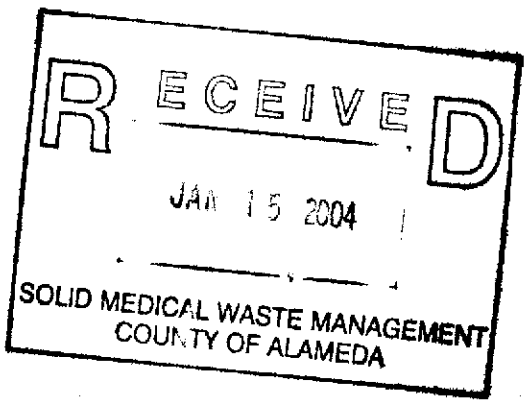
RO-367

Shell Oil Products US

January 12, 2004



eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Shell-branded Service Station
1784 150th Avenue
San Leandro, California

Dear Ms. chu:

Attached for your review and comment is a copy of the *Soil and Water Investigation and Monitoring Well Installation 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.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

Shell Oil Products US

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

P.O. Box 7869 Burbank, CA 91510-7869 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

January 12, 2004

Ms. eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Soil and Water Investigation and Monitoring Well Installation Report**
Shell-branded Service Station
1784 150th Avenue
San Leandro, California
Incident #: 98996068
Project #: 246-0612-007

Dear Ms. chu:

Cambria Environmental Technology, Inc. (Cambria) is submitting this *Soil and Water Investigation and Monitoring Well Installation Report* on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell). The current investigation and monitoring well installation was conducted in accordance with our August 28, 2003 *Soil and Water Investigation Report and Work Plan*, which Ms. eva chu of the Alameda County Health Care Services Agency (ACHCSA) approved in a letter dated September 17, 2003. The investigation's objectives were to install additional wells both on and off site with specifically defined well screen intervals based on the previous investigation results, and to define the upgradient extent of the methyl tertiary butyl ether (MTBE) and hydrocarbon plumes off site to the east with two additional soil borings. Presented below are summaries of the site background, investigation procedures, investigation results, conclusions, and recommendations.

SITE BACKGROUND

Site Location: The site is an operating Shell service station located at the southern corner of 150th Street and Freedom Avenue in San Leandro, California (Figure 1).

Local Topography: The base of the San Leandro hills is approximately 0.25 miles to the northeast. The site is about 50 feet above mean sea level, and the local topography slopes westward toward the San Francisco Bay, approximately 6 miles to the west.

Surroundings: The site is surrounded by mixed commercial and residential development.

Cambria Environmental Technology, Inc.

5900 Hollis Street
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Emeryville, CA 94608
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Fax (510) 420-9170

Local Geology: Sediments beneath the site are Quaternary alluvial deposits derived from sedimentary and igneous rocks of the Diablo Range. The site is intersected by the Hayward Fault Zone. The site is underlain by low estimated permeability sediments (clay) with interspersed moderate estimated permeability sediments. During recent investigations at the site, soil consisted of silty clay, clayey silts and clayey sandy silt interlayed with sands and gravels to the total explored depth of 40 feet below grade (fbg).

Groundwater: Local drinking water is supplied by a utility, not groundwater. An area well survey in 1992 identified 21 wells within ½ mile of the site (Figure 1). The well survey was updated in October 2003 as described below. Groundwater depths have ranged between 17 and 30 fbg on site and between approximately 4 and 14 fbg in off-site well MW-4. Water level measurements have not shown a consistent or reliable groundwater flow direction, although the predominant groundwater flow direction since 1999 has been to the north-northwest. In June 2003, depth to groundwater measurements ranged from approximately 13 to 24 fbg, and the groundwater flow direction was to the northwest.

Previous Investigations

1986 Waste Oil Tank Removal: According to an October 13, 1989 letter from Weiss Associates (Weiss) to Shell, Petroleum Engineering of Santa Rosa, California removed a 550-gallon waste oil tank from the site in November 1986. Immediately following the tank removal, Blaine Tech Services (Blaine) of San Jose, California collected soil samples beneath the former tank at 8-foot and 11- foot depths. The soil samples contained petroleum oil and grease at 196 and 167 parts per million (ppm), respectively. The tank pit was overexcavated to a total depth of 16 feet, but soil samples were not collected. Groundwater was not encountered in the tank excavation. A new 550-gallon fiberglass waste oil tank was installed in the same location.

1990 Well Installation: In March 1990, Weiss installed soil boring BH-A, which was converted to groundwater monitoring well MW-1 adjacent to the waste oil tank. In a soil sample collected from 29 fbg, 35 ppm total petroleum hydrocarbons as gasoline (TPHg) and 0.23 ppm benzene were detected.

1992 Well Installations: In February 1992, Weiss installed soil borings BH-B and BH-C, which were converted to monitoring wells MW-2 and MW-3. A soil sample collected near the water table from the boring for well MW-2 contained 79 ppm TPHg. Although well MW-3 is located over 100 feet upgradient of the tanks, up to 68 ppm TPHg was detected in soil from this boring.

1994 Subsurface Investigation: In June 1994, Weiss drilled six soil borings (B-1 through B-6) around the site. No hydrocarbons were detected in soil samples from any borings, except for 0.013 ppm benzene in boring BH-3 at 16 fbg. Also, no hydrocarbons were detected in grab

groundwater samples from borings BH-1, BH-4, BH-5 and BH-6. Groundwater from borings BH-2 and BH-3 contained over 5,000 parts per billion (ppb) TPHg.

