samples would be required as the pipeline was pressurized at above 20 psi and tested overnight, therefore requiring no sample to be taken. Cambria's December 1, 1998 1998 Upgrade Site Inspection Report presented the findings.

**Prior Groundwater Monitoring:** Groundwater was monitored and sampled generally quarterly prior to the destruction of the on-site monitoring wells in 1999 and subsequent case closure. Following initial sampling of well S-1 in September 1987, groundwater was monitored consistently between September 1989 and April 1998. During that time, the groundwater

gradient near the USTs was consistently north-easterly, ranging between north-northwest and northeast. Depth to water has ranged between approximately 4.5 and 10.5 fbg at the site.

**Prior Groundwater Remediation**: Groundwater remediation by oxygenation was implemented by using an air compressor to inject air into MW-2 from March 2, 1995 until March 18, 1996.

1999 Monitoring Well Abandonment and Case Closure: On January 15, 1999, Cambria oversaw the destruction of all four on-site monitoring wells to facilitate case closure with the ACHCSA. Cambria's February 26, 1999 Monitoring Well Abandonment Report documented the work. ACHCSA's March 15, 1999 Remedial Action Completion Certification and Fuel Leak Site Case Closure letters confirmed completion of site investigation and remedial action and granted UST case closure for the site. The case closure letter also documented that up to 100 ppm TPHg and 0.026 ppm benzene existed in soil, and up to 3,800 ppb TPHg and 190 ppb benzene existed in groundwater at the time of case closure.

March 2004 Well Survey: At Shell's request, Cambria performed a search of California Department of Water Resources (DWR) records for water producing wells within one-half mile of the site. Monitor, cathodic, test, abandoned or destroyed wells were not researched. No public water supply (PWS) wells were identified from DWR records or from the Geotracker database. Records of seven non-PWS wells were found.

The nearest identified well was located by address approximately 150 ft south of the site. The DWR well record was undated, and did not record the well's intended use. Cambria's site inspection indicated that the address is currently occupied by a café, and the visit did not indicate the presence of a well; therefore the well is presumed to be abandoned. The next closest wells, irrigation wells installed in 1977, are estimated to be about 525 and 800 feet northwest of the site, and drilled to 25 and 32 fbg, respectively. Since groundwater is known to flow generally northward, these wells are cross-gradient of the site, and are therefore unlikely to be affected by impacted groundwater from the site. All other identified wells are located more than 1,000 feet to the southeast, south, and southwest (upgradient) of the site and therefore would not likely be affected by impacted groundwater from the site.

August 2004 Fuel System Upgrades: S.J. Weaver Contracting, Inc. of Signal Hill, California upgraded the station's fuel dispensers, piping, and vapor recovery system during August 2004. Due to the high water table, groundwater from the UST excavation was pumped into a storage tank periodically, and was off-hauled as non-hazardous waste to Shell's Martinez refinery for disposal. Cambria collected soil samples beneath removed dispensers and piping on August 10, 2004. No benzene or MTBE was detected in any soil samples collected during these activities. TPHg was detected in one soil sample and xylenes were detected in two soil samples

from beneath fuel piping. The soil analytical results indicated that the highest residual hydrocarbon concentrations were located near the northwest corner of the kiosk building at sample location P-3-3'. Due to the reported presence of TPHg and xylenes in soil, Shell filed an August 11, 2004 Unauthorized Release Report Form with ACHCSA.

Following re-installation of one fuel pump into one 10,000 gallon UST, S.J. Weaver identified a product loss in one 10,000-gallon UST by manual tank gauging. S.J. Weaver personnel pumped water from the tank excavation into an open-top storage tank on-site. As fuel had leaked out of the damaged UST, the pumped water contained free product. The resulting gasoline vapor concentrations warranted site evacuation, cessation of work, and emergency response. As a result, Shell's contractors conducted emergency response and remediation beginning on August 19, 2004. On August 19, 2004, the remaining fuel in the damaged UST was removed by a tanker truck, and groundwater pumping from one of the tank backfill wells was initiated. Cambria oversaw emergency response efforts including on-going groundwater extraction from an on-site tank backfill well to recover product lost during the release. The product loss, emergency response activities, and emergency remediation efforts associated with this event are presented in further detail in Cambria's November 30, 2004 Soil & Groundwater Investigation Work Plan and Agency Response. As a result of the product loss, Shell filed an August 19, 2004 Unauthorized Release Report Form with ACHCSA. In addition, the Alameda Fire Department filed a report with the California Governor's Office of Emergency Services. ACHCSA subsequently opened a new environmental case for the site on September 3, 2004 (ACHSA RO# 2745).

August 2004 - Groundwater Extraction (GWE): Following the August 2004 product release at the site, Cambria supervised Philip Services Corporation's (PSC) groundwater extraction (GWE) from the northern-most tank backfill well (TBW-N). Initially, groundwater was extracted several times per day from August 19 until August 23, 2004. Then, daily GWE was conducted from August 24 until September 10, 2004. From September 13 through November 16, GWE was conducted weekly. Cambria gauged product thickness in well TBW-N, and estimated product recovery by measurement of product thickness in the tanker truck while separate phase hydrocarbons (SPH) were present. Cambria periodically collected grab groundwater samples from TBW-N for analysis for TPHg, BTEX, and MTBE. On November 1, 2004, Cambria switched the GWE contractor to Onyx Industrial Services. Beginning with the November 8, 2004 sample, all samples are also analyzed for four additional oxygenate compounds DIPE, TAME, TBA, and ETBE, EDB, 1, 2-DCA and ethanol. The sample analytical results and evaluation, and details regarding product removal and groundwater extraction are also presented in Cambria's November 30, 2004 Soil & Groundwater Investigation Work Plan and Agency Response. GWE was discontinued in February 2006.

November 2004 Soil and Groundwater Investigation: Between November 30 and December 3. 2004, Cambria installed eight soil borings (SB-1 through SB-8) at the site for the collection of soil and groundwater samples to further assess the impacts of the August 2004 product loss event. The borings were augered to approximately 15 fbg. Soil samples were collected from each boring at 5 fbg and at 6.5 fbg (capillary fringe). Grab groundwater samples were collected from shallow groundwater from each boring at between 6.5 to 8.0 fbg. Discrete (hydropunch-type) groundwater samples were also collected from the deeper groundwater as follows: At 10 fbg in only one boring, SB-1, and at 15 fbg from all borings except SB-3, which did not produce any deeper groundwater samples. The maximum concentrations in soil were 740 ppm of TPHg in SB-8-6.5', 1.5 ppm of MTBE in SB-4-6.5', and 53 ppm of ethanol in SB-8-6.5'. All of the other constituents were below the laboratory detection limits in soil. The maximum concentrations in the grab groundwater samples were 17,000 ppb of TPHg and 250 ppb of benzene in SB-8-W. 9,000 ppb of MTBE in SB-3-W, and 1,100 ppb of TBA in SB-4-W. None of the other constituents were reported from the grab groundwater samples. The maximum concentrations in the discrete groundwater samples were 920 ppb of TPHg in SB-7W-15', 5.3 ppb of benzene in SB-8W-15', 300 ppb of MTBE in SB-1W-10', 2,000 ppb TBA in SB-4W-15', and 4.0 ppb TAME in SB-4W-15'. None of the other fuel oxygenates or ethanol was detected in any of the discrete groundwater samples from 10 or 15 fbg. These results were reported in Cambria's February 18, 2005 Soil and Groundwater Investigation Report.

2005 Soil and Groundwater Investigations: Between October 31, 2005 through November 3, 2005 Cambria oversaw the installation of wells S-2 through S-7 and six CPT borings (SB-9 through SB-14). Proposed borings SB-15 and SB-16 were not installed on the adjacent offsite property because the site was under construction of a commercial development. The only hydrocarbon constituent detected in the soil samples was 0.0080 mg/kg of total xylenes in boring SB-13 at 5 fbg. No TPHg, benzene, MTBE, TBA, DIPE, ETBE, or TAME was detected in any of the soil samples. A total of 24 groundwater samples were analyzed from the six CPT borings (SB-9 through SB-14) collected from four different intervals in each boring. The analytical data tables are included in Appendix B, for reference. The maximum concentrations detected in the samples from 6-11 fbg were TPHg at 3 μg/l, MTBE at 4,800 μg/l, TBA at 1,300 μg/l, and TAME at 3.7 µg/l. No BTEX, DIPE, or ETBE were reported in samples from the first encountered groundwater. The maximum concentrations detected from 14-18 fbg were TPHg at 500 µg/l, MTBE at 9,200 μg/l, and TBA at 2,200 μg/l. No BTEX, DIPE, ETBE, or TAME were reported in samples from this interval. The maximum concentration in samples collected from 24-28 fbg was MTBE at 7,800 μg/l. No TPHg, BTEX, TBA, DIPE, ETBE, or TAME were reported in water samples from 24-28 fbg. And, the maximum concentrations from the deepest interval from 35-39 fbg contained TPHg at 70 µg/l, MTBE at 87 µg/l, and TBA at 68 µg/l. No BTEX, DIPE, ETBE, or TAME were reported in water samples from 35-39 fbg. The results from this

investigation were reported in Cambria's January 31, 2006 Soil and Groundwater Investigation Report.