1995 Well Installation: In February and March 1995, Weiss drilled four soil borings (BH-7 through BH-10) and converted BH-10 to monitoring well MW-4. No petroleum hydrocarbons were detected in any of the soil samples. Up to 100 ppb TPHg and 1.0 ppb benzene were detected in grab groundwater samples from BH-7 and BH-9. No TPHg or benzene was detected in the grab groundwater sample from MW-4. Groundwater was not encountered in soil boring BH-8.

1996 Soil Vapor Survey and Soil Sampling: In July 1996, Weiss conducted a subsurface investigation to obtain site-specific data for a risk-based corrective action (RBCA) evaluation of the site. Soil vapor and soil samples were collected from the vadose zone at ten on- and off-site locations (SVS-1 through SVS-10). The highest soil vapor hydrocarbon concentrations were detected near the northwest corner of the underground storage tank complex (SVS-5 at 3.0 fbg, which contained 7,600 parts per billion by volume [ppmv] benzene). No TPHg, benzene, toluene, ethylbenzene, and xylenes (BTEX), or MTBE was detected in any of the soil samples except for 1.1 ppm TPHg detected in sample SVS-5 at 18 to 20 fbg. Weiss concluded that depleted oxygen concentrations and elevated carbon dioxide and methane concentrations in the vadose zone indicated that biodegradation was occurring.

1997 RBCA Evaluation: In 1997, Weiss prepared a RBCA evaluation for the site. Results of the RBCA analysis indicated that concentrations of BTEX, MTBE, 1,2-dichloroethane, and tetrachloroethane detected in soil and groundwater beneath the site did not exceed a target risk level of 10^{-5} for residential indoor or outdoor air exposure pathways. However, a risk threshold exceedance was identified associated with ingestion of groundwater from a hypothetical well 25 feet downgradient of the source.

1997 Dispenser and Turbine Sump Upgrade: The dispensers and turbine sumps at the station were upgraded in December 1997. Cambria collected soil samples Disp-A through Disp-D from beneath the dispenser islands during upgrade activities. Up to 590 ppm TPHg (Disp-C at 4.5 fbg), 1.8 ppm benzene (Disp-C at 2.0 fbg) and 1.4 ppm MTBE (Disp-C at 2.0 fbg) were detected.

1998 Soil Vapor Survey and Soil Sampling: In November 1998, Cambria conducted a subsurface investigation to obtain site-specific data for a RBCA evaluation of the site. Soil samples, soil vapor samples and grab groundwater samples were collected from the vadose zone at three on-site and three off-site locations (SVS-11 through SVS-16). In soil vapor, maximum concentrations of 2.7 ppmv TPHg (C5+ hydrocarbons) and 0.17 ppmv TPHg (C2-C4 hydrocarbons) were detected in borings SVS-14 and SVS-15, respectively, at 10 fbg. A

maximum concentration 0.0099 ppmv benzene was detected in SVS-16 at 5 fbg. In soil, 1.6 ppm TPHg and 0.005 ppm benzene were detected in boring SVS-11 at 19.5 fbg. No TPHg or benzene was detected in any other soil samples. MTBE was reported at 0.029 ppm in boring SVS-14 at 19 fbg using EPA Method 8020; however, MTBE was not detected in this sample using EPA Method 8260. TPHg and benzene were detected using EPA Method 8020 in groundwater from borings SVS-11 and SVS-12. The highest concentrations (130,000 ppb TPHg and 18,000 ppb benzene) were detected in SVS-11. MTBE was reported at a concentration of 1,500 ppb in boring SVS-11 by EPA Method 8020, but not confirmed by EPA Method 8260.

1999 RBCA Evaluation: In September 1999, Cambria prepared a RBCA evaluation for the site. Cambria analyzed the following potential exposure pathways: off-site ingestion of groundwater, on-site ingestion of surficial soil, volatilization of benzene from soil or groundwater into on-site or off-site indoor air, and migration of benzene soil vapor to on-site or off-site outdoor air. Results of Tier 1 and Tier 2 RBCA analysis indicated that contaminants within soil and groundwater did not present significant health risks.

October 2001 Off-Site Monitoring Well Installation: Two monitoring wells (MW-5, MW-6) were installed off site to the southwest. Soil sample results collected during this investigation indicated only minimal MTBE impact to off-site soil southwest of the site. This finding is corroborated by Cambria's 1998 subsurface investigation, in which no TPHg or benzene and only low MTBE concentrations were detected in soil from three borings (SVS-14 through SVS-16) along the private driveway. In these wells, benzene has been detected only in MW-4, in June and September 2002, at a maximum concentration of 1.4 ppb. MTBE has not been detected in groundwater from either of these wells; however, TPHg, toluene, ethylbenzene and xylene have been detected in groundwater from well MW-5 at concentrations of 650 ppb, 3.0 ppb, 52 ppb, and 28 ppb, respectively.

October 2002 Off-Site Monitoring Well Installation: Two monitoring wells (MW-7, MW-8) and one soil boring (SB-9) were installed off site to the northwest of the site in 150th Avenue. Soil sample results collected during this investigation indicated minimal MTBE, BTEX and TPHg impact to off-site soil northwest of the site. However, grab groundwater samples indicated benzene and TPHg compounds were present at elevated concentrations in groundwater northwest of the site in 150th Avenue.

August 2003 Soil and Groundwater Investigation: Seven soil borings (SB-10, SB-11, SB-12, SB-13, SB-14, SB-15, and SB-16) were all installed off site to the northwest of the site in both 150th Avenue and Portofino Circle, with the exception of SB-15 which was on site (Figure 2). During the investigation, MTBE was detected only in on-site grab groundwater sample SB-15-W at 40 ppb. The highest TPHg concentration was detected in SB-14-W at 67,000 ppb, and the highest benzene concentration was detected in SB-15-W at 530 ppb. TPHg was detected only in

soil samples SB-11-30' and SB-15-36' at concentrations of 650 ppm and 1.4 ppm, respectively. Benzene was detected only in soil sample SB-11-35' at 0.10 ppm. Based on typical groundwater depths in nearby well MW-7, it was determined that samples SB-11-30' and SB-15-36' were saturated, and results may be more indicative of chemical concentrations in groundwater.

October 2003 Sensitive Receptor Survey (SRS): In October 2003, Cambria completed an SRS at Shell's request. The SRS targeted the following as potential sensitive receptors: basements within 200 feet, surface water and sensitive habitats within 500 feet, hospitals, residential care and childcare facilities within 1,000 feet, and water wells within ½ mile. No basements were observed within 200 feet, nor were any surface water or sensitive habitats observed within 500 feet. No educational or childcare facilities were identified within the search radius. The Fairmont Hospital campus, located at 15400 Foothill Boulevard, is located approximately 1,100 feet from the site, just outside the target radius.

To update the 1992 well survey performed by Weiss, Cambria researched Department of Water Resources (DWR) records in September 2003, and located no additional well records for locations within ½ mile of the site. The closest identified water well potentially used for drinking water is a well installed in 1952, listed as a "domestic well," located at Fairmont Hospital, approximately 2,445 feet east-southeast of the site, as shown on Figure 1. The well is reportedly 138 feet deep, and has screened intervals between 62 and 95 fbg. The well's status and operation frequency are unknown. Due to the well's distant location from the site, and the site's observed groundwater flow directions, it is unlikely that this well could be impacted by groundwater from the site.

Groundwater Monitoring: Groundwater has been sampled quarterly since March 1990 Groundwater samples from MW-2 have contained the highest TPHg and benzene concentrations, up to 160,000 ppb and 36,000 ppb, respectively. Although hydrocarbons have been detected in water from wells MW-1 and MW-3, no hydrocarbons have been detected in water from downgradient well MW-4 except in second quarter of 2003, and laboratory notes indicate that the detected hydrocarbons did not match the laboratory standard. Wells MW-7 and MW-8 have contained up to 49,000 ppb TPHg and 830 ppb benzene, but MTBE has not been detected in these wells. MW-7 and MW-8 were inaccessible during the third quarter 2003 sampling event because the City of San Leandro covered the well locations when they resurfaced 150th Avenue with asphalt in early 2003. However, Blaine completed the location and restoration of the previously paved over wells MW-7 and MW-8, and sampled them on September 25, 2003.

INVESTIGATION PROCEDURES

Cambria supervised the installation of one off-site and two on-site monitoring wells (Figure 2). As Cambria recommended in our August 28, 2003 *Soil and Water Investigation Report and Work Plan* and as ACHCSA requested in its September 17, 2003 agency approval letter, the on-site wells were installed downgradient, south to southeast of on-site well MW-2, and upgradient near on-site soil boring SB-15 (Figure 2). Off-site well MW-9 was installed in Portofino Circle, north to northwest of soil boring SB-14 (Figure 2). Two soil borings were proposed on the adjacent parcel, south to southeast of the site. However, the current property owner refused to sign an access agreement allowing Cambria to complete these upgradient soil borings. Gregg Drilling Inc. (Gregg) of Martinez California installed the wells using a hollow-stem auger drill rig (Rhino Rig). Cambria's Standard Field Procedures for Monitoring Well Installation are included as Attachment A.

Permits: Cambria obtained soil boring installation permits from the Alameda County Public Works Agency for all three wells and two soil borings (Permit #'s W03-1017, W03-1018, W03-1019, W03-1020). However, the permit for the two soil borings (permit #W03-1017) was not used as the soil boring were not installed. As required by the City of San Leandro, Cambria also obtained an encroachment permit from the City in order to drill in the public right-of-way (Permit # 03501). Copies of the soil boring and encroachment permits are included as Attachment B.

Soil Sampling Dates: November 19 and 20, 2003.

Drilling Company: Gregg (C-57 License #485165).

Personnel Present: Stewart Dalie, Staff Scientist, Cambria
Rich Nessinger, Driller, Gregg

Drilling Method: Gregg drilling used a hollow-stem auger drill rig (Rhino rig). For the off-site 2" well installation, 8" diameter augers were used. For the on-site 4" well installation, 10" diameter augers were used.

Number of Wells: Three: MW-9, MW-10, and MW-11

Well Depths: Well MW-9 was installed at a total depth of 35 fbg. MW-10 was installed at a total depth of 32 fbg, and MW-11 was installed at a total depth of 25 fbg (Attachment C).

Soil Sampling Method: MW-9, MW-10 and MW-11 soil samples were collected every 5-feet using a modified California split-spoon sampler using brass tubes.