Groundwater Monitoring – November 2004 - Ongoing: Tank backfill well north (TBW-N) has been monitored regularly since October 2004, including weekly during December 2004, and monthly ever since. Since the release of product from the UST system (August 2004), the maximum concentrations of TPHg, benzene, and MTBE in TBW-N were 160,000 μg/l TPHg and 31,000 μg/l benzene on December 1, 2004, and 3,300 μg/l of MTBE on December 15, 2004. Concentrations have been declining through the remedial efforts described above.

May 2006 – Risk Evaluation: Cambria performed an evaluation of the site data to assess whether the impacted soil and/or groundwater beneath the site poses any significant risk to human health or the environment. As reported in the May 17, 2006 Risk Evaluation and Work Plan, Cambria concluded that the residual impacts at this site pose very little risk to human health or the environment currently, or in the foreseeable future, particularly given that the property use is anticipated to remain a retail gasoline service station for the foreseeable future.

# Attachment B Permit

#### Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax: (510)782-1939

Application Approved on: 06/13/2006 By jamesy

Permits Issued: W2006-0582 to W2006-0584

Application Id:

1150215599887

Site Location:

1601 Webster St, Alameda, CA 94501

**Project Start Date:** 

07/17/2006

Applicant:

Cambria Environmental - Kevin Taylor 270 Perkins St., Sonoma, CA 95476

**Property Owner:** 

Shell Oil Products US 20945 Wilmington, Carson, CA 90810

Client:

\*\* same as Property Owner

**Total Due:** 

\$900.00

**Total Amount Paid:** 

\$900.00

Paver Name: Cambria Paid Bv: CHECK

Receipt Number: WR2006-0289

City of Project Site: Alameda

Completion Date:07/17/2006

Permits Valid from 07/17/2006 to 07/17/2006

Phone: 707-935-4850

Phone: 707-865-0251

**PAID IN FULL** 

Work Total: \$900.00

#### **Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 3 Wells Driller: Gregg Drilling - Lic #: 485165 - Method: auger

#### **Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2006- 0582	06/13/2006	10/15/2006	S-4B	10.00 in.	4.00 in.	14.00 ft	20.00 ft
W2006- 0583	06/13/2006	10/15/2006	S-8	10.00 in.	4.00 in.	3.00 ft	12.00 ft
W2006- 0584	06/13/2006	10/15/2006	S-9	10.00 in.	4.00 in.	3.00 ft	12.00 ft

#### **Specific Work Permit Conditions**

- 1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled. properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
- 3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.
- 4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the

#### **Alameda County Public Works Agency - Water Resources Well Permit**

Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

- 5. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
- 6. Minimum surface seal thickness is two inches of cement grout placed by tremie
- 7. Minimum seal depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.
- 8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 9. Applicant shall call 510-670-6633 to schedule an inspection at least 5 working days prior to starting.

# Attachment C Boring Logs

## **BORING/WELL LOG**

PAGE 1 OF 1



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

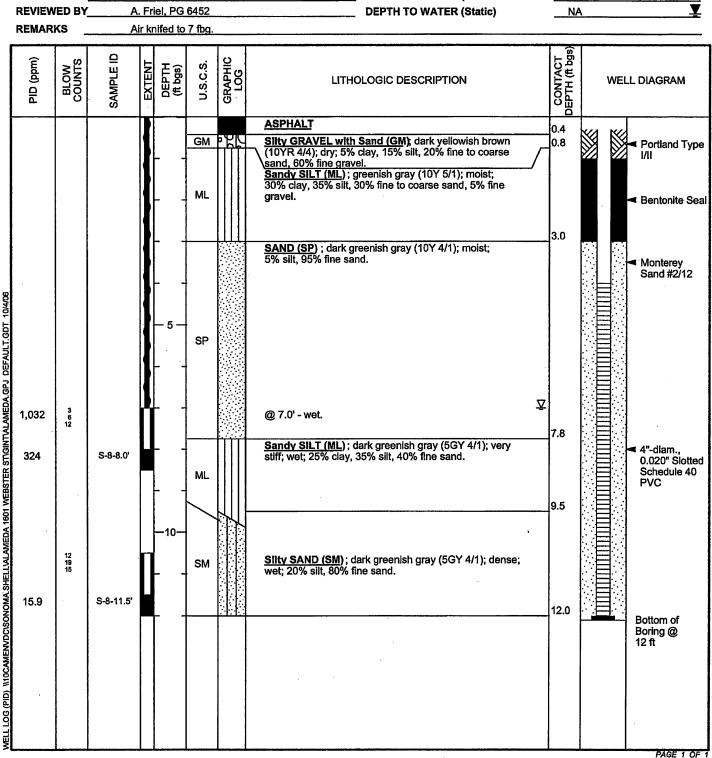
		i ax. o	10		170							
CLIENT	NAME	S	hell	Oil Pro	oducts	us		BORING/WELL NAME	S-4B/S-4B			
JOB/SIT	E NAN	IE S	hell	-brande	ed Sen	rice St	ation	DRILLING STARTED	17-Jul-06			
LOCATI	ON	10	601	Webst	er Stre	et, Ala	meda, California	DRILLING COMPLETED_	17-Jul-06			
PROJEC	T NUN	IBER 0	467			•		WELL DEVELOPMENT D	ATE (YIELD)	NA		
DRILLE	R	<u>G</u>	reg	g Drillir	ng			GROUND SURFACE ELE	VATION _	Not S	Surveyed	
DRILLIN	IG MET	THOD_H	ollo	w-stem	auger			TOP OF CASING ELEVA	TION NA			
BORING	DIAM	ETER 10	0"					SCREENED INTERVAL	15 to 20	ft bgs	1	
LOGGE	D BY	. J.	Ge	erbrand	t			DEPTH TO WATER (First	Encountere	d) 5.0	0 ft (17-Jul	-06) <u>\frac{\firec{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}{\fint}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\fir}{\fint}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}}}}}}{\frac{\figmed{\frac{\fir}}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\fir}}}}}{\frac{\frac{</u>
REVIEW	/ED BY	<u> </u>	. Fr	iel, PG	6452			DEPTH TO WATER (Stati	ic)	N	Α	<u> </u>
REMAR	KS _	Α	ir k	nifed to	5 fbg.							
<u> </u>	T	·	T			r				<u>@</u>	T	
Ē	_2<		5	Ιœ	ν <sub>ο</sub>	일				CONTACT DEPTH (ft bgs)	Ì	
PID (ppm)	Ò3	=	EXTEN	DEPTH (ft bgs)	U.S.C.S	\$8	LITHO	DLOGIC DESCRIPTION		ξĘ	WE	LL DIAGRAM
≘	BLOW	SAMPLE	껇	<u> </u>	Š	GRAPHIC LOG				ŚΕ		
		0)	L									<del>,</del>
					GM	っだて	ASPHALT Silty GRAVEL with	Sand (GM); yellowish brown		0.3 0.8	ka k	4
				┝╶┤	ML	Ш	(10YR 5/6); dry; 5%	clay, 25% silt, 25% fine to co	oarse /			
			I		IVIL		Sand, 45% fine grave	el. ellowish brown (10YR 5/4); r	moist:	2.0		
			b				30% clay, 35% silt, 3	30% fine to coarse sand, 5%	fine /	l		3
			4				\gravel.	ery dark grayish brown (10Yl	R 3/2):			
•			1		SM		dry; 15% clay, 20%	silt, 65% fine sand.	( O/L),			
			I	-	ł							
			ı	<b>-</b> 5 -					∇	5.0		
	2 3 4		П	L 3-			SAND (SP) ; brown	(10YR 4/3); mottling: brown	_			
		0.45.00	Ц				(10YR 5/3); loose; w	et; 5% silt, 95% fine sand.				D. 41-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
0.0		S-4B-6.0'	H					•				Portland Type
5			ŀ	-	·						$\bowtie$	1
:							•					
					SP			i e		ŀ	$\bowtie$	
				┡ -	-							
	6 12		П	10	ł		@ 10.0' - yellowish b	rown (10YR 5/4); dense.				
	12 19						,					
0.0		S-4B-11.0'										
			ļ	-						12.0		
	'		1		Ì							▼ Bentonite Seal
				L .		1						ţ
	}			.		1	·					✓ Monterey
	11		h	-15-	ł		@ 15 0' - hrown /10\	/R 5/3); medium dense.			l∷⊟∴	Sand #2/12
	11 13		П			İ		ir voroj, mediam dense.				,
0.0		S-4B-16.0'			İ							•
			Г									1
	İ				}							4"-diam.,
		1		<u> </u>	ł							0.020" Slotted
	13 15 16		П			l	@ 18.5' - dense.		·			Schedule 40 PVC
	16	1	Ц		Ī							
15.9		S-4B-19.5'		<b>—20</b> —		ŀ						Bottom of
3												Bottom of Boring @
					}	1					l	20 ft