Sediment Lithology: Soil encountered during drilling consisted of clay from 0.6 to 4.0 fbg to between 12.5 and 17.5 fbg, underlain by clayey sands and silty and clayey gravel with sand interlayed with silts and sands to the total explored depth of between 25 and 35 fbg, respectively (Attachment C).

Groundwater Depths: Groundwater was first encountered during drilling activities at approximately 23 fbg in MW-10 and MW-11, and at 20 fbg in MW-9. These measurements may not be indicative of true groundwater conditions as the wells were very recently measured after initial intrusion into the aquifer, and hydrostatic pressures may not have had adequate time to equilibrate. Blain will measure static groundwater depths in the new wells during the next quarterly monitoring event.

Well Materials: MW-10 and MW-11 were constructed using 4-inch diameter, Schedule 40, PVC casing with 0.010-inch slotted screen. The filter pack consisted of Monterey sand #2/12 from 26 to 32 fbg in MW-10 and from 13 to 25 fbg in MW-11. MW-9 was constructed using 2-inch diameter Schedule 40, PVC casing with 0.010-inch slotted screen. The filter pack consisted of Monterey sand #2/12 from 28 to 35 fbg. The annular space between the borehole and the casing was sealed with bentonite from 24 to 26 fbg in MW-10, 11 to 13 fbg in MW-11, and 26 to 28 fbg in MW-9. Portland Type I neat cement grout was used to seal the remainder of the annular space to surface grade. A traffic-rated well box was installed over each well (Attachment C).

Screened Interval: Based on pre-determined screen interval requirements recommended by Cambria and the ACHSCA, monitoring well MW-9 was screened from 30 to 35 fbg. MW-10 was screened

from 28 to 32 fbg, and MW-11 was screened from 15 to 25 fbg, respectively (Attachment C).

Well Elevation Survey: On December 11, 2003, Virgil Chavez Land Surveying of Vallejo, California surveyed the top of casing elevation. The benchmark for this survey was a cinch nail in the top of a catch basin on the northwest corner of 150th and East 14th Streets. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83). Benchmark elevation = 26.883 feet (NGVD29) (Attachment D).

Well Development and Sampling Blaine will develop the wells using surge-block agitation and pump evacuation. The wells will be developed at least 72 hours after installation and at least 72 hours prior to sampling. Blaine will sample the new wells during the next regularly scheduled groundwater monitoring event.

Chemical Analyses: Selected soil samples collected from the monitoring well locations were analyzed by a State-certified laboratory for TPHg, BTEX, and MTBE using EPA Method 8260B. Severn Trent Laboratories Inc. of Pleasanton, California analyzed all samples (Attachment E).

Stockpile Soil Sampling And Disposal: Soil cuttings produced from the borings were wrapped in plastic sheeting, labeled and temporarily stockpiled on site. The cuttings were directly loaded and transported on December 8, 2003 by Manley and Sons Trucking Company of Sacramento, California to Forward Landfill in Manteca, California for disposal (Attachment F).

Well Completion Forms: DWR Well Driller's Completion Reports are included as Attachment G.

INVESTIGATION RESULTS

Chemical Distribution in Soil: No benzene was detected in any of the soil samples collected during this investigation. MTBE was detected in two soil samples (MW-11-20' and MW-11-24.5') at concentrations of 0.039 and 1.4 ppm, respectively. TPHg was detected in four soil samples (MW-10-30', MW-10-31.5', MW-11-20', and MW-11-34.5') at concentrations of 14, 230, 1.8, and 330 ppm, respectively. All soil samples with detectable hydrocarbon concentrations were saturated soil samples, so results may be more indicative of chemical concentrations in groundwater rather than sorbed to soil.

Currently, of the 134 soil samples collected at and near the site since March 1990, 35 samples have contained detectable level of hydrocarbons, and chemical concentrations in unsaturated soil were generally low. Analytical results for the soil samples collected during this and previous investigations at the site are summarized in Table 1. The certified analytical laboratory reports for this investigation are included as Attachment E.

CONCLUSIONS AND RECOMMENDATIONS

Soil lithology observed during this investigation was consistent with previously determined saturated intervals and depth-to-water readings. The off-site soil borings previously installed in conjunction with the new monitoring wells adequately define the hydrocarbon plume in all directions except to the southeast. Cambria had planned to install soil borings on the adjacent property to the southeast as part of this investigation; however, the owner has been unwilling to sign an access agreement to complete the work. Cambria recommends completing the installation of soil borings SB-17 and SB-18, as previously approved by ACHCSA.

Cambria recommends continued ongoing monitoring at the site, including the new wells, which will be added to the quarterly sampling event beginning in 2004.

SCHEDULE

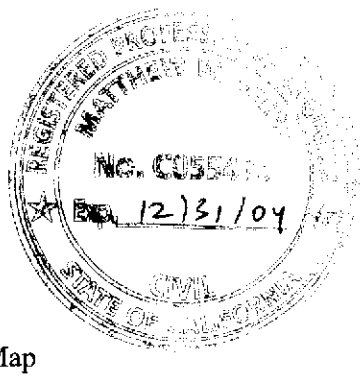
In order to install the proposed soil borings (SB-17 and SB-18), Cambria will continue to work with the adjacent property owner to reach an access agreement. When an agreement is signed, Cambria will renew the permits or, if necessary, resubmit the permit applications, and schedule the fieldwork.