### **BORING/WELL LOG**



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

CLIENT NAME	Shell Oil Products US	BORING/WELL NAME S-8/S-8	
JOB/SITE NAME	Shell-branded Service Station	DRILLING STARTED 17-Jul-06	
LOCATION	1601 Webster Street, Alameda, California	DRILLING COMPLETED 17-Jul-06	
PROJECT NUMBER	0467	WELL DEVELOPMENT DATE (YIELD	) NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION NA	
BORING DIAMETER	10"	SCREENED INTERVAL 4 to 12	ft bgs
LOGGED BY	J. Gerbrandt	<b>DEPTH TO WATER (First Encounter</b>	ed) 7.0 ft (17-Jul-06) 💆
REVIEWED BY	A. Friel, PG 6452	DEPTH TO WATER (Static)	NA ¥
REMARKS	Air knifed to 7 fbg.		







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

	CLIENT DOB/SIT	E NAM ON T NUM R G MET DIAMI D BY ED BY	E S 11 1BER 0 G HOD H ETER 1 J	hell 601 467 reg ollo 0" . Ge		er Stre g auger	ice St	ation meda, California	BORING/WELL NAME DRILLING STARTED DRILLING COMPLETED WELL DEVELOPMENT D GROUND SURFACE ELE TOP OF CASING ELEVA SCREENED INTERVAL DEPTH TO WATER (Firs DEPTH TO WATER (State	17-Jul-06 17-Jul-06 DATE (YIELD) EVATION TION NA 4 to 12	Not S ft bgs d) 10.		-06) <u><u>V</u></u>
	PID (ppm)	BLOW	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	ЦТНС	DLOGIC DESCRIPTION		CONTACT DEPTH (ft bgs)	WEL	L DIAGRAM
ALAMEDA 1601 WEBSTER STGINTALAMEDA,GPJ DEFAULT.GDT 10/4/06	0.0	1 2 5 6 9 11	S-9-5.0'			SM SP		ASPHALT  Silty GRAVEL with (10YR 5/6); dry; 5% sand, 45% fine grave Sandy SiLT (ML); y 30% clay, 35% silt, 3 gravel.  Silty SAND (SM); ve dry; 15% clay, 20% s  @ 3.0 - 5.0' - bricks ( loose; dry; 5% silt, 8 gravel.  Silty SAND (SM); d	ellowish brown (10YR 5/4); 10% fine to coarse sand, 5% ery dark grayish brown (10Y silt, 65% fine sand.	moist; ofine  (R 3/2);	0.3 0.8 2.0		<ul> <li>✓ Portland Type I/II</li> <li>✓ Bentonite Seal</li> <li>✓ Monterey Sand #2/12</li> <li>✓ 4"-diam., 0.020" Slotted Schedule 40 PVC</li> </ul>
L LOG (PID) \\10CAMENVDC\SONOMA\SHELL\ALAMEDA\1601\WEBSTER\	0.0		S-9-11.5'						,		12.0		Bottom of Boring @ 12 ft

# Attachment D Waste Disposal Manifest

	9999 South Austin Read P.O. Box 6336 DATE  Warteca, CA 95336 Stockton, CA 95206  Landfill: (209) 982-4298 Fax (209) 982-1009 Main Office: (209) 466-4482-  Resource Recovery: (209) 982-4298 Fax: (209) 465-0631 TRUCK LIC.#	160
	CUSTOMER NO. 6600 TRUCK NO. TRAILER LIC. #_	
·	BILL TO: S/Jell	
		<del>-</del> 
	SIZE YDS. DESCRIPTION NOTES	
	© HEFUSE 2 C420	GROSS
	DASH 2/ /DO	TARE
•	N Carry, Co soil. 4520	NET
	O'STOCKPILE 226	TONS
		^AM
	Signed	

•

•

## ☐ Keller CanyonSenitary Landfill

901 Bailey Road Pittsburg, CA 94565 Phone (925) 458-9800 Fax (925) 458-9891

## ☐ Ox MountainSanitary Landfill

12310 San Mateo Road Half Moon Bay, CA 94019 Phone (650) 726-1819 Fax (650) 726-9183

# ☐ Newby IslandSanitary Landfill

1601 Dixon Landing Road Milpitas, CA 95035 Phone (408) 945-2800 Fax (408) 262-2871

## ☐ Forward ☐ Landfill

9999 S. Austin Road Manteca, CA 95336 Phone (209) 982-4298 Fax (209) 982-1009

#### **NON-HAZARDOUS WASTE MANIFEST**

OF MEDITOR		<del></del>			<del> </del>		
GENERATOR Equilon Enterprises, LLC		1	WA:	STE ACC	EPTANCI	E NO.	
MAILING ADDRESS		<del> </del>					
P.O. Box 7869		1		_	#	6600	
CITY, STATE, ZIP		REQUIR	ED PERS	SONAL PE		E EQUIPM	ENT
Burbank, CA 91510		GLOVE	S GOO	GLES D	RESPIRAT	OR DHA	RD HAT
PHONE		J				O., G.,	
707-865-0251 CONTACT PERSON		O TY-VEK	O OTH	ER			
Denis Brown		SPECIAL	HANDLIN	G PROCE	DURES:		
SIGNATURE OF AUTHORIZED AGENT / TITLE	DATE	$\exists$					
*							
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is a waste as defined by 40 CFR Part 281 or title 22 of the California code of regulations, described, classified and packaged, and is in proper condition for transportation a corregulations; AND, if the waste is a treatment residue of a previously restricted his subject to the Land Disposal Restrictions, I certify and warrant that the waste has bee accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous of 40 CFR Part 261.	has been properly rding to applicable	RECEIVI	NG FACILI	TY		: 	
WASTE TYPE:		<b> </b>					
☐ DISPOSAL ☐ SLUDGE ☐ CONSTRUCTION ☐ WOOD ☐ DEBRIS ☐ OTHER ☐ SPECIAL WASTE							1.7.
GENERATING FACILITY		1					
1601 Webster Street, Alameda, CA		RIPR # 54619 SAP# N/A Incident# 97564701 WIC # N/A					
TRANSPORTER		NOTES:	VEHICLE L	ICENSE NU	MBER	TRUCK NUM	MBER
Manley & Sons Trucking, Inc.			17	4	·	MZ	
ADDRESS			ζ/	66002		716	
8896 Eider Creek Rd. CITY, STATE, ZIP		_					
		4					
Sacramento, CA 95828 PHONE		END D	I IMP	POTT	OM DUMP	TOAN	CEED
(916) 381-6864		LIND	I	BOTT		INAN	SFER
SIGNATURE OF AUTHORIZED AGENT OR DRIVER	DATE	ROLL-C	FF(S)	FLAT-BI			RUMS
*	9/4/06		<del></del>				
		CUBIC YA	RDS				
I hereby certify that the above named material		CODIO II		gal drun	ns		
accepted and to the best of my knowledge the	foregoing	DISPOSAL	METHOD:	(TO BE C	OMPLETED	BY LANDFILL)	<del></del>
is true and accurate.			,		POSE	OTHE	
HEMARKS		D SOIL					<del></del> ;
HEMARKS ,	·	CONST	RUCTION			·	;
		CONST DEBRI	S RIABLE				······································
\$	DATE	CONST DEBRIS	RIABLE TOS				
FACILITY TICKET NUMBER	DATE OG	CONST DEBRI DEBRI D NON-F ASBES	RIABLE TOS				,

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

## Attachment E Survey Data

August 21, 2006 Project No.: 2640-04B

Ana Friel Cambria Environmental 270 Perkins St. Sonoma, Ca. 95476

Subject:

Monitoring Well Survey Shell Service Station 1601 Webster Street Alameda, CA

#### Dear Ana:

This is to confirm that we have proceeded at your request to survey the ground water monitoring wells located at the above referenced location. The survey was performed on August 17, 2006. The benchmark for this survey was a brass disk marked WEB PAC 1947, in a monument well at the northwest corner of Webster Street and Pacific Avenue. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83).

Benchmark Elevation = 16.81 feet (NAVD 88).

<u>Latitude</u>	<u>Longitude</u>	Northing	Easting	Elev.	Desc.
37.7757289	-122.2768752	2109797.51	6048147.57	19.10 18.78	RIM S-4B TOC S-4B
37.7754365	-122.2769449	2109691.46	6048125.40	19.90 19.44	RIM S-7 TOC S-7
37.7754829	-122.2770621	2109708.98	6048091.85	20.50 20.11 19.97	RIM S-8 TOC S-8 RIM S-9
37.7753809	-122.2769623	2109671.29	6048119.99	19.60	TOC S-9

Sincerely,

Virgil D. Chavez, PLS 6323

# Attachment F Certified Analytical Reports



3 August, 2006

Ana Friel Cambria Environmental - Sonoma 270 Perkins Street Sonoma, CA 95476

RE: Shell 1601 Webster St. Alameda

Work Order: S607287

Enclosed are the results of analyses for samples received by the laboratory on 07/19/06 10:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sylvia Krenn Project Manager

CA ELAP Certificate # 2630





Cambria Environmental - SonomaProjectShell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-8-8.0'	S607287-01	Soil	07/17/06 09:25	07/19/06 10:05
S-8-11.5'	S607287-02	Soil	07/17/06 09:50	07/19/06 10:05
S-9-5.0'	S607287-03	Soil	07/17/06 10:55	07/19/06 10:05
S-9-11.5'	S607287-04	Soil	07/17/06 11:10	07/19/06 10:05
S-4B-6.0'	S607287-05	Soil	07/17/06 13:25	07/19/06 10:05
S-4B-11.0'	S607287-06	Soil	07/17/06 13:35	07/19/06 10:05
S-4B-16.0'	S607287-07	Soil	07/17/06 13:45	07/19/06 10:05
S-4B-19.5'	S607287-08	Soil	07/17/06 13:55	07/19/06 10:05



Cambria Environmental - SonomaProject:Shell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

### Gasoline\BTEX\Oxygenates by EPA method 8260B TestAmerica - Sacramento, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-8-8.0' (S607287-01) Soil Sampled: 0	7/17/06 09:25	Received: 07	/19/06 10	:05					
Tert-butyl alcohol	ND	2.5	mg/kg	50	6070300	07/25/06	07/26/06	EPA 8260B	
Methyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.25	"	"	"	"	"	"	
Benzene	1.0	0.25	"	"	"	"	"	"	
Ethylbenzene	15	0.25	"	"	"	"	"	"	E
Toluene	ND	0.25	"	"	"	"	"	"	
Xylenes (total)	64	0.50	"	"	"	"	"	"	E
Gasoline Range Organics (C4-C12)	1500	50	"	"	"	"	"	"	E
Surrogate: 1,2-DCA-d4		88 %	60-	140	"	"	"	"	
Surrogate: Toluene-d8		119 %	60-	140	"	"	"	"	
Surrogate: 4-BFB		99 %	60-	140	"	"	"	"	
S-8-8.0' (S607287-01RE1) Soil Sample	ed: 07/17/06 09	:25 Received	d: 07/19/0	6 10:05					
Ethylbenzene	90	5.0	mg/kg	1000	6070334	07/25/06	07/28/06	EPA 8260B	
Xylenes (total)	310	10	"	"	"	"	"	"	E
Gasoline Range Organics (C4-C12)	3700	1000	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		93 %	60-	140	"	"	"	"	
Surrogate: Toluene-d8		113 %	60-	140	"	"	"	"	
Surrogate: 4-BFB		99 %	60-	140	"	"	"	"	
S-8-11.5' (S607287-02) Soil Sampled:	07/17/06 09:50	Received: 0	7/19/06 1	0:05					
Tert-butyl alcohol	ND	2.5	mg/kg	50	6070334	07/25/06	07/27/06	EPA 8260B	
Methyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.25	"	"	"	"	"	"	
Benzene	ND	0.25	"	"	"	"	"	"	
Ethylbenzene	0.89	0.25	"	"	"	"	"	"	
m 1	ND	0.25	"	"	"	"	"	"	
Toluene									
Xylenes (total)	2.5	0.50	"	"	"	"	"	"	
		0.50 50	"	"	"	"	"	"	
Xylenes (total)	2.5		"						

TestAmerica - Sacramento, CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-8-11.5' (S607287-02) Soil	Sampled: 07/17/06 09:50	Received: 0	7/19/06 10	:05					
Surrogate: 4-BFB		100 %	60-1	40	6070334	07/25/06	07/27/06	EPA 8260B	
S-9-5.0' (S607287-03) Soil	Sampled: 07/17/06 10:55	Received: 07	/19/06 10:0	05					
Tert-butyl alcohol	ND	2.5	mg/kg	50	6070300	07/25/06	07/26/06	EPA 8260B	
Methyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.25	"	"	"	"	"	"	
Benzene	ND	0.25	"	"	"	"	"	"	
Ethylbenzene	2.0	0.25	"	"	"	"	"	"	
Toluene	ND	0.25	"	"	"	"	"	"	
Xylenes (total)	3.5	0.50	"	"	"	"	"	"	
<b>Gasoline Range Organics (C</b>	C4-C12) 110	50	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		92 %	60-1	40	"	"	"	"	
Surrogate: Toluene-d8		106 %	60-1	40	"	"	"	"	
Surrogate: 4-BFB		99 %	60-1	40	"	"	"	"	
S-9-11.5' (S607287-04) Soil	Sampled: 07/17/06 11:10	Received: 0	7/19/06 10	:05					
Tert-butyl alcohol	ND	0.050	mg/kg	1	6070250	07/21/06	07/22/06	EPA 8260B	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.010	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.010	0.010	"	"	"	"	"	"	
Gasoline Range Organics (C4		1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		97 %	60-1	40	"	"	"	n .	
Surrogate: Toluene-d8		104 %	60-1	40	"	"	"	"	
Surrogate: 4-BFB		97 %	60-1	40	"	"	"	"	



Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-4B-6.0' (S607287-05) Soil S	Sampled: 07/17/06 13:25	Received: 0	7/19/06 1	0:05					
Tert-butyl alcohol	ND	0.050	mg/kg	1	6070250	07/21/06	07/22/06	EPA 8260B	_
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.010	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Organics (C4-C	12) ND	1.0	"	"	"	"	"	н	
Surrogate: 1,2-DCA-d4		94 %	60-	140	"	"	"	"	
Surrogate: Toluene-d8		108 %	60-	140	"	"	"	"	
Surrogate: 4-BFB		95 %	60-	140	"	"	"	"	
S-4B-11.0' (S607287-06) Soil	Sampled: 07/17/06 13:35	Received:	07/19/06	10:05					
Tert-butyl alcohol	0.56	0.050	mg/kg	1	6070250	07/21/06	07/22/06	EPA 8260B	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.010	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Organics (C4-C	12) ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	·	103 %	60-	140	"	"	"	"	
Surroguie. 1,2-DC/1-u+		105 /0	00-	170					
Surrogate: Toluene-d8		105 %	60-		"	"	"	n .	



Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-4B-16.0' (S607287-07) Soil	Sampled: 07/17/06 13:45	Received:	07/19/06 1	0:05					
Tert-butyl alcohol	0.30	0.050	mg/kg	1	6070251	07/21/06	07/23/06	EPA 8260B	CC02
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.010	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Organics (C4-C	(12) ND	1.0	"	"	"	"	"	II .	
Surrogate: 1,2-DCA-d4		100 %	60-14	40	"	"	"	"	
Surrogate: Toluene-d8		104 %	60-14	40	"	"	"	"	
Surrogate: 4-BFB		96 %	60-14	40	"	"	"	"	
S-4B-19.5' (S607287-08) Soil	Sampled: 07/17/06 13:55	Received:	07/19/06 1	0:05					
Tert-butyl alcohol	0.13	0.050	mg/kg	1	6070251	07/21/06	07/23/06	EPA 8260B	CC02
Methyl tert-butyl ether	0.28	0.0050	"	"	"	"	"	"	E
Di-isopropyl ether	ND	0.010	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Organics (C4-C	(12) ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		97 %	60-14	40	"	"	"	"	
Surrogate: Toluene-d8		104 %	60-14	40	"	"	"	"	
Surrogate: 4-BFB		97 %	60-14	40	"	"	"	"	





Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-4B-19.5' (S607287-08RE1) Soil	Sampled: 07/17/06 13:5	5 Recei	ved: 07/19/0	6 10:05	5				
Methyl tert-butyl ether	0.31	0.025	mg/kg	5	6070321	07/27/06	07/27/06	EPA 8260B	
Surrogate: 1,2-DCA-d4		101 %	60-14	0	"	"	"	"	
Surrogate: Toluene-d8		104 %	60-14	0	"	"	"	"	
Surrogate: 4-BFB		107 %	60-14	0	"	"	"	"	