CLOSING

Please call Caryl Weekley at (510) 420-3324, if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Caryl A. Weekley, R.G.
Senior Project Geologist



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

Figures: 1 - Vicinity/Area Well Survey Map
2 - Monitoring Well Location Map

Tables: 1 - Current and Historical Soil Analytical Results

Attachments: A - Standard Field Procedures for Monitoring Well Installation
B - Permits
C - Boring Logs
D - Virgil Chavez Well Survey Report
E - Certified Laboratory Report
F - Disposal Confirmation Report
G - Well Driller's Completion Reports

cc: Karen Petryna, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810
Victor Lemon, City of San Leandro, Engineering and Transportation Division, 835 East 14th Street, San Leandro, CA. 94577
City of San Leandro, Environmental Division, 835 East 14th Street, San Leandro, CA. 94577

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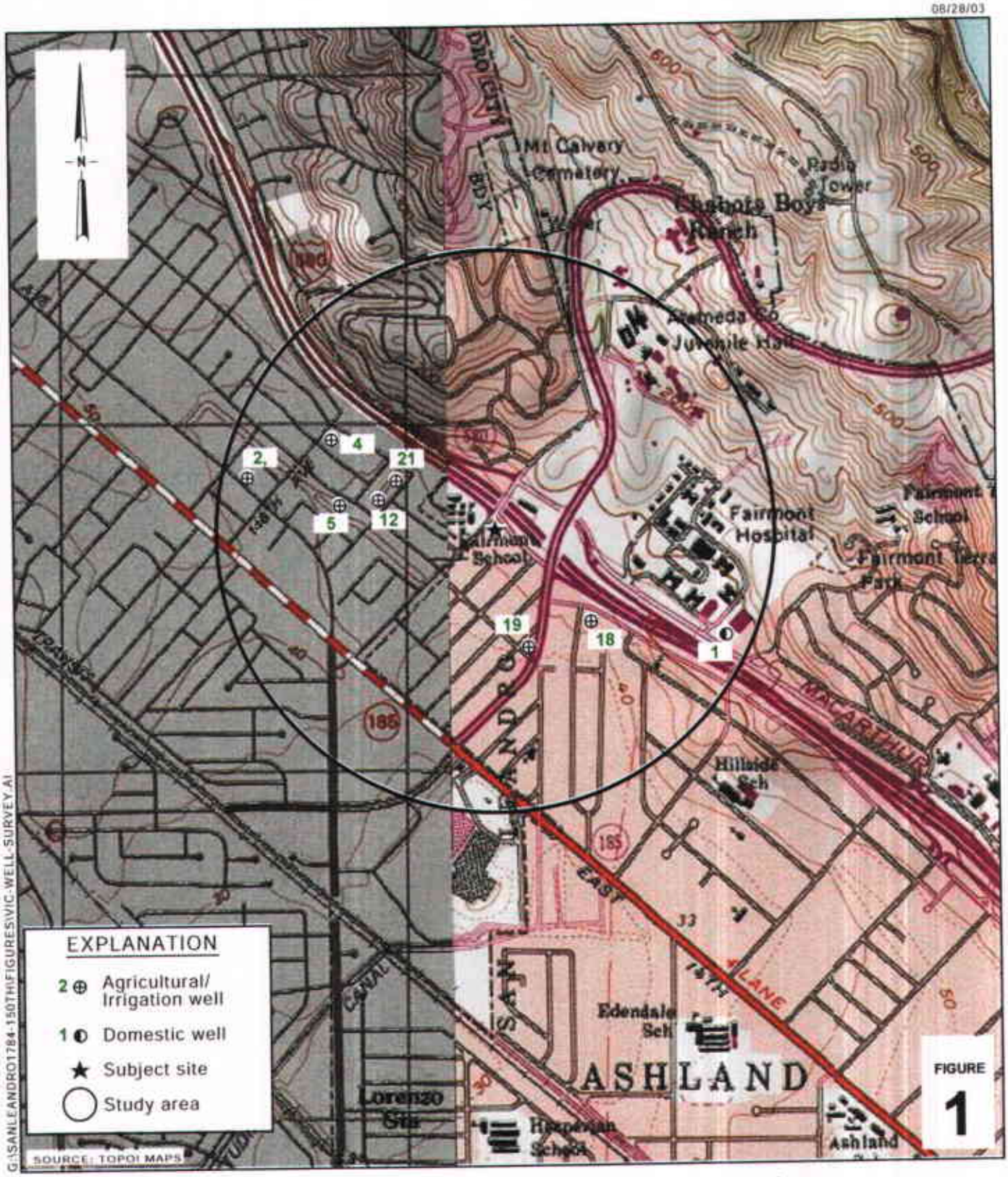
08/28/03



Shell-branded Service Station
1784 150th Avenue
San Leandro, California
Incident #98996068

CAMBRIA

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

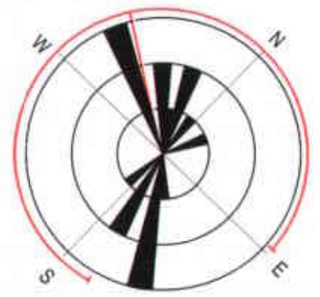
12/02/03

Monitoring Well Location Map

EXPLANATION

SB-17	Proposed soil boring location
MW-1	Monitoring well location
BH-1	Soil boring location (Weiss, 6/94)
BH-7	Soil boring location (Weiss, 3/95)
A	Dispenser soil sample location (Weiss, 3/95)
SVS-1	Soil boring location (Cambria, 7/96)
SVS-11	Soil boring location (Cambria, 11/98)
SB-9	Soil boring location (Cambria, 10/02)
SB-10	Soil boring location (Cambria, 6/03)

PORTOFINO DRIVE
PORTOFINO CIRCLE
150TH AVENUE
FREEDOM AVENUE
I-580
I-580 OFF-RAMP
Residential
Residential (townhouses)
brick sound wall
private
MH
BH-1
BH-2
BH-3
BH-4
BH-5
BH-6
BH-7
BH-8
BH-9
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
SB-9
SB-10
SB-11
SB-12
SB-13
SB-14
SB-15
SB-16
SB-17
SB-18
SVS-1
SVS-2
SVS-3
SVS-4
SVS-5
SVS-6
SVS-7
SVS-8
SVS-9
SVS-10
SVS-11
SVS-12
SVS-13
SVS-14
SVS-15
SVS-16
USTs
dispensers
canopy
W/O UST
Shell Station
1784 150th
parking lot
Denny's Restaurant
15015 Freedom
BH-1 located 215' SE
BH-6 located 360' SE



Groundwater Flow Direction
(06/14/99 to 06/24/03)

0 25 50 100
Scale (ft)

FIGURE
2

Shell-branded Service Station
1784 150th Avenue
San Leandro, California
Incident #98996068

CAMBRIA

G:\SAN LEANDRO 1784-150TH\FIGURES\SITEPLAN 11-03.DWG

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	← (Concentrations in mg/kg) →						
BH-A[a,b]	3/5/1990	5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-A[a,b]	3/5/1990	15.7	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-A[a,b,c]	3/5/1990	24.7	<1	**0.020**	<0.0025	<0.0025	<0.0025	---	---
BH-A[a,d]	3/5/1990	29.2	**35**	**0.23**	**0.20**	<0.0025	**0.64**	---	---
BH-A[a,b]	3/5/1990	41.2	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-B[b]	2/4/1992	11.5	<1	**0.0026**	<0.0025	<0.0025	<0.0025	---	---
BH-B	2/4/1992	16.5	<1	**0.0058**	<0.0025	<0.0025	<0.0025	---	---
BH-B[b,e]	2/4/1992	21.5	**79**	**0.20**	**0.60**	**1.0**	**4.1**	---	---
BH-B	2/4/1992	26.5	**74**	**0.59**	**0.91**	**1.5**	**3.9**	---	---
BH-C[b]	2/5/1992	11.5	<1	**0.0042**	**0.0029**	**0.0039**	<0.0025	---	---
BH-C[b]	2/5/1992	21.5	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-C[b,f]	2/5/1992	26.5	**3.9**	<0.0025	<0.0025	<0.0025	**0.0054**	---	---
BH-C	2/5/1992	31.5	**68**	<0.05	<0.05	<0.05	**0.17**	---	---
BH-1-21	6/6/1994	21	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
BH-2-20	6/6/1994	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
BH-3-16[g]	6/6/1994	16	<1.0	**0.013**	<0.0050	<0.0050	<0.0050	---	---
BH-4-20.6	6/7/1994	20.6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
BH-5-15.6	6/7/1994	15.6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
BH-6-20.5	6/7/1994	20.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
BH-7-15.8	2/14/1995	15.8	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-8-16.0	2/14/1995	16.0	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-9-19.5	2/14/1995	19.5	<1.0	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-10-15.2	3/3/1995	15.2	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
SVS-3	7/18-19/96	16-18	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-5	7/18-19/96	4-6	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-5	7/18-19/96	8-10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-5	7/18-19/96	18-20	**1.1**	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-9	7/18-19/96	3-5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-9	7/18-19/96	8-10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---
SVS-9	7/18-19/96	16-18	<1.0	<0.005	<0.005	<0.005	<0.005	<0.025	---