Batch 6070250 - EPA 5030B [P/T] / EPA 8260B

Cambria Environmental - SonomaProject:Shell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

### Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (6070250-BLK1)				Prepared & Ana	alyzed: 07/21/	06
Ethanol	ND	0.20	mg/kg			
Tert-butyl alcohol	ND	0.050	"			
Methyl tert-butyl ether	ND	0.0050	"			
Di-isopropyl ether	ND	0.010	"			
Ethyl tert-butyl ether	ND	0.0050	"			
Tert-amyl methyl ether	ND	0.0050	"			
,2-Dichloroethane	ND	0.0050	"			
,2-Dibromoethane (EDB)	ND	0.0050	"			
Benzene	ND	0.0050	"			
Ethylbenzene	ND	0.0050	"			
Toluene	ND	0.0050	"			
Xylenes (total)	ND	0.010	"			
Gasoline Range Organics (C4-C12)	ND	1.0	"			
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100	98	60-140
Surrogate: Toluene-d8	0.0106		"	0.0100	106	60-140
Surrogate: 4-BFB	0.00986		"	0.0100	99	60-140
Laboratory Control Sample (607025	50-BS1)			Prepared & Ana	alyzed: 07/21/	06
Methyl tert-butyl ether	0.0434	0.0050	mg/kg	0.0500	87	60-140
Benzene	0.0533	0.0050	"	0.0500	107	70-130
Toluene	0.0558	0.0050	"	0.0500	112	70-130
Surrogate: 1,2-DCA-d4	0.00906		"	0.0100	91	60-140
Surrogate: Toluene-d8	0.0102		"	0.0100	102	60-140
Surrogate: 4-BFB	0.00972		"	0.0100	97	60-140
Laboratory Control Sample (607025	50-BS2)			Prepared & Ana	alyzed: 07/21/	06
Toluene	0.175	0.0050	mg/kg	0.188	93	70-130
Gasoline Range Organics (C4-C12)	2.75	1.0	"	2.20	125	70-130
Surrogate: 1,2-DCA-d4	0.00941		"	0.0100	94	60-140
	0.0107		"	0.0100	107	60-140
Surrogate: Toluene-d8	0.0107			0.0100	107	00-140

RPD



Cambria Environmental - SonomaProject:Shell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

Reporting

Spike

Source

%REC

1		Reporting		Spike	Bource		/OKLC		KI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6070250 - EPA 5030B [P/T] /	EPA 8260B									
Matrix Spike (6070250-MS1)	Source: S6	07292-02RF	E1	Prepared	& Analyze	ed: 07/21/	06			
Methyl tert-butyl ether	0.0404	0.0050	mg/kg	0.0500	ND	81	60-140			
Benzene	0.0489	0.0050	"	0.0500	ND	98	60-140			
Toluene	0.0528	0.0050	"	0.0500	0.00259	100	60-140			
Surrogate: 1,2-DCA-d4	0.00961		"	0.0100		96	60-140			
Surrogate: Toluene-d8	0.0102		"	0.0100		102	60-140			
Surrogate: 4-BFB	0.0100		"	0.0100		100	60-140			
Matrix Spike (6070250-MS2)	Source: S6	607292-01RF	E1	Prepared	& Analyze	d: 07/21/	06			
Methyl tert-butyl ether	0.0233	0.0050	mg/kg	0.0520	ND	45	60-140			QC02
Benzene	0.0226	0.0050	"	0.0388	ND	58	60-140			QC02
Toluene	0.173	0.0050	"	0.188	ND	92	60-140			
Gasoline Range Organics (C4-C12)	2.44	1.0	"	2.20	ND	111	60-140			
Surrogate: 1,2-DCA-d4	0.00955		"	0.0100		96	60-140			
Surrogate: Toluene-d8	0.0110		"	0.0100		110	60-140			
Surrogate: 4-BFB	0.00983		"	0.0100		98	60-140			
Matrix Spike Dup (6070250-MSD1)	Source: S6	607292-02RF	E <b>1</b>	Prepared	& Analyze	d: 07/21/	06			
Methyl tert-butyl ether	0.0385	0.0050	mg/kg	0.0500	ND	77	60-140	5	25	
Benzene	0.0461	0.0050	"	0.0500	ND	92	60-140	6	25	
Toluene	0.0492	0.0050	"	0.0500	0.00259	93	60-140	7	25	
Surrogate: 1,2-DCA-d4	0.00965		"	0.0100		97	60-140			
Surrogate: Toluene-d8	0.0105		"	0.0100		105	60-140			
Surrogate: 4-BFB	0.0102		"	0.0100		102	60-140			
Matrix Spike Dup (6070250-MSD2)	Source: S6	07292-01RE	E1	Prepared	& Analyze	ed: 07/21/	06			
Methyl tert-butyl ether	0.0251	0.0050	mg/kg	0.0520	ND	48	60-140	7	25	QC02
Benzene	0.0215	0.0050	"	0.0388	ND	55	60-140	5	25	QC02
Toluene	0.157	0.0050	"	0.188	ND	84	60-140	10	25	
Gasoline Range Organics (C4-C12)	2.18	1.0	"	2.20	ND	99	60-140	11	25	
Surrogate: 1,2-DCA-d4	0.00937		"	0.0100		94	60-140			
Surrogate: Toluene-d8	0.0108		"	0.0100		108	60-140			
Surrogate: 4-BFB	0.00972			0.0100		97	60-140			



# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (6070251-BLK1)				Prepared & Ana	alyzed: 07/21/	/06	
Ethanol	ND	0.20	mg/kg				
Tert-butyl alcohol	ND	0.050	"				CC02
Methyl tert-butyl ether	ND	0.0050	"				
Di-isopropyl ether	ND	0.010	"				
Ethyl tert-butyl ether	ND	0.0050	"				
Tert-amyl methyl ether	ND	0.0050	"				
1,2-Dichloroethane	ND	0.0050	"				
1,2-Dibromoethane (EDB)	ND	0.0050	"				
Benzene	ND	0.0050	"				
Ethylbenzene	ND	0.0050	"				
Toluene	ND	0.0050	"				
Xylenes (total)	ND	0.010	"				
Gasoline Range Organics (C4-C12)	ND	1.0	"				
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100	98	60-140	
Surrogate: Toluene-d8	0.0106		"	0.0100	106	60-140	
Surrogate: 4-BFB	0.00986		"	0.0100	99	60-140	
Blank (6070251-BLK2)				Prepared & Ana	alyzed: 07/25/	/06	
Ethanol	ND	0.20	mg/kg				
Tert-butyl alcohol	ND	0.050	"				
Methyl tert-butyl ether	ND	0.0050	"				
Di-isopropyl ether	ND	0.010	"				
Ethyl tert-butyl ether	ND	0.0050	"				
Tert-amyl methyl ether	ND	0.0050	"				
1,2-Dichloroethane	ND	0.0050	"				
1,2-Dibromoethane (EDB)	ND	0.0050	"				
Benzene	ND	0.0050	"				
Ethylbenzene	ND	0.0050	"				
Toluene	ND	0.0050	"				
Xylenes (total)	ND	0.010	"				
Gasoline Range Organics (C4-C12)	ND	1.0	"				
Surrogate: 1,2-DCA-d4	0.0102		"	0.0100	102	60-140	
Surrogate: Toluene-d8	0.0106		"	0.0100	106	60-140	
Surrogate: 4-BFB	0.00979		"	0.0100	98	60-140	

TestAmerica - Sacramento, CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.



# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

											1
		Reporting		Spike	Source		%REC		RPD		İ
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	ĺ

Blank (6070251-BLK3)				Prepared & Ana	lyzed: 07/26/	07/26/06 QB02					
Ethanol	0.287	0.20	mg/kg		•		QB02				
Tert-butyl alcohol	ND	0.050	"								
Methyl tert-butyl ether	ND	0.0050	"								
Di-isopropyl ether	ND	0.010	"								
Ethyl tert-butyl ether	ND	0.0050	"								
Tert-amyl methyl ether	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dibromoethane (EDB)	ND	0.0050	"								
Benzene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Toluene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
Gasoline Range Organics (C4-C12)	ND	1.0	"								
Surrogate: 1,2-DCA-d4	0.00929		"	0.0100	93	60-140					
Surrogate: Toluene-d8	0.0111		"	0.0100	111	60-140					
Surrogate: 4-BFB	0.00971		"	0.0100	97	60-140					
<b>Laboratory Control Sample (6070251</b>	·BS1)			Prepared & Ana	lyzed: 07/21/	06					
Toluene	0.175	0.0050	mg/kg	0.188	93	70-130					
Gasoline Range Organics (C4-C12)	2.75	1.0	"	2.20	125	70-130					
Surrogate: 1,2-DCA-d4	0.00941		"	0.0100	94	60-140					
Surrogate: Toluene-d8	0.0107		"	0.0100	107	60-140					
Surrogate: 4-BFB	0.00999		"	0.0100	100	60-140					
<b>Laboratory Control Sample (6070251</b>	-BS2)			Prepared & Ana	lyzed: 07/21/	06					
Methyl tert-butyl ether	0.0434	0.0050	mg/kg	0.0500	87	60-140					
Benzene	0.0533	0.0050	"	0.0500	107	70-130					
Toluene	0.0558	0.0050	"	0.0500	112	70-130					
Surrogate: 1,2-DCA-d4	0.00906		"	0.0100	91	60-140					
Surrogate: Toluene-d8	0.0102		"	0.0100	102	60-140					
Surrogate: 4-BFB	0.00972		"	0.0100	97	60-140					