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	(Concentrations in mg/kg)						
Disp-A	12/4/1997	2.0	**3.1**	<0.005	**0.037**	**0.022**	<0.01	**0.019**	---
Disp-A, 4.5	12/4/1997	4.5	**6.3**	**0.096**	**0.012**	**0.46**	**0.037**	**0.056**	---
Disp-B	12/4/1997	2.0	**130**	<1	<1	<1	<2	<1	---
Disp-B, 4.5	12/4/1997	4.5	**1.0**	**0.045**	<0.005	**0.064**	**0.32**	<0.03	---
Disp-C	12/4/1997	2.0	**190**	**1.8**	**2.1**	**3.6**	**20**	**1.4**	---
Disp-C, 4.5[h]	12/4/1997	4.5	**590**	<0.5	**0.98**	**2.3**	**3.1**	<0.5	---
Disp-D	12/4/1997	2.0	**3.8**	**0.11**	<0.005	**0.15**	**0.17**	**0.11**	---
Disp-D, 4.5	12/4/1997	4.5	**1.4**	**0.027**	<0.005	**0.036**	**0.178**	**0.005**	---
SVS-11-5.5	11/10/1998	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-6	11/10/1998	6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-9.5	11/10/1998	9.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-10	11/10/1998	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-15	11/10/1998	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-15.5	11/10/1998	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-19	11/10/1998	19	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-11-19.5	11/10/1998	19.5	**1.6**	**0.0050**	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-5	11/11/1998	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-5.5	11/11/1998	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-10	11/11/1998	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-10.5	11/11/1998	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-15	11/11/1998	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-14-15.5	11/11/1998	15.5	<1.0	<0.0050	**0.006**	<0.0050	<0.0050	<0.025	---
SVS-14-19	11/11/1998	19	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	**0.029**	<25
SVS-14-19.5	11/11/1998	19.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-4.5	11/11/1998	4.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-5	11/11/1998	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-10	11/11/1998	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-10.5	11/11/1998	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-15	11/11/1998	15	<1.0	<0.0050	<0.0050	<0.0050	**0.013**	<0.025	---
SVS-15-15.5	11/11/1998	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	← (Concentrations in mg/kg) →						
SVS-15-19.5	11/11/1998	19.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-15-20	11/11/1998	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-16-5	11/11/1998	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-16-5.5	11/11/1998	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-16-10	11/11/1998	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-16-10.5	11/11/1998	10.5	<1.0	<0.0050	<0.0050	<0.0050	**0.0093**	**0.026**	---
SVS-16-15	11/11/1998	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
SVS-16-15.5	11/11/1998	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	---
MW-5-515.5	10/24/01	15.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-6-5.5	10/24/01	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.012**
MW7@5'	10/03/02	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW7@10'	10/03/02	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW7@15'	10/03/02	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW7@20'	10/03/02	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW7@25'	10/03/02	25	**11**	<0.0050	**0.0060**	**0.086**	**0.13**	---	<0.5
MW7@30'	10/03/02	30	**68**	<0.025	**0.19**	**0.89**	**3.7**	---	<0.5
MW7@32'	10/03/02	32	**1.2**	<0.0050	**0.0069**	**0.025**	**0.11**	---	<0.5
MW8@5'	10/04/02	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW8@10'	10/04/02	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW8@15'	10/04/02	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW8@20'	10/04/02	20	**1.2**	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.5
MW8@25'	10/04/02	25	**140**	**0.072**	**0.15**	**1.5**	**5.8**	---	<0.5
SB9@22	10/04/02	22	1.1	<0.0050	<0.0050	**0.016**	**0.088**	---	<0.5
SB-10-10'	6/23/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-20'	6/23/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-22'	6/23/03	22	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-25'	6/23/03	25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-30	6/23/03	30	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-37'	6/23/03	37	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-10-39.5'	6/23/03	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-11-10'	6/24/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	← (Concentrations in mg/kg) →						
SB-11-15'	6/24/03	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-11-20'	6/24/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-11-24'	6/24/03	24	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-11-28'	6/24/03	28	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-11-30'	6/24/03	30	**650**	<0.50	<0.50	**3.5**	**9.9**	---	<0.50
SB-12-10'	6/24/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-12-20'	6/24/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-12-25'	6/24/03	25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-12-30'	6/24/03	30	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-12-35'	6/24/03	35	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-12-39.5'	6/24/03	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-10'	6/23/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-20'	6/23/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-24'	6/23/03	24	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-30'	6/23/03	30	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-35'	6/23/03	35	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-13-39.5'	6/23/03	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-10'	6/24/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-20'	6/24/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-24'	6/24/03	24	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-30'	6/24/03	30	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-35'	6/24/03	35	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-14-39.5'	6/24/03	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-15-10'	6/26/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-15-15'	6/26/03	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-15-20'	6/26/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-15-22.5'	6/26/03	22.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-15-35'	6/26/03	35	**1.4**	**0.10**	<0.0050	**0.030**	**0.0055**	---	<0.0050
SB-16-10'	6/23/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-16-20'	6/23/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-16-24'	6/23/03	24	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	← (Concentrations in mg/kg) →						
SB-16-28'	6/23/03	28	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-16-35'	6/23/03	35	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
SB-16-39.5'	6/23/03	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-5'	11/19/03	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-10'	11/19/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-15'	11/19/03	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-20'	11/19/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-25'	11/19/03	25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-30'	11/19/03	30	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-9-35'	11/19/03	35	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-5'	11/20/03	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-10'	11/20/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-15'	11/20/03	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-20'	11/20/03	20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-25'	11/20/03	25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-10-30'	11/20/03	30	**14**	<0.023	<0.023	<0.023	<0.023	---	<0.023
MW-10-31.5'	11/20/03	31.5	**230**	<0.50	<0.50	**2.2**	**1.5**	---	<0.50
MW-11-5'	11/20/03	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-11-10'	11/20/03	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-11-15'	11/20/03	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050
MW-11-20'	11/20/03	20	**1.8**	<0.0050	<0.0050	**0.0084**	**0.013**	---	**0.039**
MW-11-24.5'	11/20/03	24.5	**330**	<0.50	**1.6**	**4.8**	**29**	---	**1.4**

Table 1. Current and Historical Soil Analytical Results - Shell-branded Service Station, 1784 150th St., San Leandro, California - Incident #98996068

Sample ID	Date	Depth	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA Method 8020	MTBE EPA Method 8260
		(fbg)	← (Concentrations in mg/kg) →						

Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline. From 1990 through 1998, analyzed by modified EPA Method 8015; from 2001 through 2003, analyzed by EPA Method 8260B.