RPD



Cambria Environmental - SonomaProjectShell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

### Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6070251 - EPA 5030B [P/T	T] / EPA 8260B									
Laboratory Control Sample (607025)	1-BS3)			Prepared &	& Analyz	ed: 07/25/0	06			
Methyl tert-butyl ether	0.0354	0.0050	mg/kg	0.0520		68	60-140			
Toluene	0.178	0.0050	"	0.188		95	70-130			
Gasoline Range Organics (C4-C12)	2.04	1.0	"	2.20		93	70-130			
Surrogate: 1,2-DCA-d4	0.00973		"	0.0100		97	60-140			
Surrogate: Toluene-d8	0.0109		"	0.0100		109	60-140			
Surrogate: 4-BFB	0.0100		"	0.0100		100	60-140			
Laboratory Control Sample (607025)	1-BS4)			Prepared &	& Analyz	ed: 07/25/0	06			
Methyl tert-butyl ether	0.0421	0.0050	mg/kg	0.0500	-	84	60-140			
Benzene	0.0521	0.0050	"	0.0500		104	70-130			
Toluene	0.0531	0.0050	"	0.0500		106	70-130			
Surrogate: 1,2-DCA-d4	0.00960		"	0.0100		96	60-140			
Surrogate: Toluene-d8	0.0106		"	0.0100		106	60-140			
Surrogate: 4-BFB	0.00982		"	0.0100		98	60-140			
Laboratory Control Sample (607025)	1-BS5)			Prepared a	& Analyz	ed: 07/26/0	06			
Toluene	0.141	0.0050	mg/kg	0.188		75	70-130			
Gasoline Range Organics (C4-C12)	1.86	1.0	"	2.20		85	70-130			
Surrogate: 1,2-DCA-d4	0.00892		"	0.0100		89	60-140			
Surrogate: Toluene-d8	0.0111		"	0.0100		111	60-140			
Surrogate: 4-BFB	0.0102		"	0.0100		102	60-140			
Laboratory Control Sample (607025)	1-BS6)			Prepared &	& Analyz	ed: 07/26/0	06			
Methyl tert-butyl ether	0.0355	0.0050	mg/kg	0.0500	·	71	60-140			
Benzene	0.0415	0.0050	"	0.0500		83	70-130			
Toluene	0.0432	0.0050	"	0.0500		86	70-130			
Surrogate: 1,2-DCA-d4	0.00945		"	0.0100		94	60-140			
Surrogate: Toluene-d8	0.0106		"	0.0100		106	60-140			
Surrogate: 4-BFB	0.0101		"	0.0100		101	60-140			

%REC

RPD



Cambria Environmental - SonomaProjectShell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

Reporting

Spike

Source

%REC

1		Reporting		Spike	Source		/OKEC		KI D	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6070251 - EPA 5030B [P/T] /	EPA 8260B									
Matrix Spike (6070251-MS1)	Source: S6	607322-21		Prepared &	& Analyze	ed: 07/26/	06			
Methyl tert-butyl ether	0.0345	0.0050	mg/kg	0.0520	ND	66	60-140			
Benzene	0.0252	0.0050	"	0.0388	ND	65	60-140			
Toluene	0.155	0.0050	"	0.188	ND	82	60-140			
Gasoline Range Organics (C4-C12)	1.86	1.0	"	2.20	ND	85	60-140			
Surrogate: 1,2-DCA-d4	0.00791		"	0.0100		79	60-140			
Surrogate: Toluene-d8	0.0112		"	0.0100		112	60-140			
Surrogate: 4-BFB	0.0102		"	0.0100		102	60-140			
Matrix Spike (6070251-MS2)	Source: S6	07322-21		Prepared &	& Analyze	ed: 07/26/	06			
Methyl tert-butyl ether	0.0355	0.0050	mg/kg	0.0500	ND	71	60-140			
Benzene	0.0464	0.0050	"	0.0500	ND	93	60-140			
Toluene	0.0470	0.0050	"	0.0500	ND	94	60-140			
Surrogate: 1,2-DCA-d4	0.0101		"	0.0100		101	60-140			
Surrogate: Toluene-d8	0.0105		"	0.0100		105	60-140			
Surrogate: 4-BFB	0.00994		"	0.0100		99	60-140			
Matrix Spike Dup (6070251-MSD1)	Source: S6	07322-21		Prepared a	& Analyze	ed: 07/26/	06			
Methyl tert-butyl ether	0.0293	0.0050	mg/kg	0.0520	ND	56	60-140	16	25	QM0
Benzene	0.0215	0.0050	"	0.0388	ND	55	60-140	16	25	QM0
Toluene	0.144	0.0050	"	0.188	ND	77	60-140	7	25	
Gasoline Range Organics (C4-C12)	1.70	1.0	"	2.20	ND	77	60-140	9	25	
Surrogate: 1,2-DCA-d4	0.00952		"	0.0100		95	60-140			
Surrogate: Toluene-d8	0.0110		"	0.0100		110	60-140			
Surrogate: 4-BFB	0.0100		"	0.0100		100	60-140			
Matrix Spike Dup (6070251-MSD2)	Source: S6	607322-21		Prepared &	& Analyze	ed: 07/26/	06			
Methyl tert-butyl ether	0.0410	0.0050	mg/kg	0.0500	ND	82	60-140	14	25	
Benzene	0.0425	0.0050	"	0.0500	ND	85	60-140	9	25	
Toluene	0.0428	0.0050	"	0.0500	ND	86	60-140	9	25	
Surrogate: 1,2-DCA-d4	0.0100		"	0.0100		100	60-140			
Surrogate: Toluene-d8	0.0102		"	0.0100		102	60-140			



# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 6070300 - EPA 5030B [Me	OH] / EPA 8260E	3					
Blank (6070300-BLK1)				Prepared: 07/25	5/06 Analyzed	1: 07/26/06	
Ethanol	ND	10	mg/kg				
Tert-butyl alcohol	ND	2.5	"				
Methyl tert-butyl ether	ND	0.25	"				
Di-isopropyl ether	ND	0.50	"				
Ethyl tert-butyl ether	ND	0.25	"				
Tert-amyl methyl ether	ND	0.25	"				
1,2-Dichloroethane	ND	0.25	"				
1,2-Dibromoethane (EDB)	ND	0.25	"				
Benzene	ND	0.25	"				
Ethylbenzene	ND	0.25	"				
Toluene	ND	0.25	"				
Xylenes (total)	ND	0.50	"				
Gasoline Range Organics (C4-C12)	ND	50	"				
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100	98	60-140	
Surrogate: Toluene-d8	0.0104		"	0.0100	104	60-140	
Surrogate: 4-BFB	0.00977		"	0.0100	98	60-140	
<b>Laboratory Control Sample (607030</b>	0-BS1)			Prepared & Ana	alyzed: 07/25/	06	
Gasoline Range Organics (C4-C12)	2.04	1.0	mg/kg	2.20	93	70-130	
Surrogate: 1,2-DCA-d4	0.00973		"	0.0100	97	60-140	
Surrogate: Toluene-d8	0.0109		"	0.0100	109	60-140	
Surrogate: 4-BFB	0.0100		"	0.0100	100	60-140	
<b>Laboratory Control Sample (607030</b>	0-BS2)			Prepared & Ana	alyzed: 07/25/	06	
Methyl tert-butyl ether	0.0421	0.0050	mg/kg	0.0500	84	60-140	
Benzene	0.0521	0.0050	"	0.0500	104	70-130	
Toluene	0.0531	0.0050	"	0.0500	106	70-130	
Surrogate: 1,2-DCA-d4	0.00960		"	0.0100	96	60-140	
Surrogate: Toluene-d8	0.0106		"	0.0100	106	60-140	
Surrogate: 4-BFB	0.00982		"	0.0100	98	60-140	



# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070300 - EPA 5030B [Me	OH] / EPA 8260	В								
Laboratory Control Sample Dup (60'				Prepared &	& Analyze	ed: 07/25/	06			
Gasoline Range Organics (C4-C12)	1.61	1.0	mg/kg	2.20		73	70-130	24	25	
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100		98	60-140			
Surrogate: Toluene-d8	0.0108		"	0.0100		108	60-140			
Surrogate: 4-BFB	0.00986		"	0.0100		99	60-140			
Batch 6070321 - EPA 5030B [P/T	] / EPA 8260B									
Blank (6070321-BLK1)				Prepared:	07/27/06	Analyzed	1: 07/28/06			
Ethanol	ND	0.20	mg/kg	-						
Tert-butyl alcohol	ND	0.050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Di-isopropyl ether	ND	0.010	"							
Ethyl tert-butyl ether	ND	0.0050	"							
Tert-amyl methyl ether	ND	0.0050	"							
1,2-Dichloroethane	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0050	"							
Benzene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Organics (C4-C12)	ND	1.0	"							
Surrogate: 1,2-DCA-d4	0.00964		"	0.0100		96	60-140			
Surrogate: Toluene-d8	0.0105		"	0.0100		105	60-140			
Surrogate: 4-BFB	0.0104		"	0.0100		104	60-140			
<b>Laboratory Control Sample (607032</b>	1-BS1)			Prepared:	07/27/06	Analyzed	1: 07/28/06			
Methyl tert-butyl ether	0.0456	0.0050	mg/kg	0.0500		91	60-140			
Benzene	0.0608	0.0050	"	0.0500		122	70-130			
Toluene	0.0580	0.0050	"	0.0500		116	70-130			
Surrogate: 1,2-DCA-d4	0.00948		"	0.0100		95	60-140			
Surrogate: Toluene-d8	0.0102		"	0.0100		102	60-140			
Surrogate: 4-BFB	0.0105		"	0.0100		105	60-140			



### Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

	Te	estAmerio	ca - Sac	crament	0, CA					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6070321 - EPA 5030B [P/T	] / EPA 8260B									
Laboratory Control Sample (607032)	1-BS2)			Prepared:	07/27/06	Analyzed	1: 07/28/06	i		
Methyl tert-butyl ether	0.0432	0.0050	mg/kg	0.0520		83	60-140			
Benzene	0.0285	0.0050	"	0.0388		73	70-130			
Toluene	0.194	0.0050	"	0.188		103	70-130			
Gasoline Range Organics (C4-C12)	2.14	1.0	"	2.20		97	70-130			
Surrogate: 1,2-DCA-d4	0.00984		"	0.0100		98	60-140			
Surrogate: Toluene-d8	0.0112		"	0.0100		112	60-140			
Surrogate: 4-BFB	0.0102		"	0.0100		102	60-140			
Batch 6070334 - EPA 5030B [Me	OH] / EPA 8260	В								
Blank (6070334-BLK1)				Prepared of	& Analyz	ed: 07/25/	06			
Ethanol	ND	10	mg/kg							
Tert-butyl alcohol	ND	2.5	"							
Methyl tert-butyl ether	ND	0.25	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.25	"							
Tert-amyl methyl ether	ND	0.25	"							
1,2-Dichloroethane	ND	0.25	"							
1,2-Dibromoethane (EDB)	ND	0.25	"							
Benzene	ND	0.25	"							
Ethylbenzene	ND	0.25	"							
Toluene	ND	0.25	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
Surrogate: 1,2-DCA-d4	0.00977		"	0.0100		98	60-140			
Surrogate: Toluene-d8	0.0108		"	0.0100		108	60-140			
Surrogate: 4-BFB	0.00995		"	0.0100		100	60-140			

RPD



Cambria Environmental - SonomaProject:Shell 1601 Webster St. AlamedaS607287270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:17

### Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6070334 - EPA 5030B [Me	OH] / EPA 82601	3								
Laboratory Control Sample (6070334	4-BS1)			Prepared &	& Analyz	ed: 07/25/	06			
Methyl tert-butyl ether	0.0354	0.0050	mg/kg	0.0520		68	60-140			
Toluene	0.178	0.0050	"	0.188		95	70-130			
Gasoline Range Organics (C4-C12)	2.04	1.0	"	2.20		93	70-130			
Surrogate: 1,2-DCA-d4	0.00973		"	0.0100		97	60-140			
Surrogate: Toluene-d8	0.0109		"	0.0100		109	60-140			
Surrogate: 4-BFB	0.0100		"	0.0100		100	60-140			
Laboratory Control Sample (6070334	4-BS2)			Prepared &	& Analyz	ed: 07/24/	06			
Methyl tert-butyl ether	0.0526	0.0050	mg/kg	0.0500		105	60-140			
Benzene	0.0534	0.0050	"	0.0500		107	70-130			
Γoluene	0.0493	0.0050	"	0.0500		99	70-130			
Surrogate: 1,2-DCA-d4	0.00944		"	0.0100		94	60-140			
Surrogate: Toluene-d8	0.0100		"	0.0100		100	60-140			
Surrogate: 4-BFB	0.00994		"	0.0100		99	60-140			
Laboratory Control Sample Dup (60'	70334-BSD1)			Prepared &	& Analyz	ed: 07/25/	06			
Gasoline Range Organics (C4-C12)	1.61	1.0	mg/kg	2.20		73	70-130	24	25	
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100		98	60-140			
Surrogate: Toluene-d8	0.0108		"	0.0100		108	60-140			
Surrogate: 4-BFB	0.00986		"	0.0100		99	60-140			
Laboratory Control Sample Dup (60'	70334-BSD2)			Prepared &	& Analyz	ed: 07/25/	06			
Methyl tert-butyl ether	0.0421	0.0050	mg/kg	0.0500		84	60-140	22	25	
Benzene	0.0521	0.0050	"	0.0500		104	70-130	2	25	
Γoluene	0.0531	0.0050	"	0.0500		106	70-130	7	25	
Surrogate: 1,2-DCA-d4	0.00960		"	0.0100		96	60-140			
Surrogate: Toluene-d8	0.0106		"	0.0100		106	60-140			
Surrogate: 4-BFB	0.00982		"	0.0100		98	60-140			

%REC





#### **Notes and Definitions**

QM02 The spike recovery was below control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

QC02 The percent recovery was below the control limits.

QB02 The method blank contains this analyte at a concentration above the method reporting limit.

E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.

CC02 The result was reported with a possible low bias due to the continuing calibration verification falling outside the acceptance

criteria.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LAB:					<b>)</b>	SH	FI	ı	Ch	air	n (	<b>ን</b> ք	_ Cii	eta	ad.	, E	201	٠or	d		,	<			سر ۾	$\sim 10^{\circ}$
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PROJECT CONTACT (Hardcopy or PDF Re						Sus	an Li	ukas	zewic	z. Ca	, ımbri	a. So	nom.	а	707-	933-2	376			sonon	naed	f@c:	amh	ria-e	nv ec	om 248-0427
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TELEPHONE: (707) 266-3812	FAX: (707) 935-6649	E-MAIL:	cambria-	env.com		Jol	hn G	erb	orano	it						-		1						4,27		i y New Yang Karamatan Kalamatan Kalamatan Kalamatan Kalamatan Kalamatan Kalamatan Kalamatan Kalamatan Kalamat Kalamatan Kalamatan K
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USE Field Sample		SAME	LING	MATRIX	NO. OF CONT.	TPH-	TPH - Extractable	BTEX (8260B)	5 Oxygenates (MTBE, TBA, Dil	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	Vocs by 8260B	Semi-Volatiles		ZUFTS	CAM17	Test for		TEMPERATURE ON RECEIPT Cº
\$ 5-8-8.0	-	7/17/16	9:25	Soil		х		х	х						х	х				<	1	ץכ			∣ ł	PID(ppm)=324
5-8-11.5		7/17/06	9:50		1	X		X	X						X	X				<	C	(((	3			PID(0PM)=15,9
8-9-5,0		7/17/96			1	X		メ	X						X	X				7	C	3				PID(ppm) = 0,0
5-9-11.5		7/17/6		Soil	(	火		メ	乂						X	X				7	8	54				PID(ppm)=0,0
5-4B-6"		7/17/06			1	X		X	X						X	$\overline{\chi}$					7	5\$				P10(ppm)=0.0
1 S-4B-1	110	7/7/2	13:35	Soil	1	又		X	X						N	X				1	C					PIDCPPM): ONO
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3 August, 2006

Ana Friel Cambria Environmental - Sonoma 270 Perkins Street Sonoma, CA 95476

RE: Shell 1601 Webster St. Alameda

Work Order: S607288

Enclosed are the results of analyses for samples received by the laboratory on 07/19/06 10:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sylvia Krenn Project Manager

CA ELAP Certificate # 2630





#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1	S607288-01	Soil	07/17/06 14:00	07/19/06 10:05





#### **ORGANIC LEAD BY GFAA (HML 939-M)**

### TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1 (S607288-01) Soil	Sampled: 07/17/06 14:00	<b>Received: 07/19/</b>	/06 10:05						
Organic Lead	ND	25	ug/kg	1	6G31077	07/31/06	07/31/06	HML 939-M	M2



Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1 (S607288-01) Soil Sampled: 07/17/	06 14:00 Rece	eived: 07/19	/06 10:05						
Benzene	ND	0.25	mg/kg	50	6070300	07/25/06	07/26/06	EPA 8260B	
Ethylbenzene	1.2	0.25	"	"	"	"	"	"	
Toluene	ND	0.25	"	"	"	"	"	"	
Xylenes (total)	5.1	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	69	50	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		94 %	60-1	40	"	"	"	"	
Surrogate: Toluene-d8		113 %	60-1	40	"	"	"	"	
Surrogate: 4-BFB		97 %	60-1	40	"	"	"	"	





### Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Sacramento, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1 (S607288-01) Soil	Sampled: 07/17/06 14:00	Received: 07/19/	/06 10:05						
Lead	27	5.0	mg/kg	1	6070299	07/25/06	07/26/06	EPA 6010B	



### ORGANIC LEAD BY GFAA (HML 939-M) - Quality Control TestAmerica - Irvine, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6G31077 - HML 939-M / HMI	2 939-M									
Blank (6G31077-BLK1)				Prepared	& Analyz	ed: 07/31/	06			
Organic Lead	ND	25	ug/kg							
<b>Laboratory Control Sample (6G31077-B</b>	<b>S1</b> )			Prepared	& Analyz	ed: 07/31/	06			
Organic Lead	115	25	ug/kg	100		115	80-120			
Matrix Spike (6G31077-MS1)	Source: S6	07288-01		Prepared	& Analyz	ed: 07/31/	06			
Organic Lead	67.5	25	ug/kg	100	ND	68	80-120			M2
Matrix Spike Dup (6G31077-MSD1)	Source: S6	07288-01		Prepared	& Analyz	ed: 07/31/	06			
Organic Lead	100	25	ug/kg	100	ND	100	80-120	39	20	R-3



Batch 6070300 - EPA 5030B [MeOH] / EPA 8260B

Blank (6070300-BLK1)

Cambria Environmental - SonomaProject:Shell 1601 Webster St. AlamedaS607288270 Perkins StreetProject Number:97564701 SAP# 135032Reported:Sonoma CA, 95476Project Manager:Ana Friel08/03/06 15:41

# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Prepared: 07/25/06 Analyzed: 07/26/06

Ethanol	ND	10	mg/kg				
Tert-butyl alcohol	ND	2.5	"				
Methyl tert-butyl ether	ND	0.25	"				
Di-isopropyl ether	ND	0.50	"				
Ethyl tert-butyl ether	ND	0.25	"				
Tert-amyl methyl ether	ND	0.25	"				
1,2-Dichloroethane	ND	0.25	"				
1,2-Dibromoethane (EDB)	ND	0.25	"				
Benzene	ND	0.25	"				
Ethylbenzene	ND	0.25	"				
Toluene	ND	0.25	"				
Xylenes (total)	ND	0.50	"				
Gasoline Range Organics (C4-C12)	ND	50	"				
Surrogate: 1,2-DCA-d4	0.00985		"	0.0100	98	60-140	
Surrogate: Toluene-d8	0.0104		"	0.0100	104	60-140	
Surrogate: 4-BFB	0.00977		"	0.0100	98	60-140	
Laboratory Control Sample (6070300	<b>0-BS1</b> )			Prepared & Ana	alyzed: 07/25/	06	
Gasoline Range Organics (C4-C12)	2.04	1.0	mg/kg	2.20	93	70-130	
Surrogate: 1,2-DCA-d4	0.00973		"	0.0100	97	60-140	

Surrogate: 1,2-DCA-d4	0.00973		"	0.0100	97	60-140	
Surrogate: Toluene-d8	0.0109		"	0.0100	109	60-140	
Surrogate: 4-BFB	0.0100		"	0.0100	100	60-140	
Laboratory Control Sample (607	70300-BS2)			Prepared & Ar	nalyzed: 07/25/0	06	
Methyl tert-butyl ether	0.0421	0.0050	mg/kg	0.0500	84	60-140	
Benzene	0.0521	0.0050	"	0.0500	104	70-130	
Toluene	0.0531	0.0050	"	0.0500	106	70-130	
Surrogate: 1,2-DCA-d4	0.00960		"	0.0100	96	60-140	
Surrogate: Toluene-d8	0.0106		"	0.0100	106	60-140	
Surrogate: 4-BFB	0.00982		"	0.0100	98	60-140	



# Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 6070300 - EPA 5030B [MeOH] / EPA 8260B

<b>Laboratory Control Sample Dup (60</b>	70300-BSD1)	Prepared & Ana	Prepared & Analyzed: 07/25/06												
Gasoline Range Organics (C4-C12)	1.61	1.0 mg/	kg 2.20	73	70-130	24	25								
Surrogate: 1,2-DCA-d4	0.00985	n	0.0100	98	60-140										
Surrogate: Toluene-d8	0.0108	n	0.0100	108	60-140										
Surrogate: 4-BFB	0.00986	n	0.0100	99	60-140										



### Total Metals by EPA 6000/7000 Series Methods - Quality Control TestAmerica - Sacramento, CA

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6070299 - EPA 3050B / EPA 6	010B									
Blank (6070299-BLK1)				Prepared:	07/25/06	Analyzed	l: 07/26/06			
Lead	ND	5.0	mg/kg							
Laboratory Control Sample (6070299-BS	<b>S1</b> )			Prepared:	07/25/06	Analyzed	1: 07/26/06	i		
Lead	102	5.0	mg/kg	100		102	80-120			
<b>Matrix Spike (6070299-MS1)</b>	Source: S6	07325-01		Prepared:	07/25/06	Analyzed	l: 07/26/06	i		
Lead	65.2	5.0	mg/kg	100	ND	65	75-125			QM02
Matrix Spike Dup (6070299-MSD1)	Source: S6	07325-01		Prepared:	07/25/06	Analyzed	l: 07/26/06	i		
Lead	58.7	5.0	mg/kg	100	ND	59	75-125	10	20	QM02





#### **Notes and Definitions**

R-3 The RPD exceeded the method control limit due to sample matrix effects.

QM02 The spike recovery was below control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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This information is business proprietary and confidential and must not be divulged or shared outside the company. The use of this information is strictly for the purpose of doing business with the Centralized Residual Management Team (CRMT). Upon termination of the relationship with the CRMT, his information is not to be forwarded, duplicated, shared or used for any purpose other than for the documentation of past actions.

#### RESIDUAL MANAGEMENT PROCEDURE

ISSUED DATE: 08/01/01

CANCELS ISSUE:

ISSUED BY: LRR

ESIDUAL STREAM:

SOIL WITH UNLEADED GASOLINE

ENDOR:

ALLIED-BFI

CATION:

ALLIED WASTE - MANTECA 9999 SOUTH AUSTIN ROAD

MANTECA, CA 95336

LIFORNIA TRANSPORTATION AND RETAIL

EX - EPA:80218/8260B (IF BENZENE IS > OR = TO 10 MG/KG THEN TCLP BENZENE IS REQUIRED)

MMETALS - TILC METALS - LEAD ONLY

STLC ON ALL TILE METALS 10 TIMES STLC MAXIMUM

TTLC LEAD +> 13 MG/KG REQUIRES ORGANIC LEAD ANALYSIS

IF ANY TIECTOTAL METAL IS > OR = TO 20 TIMES TOLP REGULATORY LEVELS, TOLP IS REQUIRED

ITAL PETROLEUM HYDROCARBONS, METHOD 418.1 OF 8015

GASOLINE

BE METHOD 82608 (SC/MS)

WATTE BIGASSAY (FISH TOX) IS ONLY TO BE RUN ON SAMPLES > OR = TO 5000 PPM TPH. AQUATTE DASSAY (FISH TOX) = PART 800 OF STANDARD METHODS FOR THE EXAMINATION OF WATER AND ASTEWATER (15TH EDITION)

BORATORY INSTRUCTIONS (MINIMUM GUIDELINES ONLY)

LTERNATE APPROVED TEST METHODS PER SW846 ARE ALSO ACCEPTABLE LE REQUIRED TESTS ON COMPOSITE (MXX 4:1)

BOBATORY IS TO SUPPLY QA/QC INFORMATION WITH ALL ANALYTICAL REPORTS ATE OR FAX ALL ANALYSIS TO THE CENTRALIZED RESIDUAL MANAGEMENT TEAM

> PROCEDURE ORIGINAL DATE: 08/01/01 PROCEDURE REVISED DATE: 08/01/01