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8020 from 1990 through 1998; from 2001 through 2003, analyzed by EPA Method 8260B.

MTBE = Methyl tert-butyl ether

fbg = Feet below grade

mg/kg = milligrams per kilogram

<n = Below detection limit of n mg/kg

--- = Not analyzed

Notes:

a = Petroleum oil and grease analyzed by American Public Health Association Standard Method 503E; no detections above 100 ppm detection limit. Total oil and grease analyzed by American Public Health Association Standard Method 503E; no detections above 50 ppm detection limit.

b = Analyzed for halogenated volatile organic compounds by EPA Method 8010; none detected.

c = Total petroleum hydrocarbons as diesel (TPHd) and total petroleum hydrocarbons as motor oil (TPHmo) analyzed by modified EPA Method 8015; no TPHd detected at 1 ppm limit; no TPHmo detected at 10 ppm limit.

d = 1,2-dicholorethane detected at 0.0064 ppm by EPA Method 8010.

e = TPHd detected at 23 ppm by modified EPA Method 8015; lab characterized detected compounds as hydrocarbons lighter than diesel.

f = TPHd detected at 4.9 ppm by modified EPA Method 8015; lab characterized detected compounds as hydrocarbons lighter than diesel.

g = Analyzed for volatile organic compounds by EPA Method 8010; none detected above detection limits ranging from 0.005 to 0.050 ppm.

h = Sample saturated with perched water from beneath dispenser.

G:\SANLEA~3\[Soil Summary 1784 150th.xls]Soil Summary

ATTACHMENT A

Standard Procedures for Monitoring Well Installation

CAMBRIA

STANDARD FIELD PROCEDURES FOR MONITORING WELL INSTALLATIONS

This document describes Cambria Environmental Technology's standard field methods for drilling, installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Well Construction and Surveying

Groundwater monitoring wells are installed in soil borings to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two ft above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I,II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security. The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

ATTACHMENT B

Permits

ALAMEDA COUNTY PUBLIC WORKS AGENCY

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

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

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1784 150th st
San Leandro, Ca.
2 Soil borings
3 days

CLIENT
Name Shell Oil Products Co. (US)
Address P.O. Box 7869 Phone (510) 645-1903
City Burbank, Ca 91510 Zip 91510-7869

APPLICANT
Name Cambria Environmental
Fax (510) 420-9170
Address 5900 Hollis St. Ste A Phone (510) 420-3339
City Emeryville, Ca. Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring		Well Destruction	☐
		Soil Borings	X

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other Environmental monitoring	X

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	X
Cable	☐	Other	X geoprobe Soil borings		

DRILLER'S NAME Gregg Drilling
DRILLER'S LICENSE NO. C-57-485-165

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

GEOTECHNICAL PROJECTS
Number of Borings 2 Maximum
Hole Diameter 2 in. Depth 30 ft

STARTING DATE 11/19-21/2003
COMPLETION DATE 11/21/2003

FOR OFFICE USE
PERMIT NUMBER W03-1017
WELL NUMBER ___
APN ___

PERMIT CONDITIONS
Circled Permit Requirements Apply

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

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

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

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

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

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

G. SPECIAL CONDITIONS B #1 Attached.

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

APPROVED ___ DATE 11-10-03

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

APPLICANT'S SIGNATURE ___ DATE 11/5/2003

PLEASE PRINT NAME Stewart A. Doak, III

Rev.9-18-02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939
APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1784 150th St San Leandro, Ca
2 Soil borings
3 wells

CLIENT
Name Shell Oil Products Co. (US)
Address P.O. Box 7869 Phone (925) 275-3803
City Burlingame, Ca 94010 Zip 94010-7869

APPLICANT
Name Cambria Environmental
Fax (510) 420-9170
Address 5900 Hollis St. Ste A Phone (510) 420-3339
City Emeryville, Ca. Zip 94608

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic		Replacement Domestic	
Municipal		Irrigation	
Industrial		Other Environmental Well Drilling	X

DRILLING METHOD:

Mud Rotary		Air Rotary		Auger	X
Cable		Other			

DRILLER'S NAME Gregg Drilling
DRILLER'S LICENSE NO. C-57-485-165

WELL PROJECTS
Drill Hole Diameter 10" in. Maximum
Casing Diameter 4" in. Depth 35 ft.
Surface Seal Depth 0 ft. Owner's Well Number MW-9
3 wells

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

STARTING DATE 11/19-21/2003
COMPLETION DATE 11/21/2003

FOR OFFICE USE
PERMIT NUMBER WO3-1018
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

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

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

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

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

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

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

G. SPECIAL CONDITIONS MW#1 Attached.

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

APPROVED [signature] DATE 11-10-03

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

APPLICANT'S SIGNATURE [signature] DATE 11/5/2003

PLEASE PRINT NAME Stewart A. Dalby IV

Rev.9-18-02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

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

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

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1784 150th St
San Leandro, Ca.
2 Soil Borings
3 wells

CLIENT
Name Shell Oil Products Co. (US)
Address P.O. Box 7869 Phone (559) 645-1903
City Burbank, Ca 91510 Zip 91510-7869

APPLICANT
Name Cambria Environmental Fax (510) 420-9170
Address 2900 Hotles St. Ste A Phone (510) 420-3339
City Emeryville, CA. Zip 94608

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic		Replacement Domestic	
Municipal		Irrigation	
Industrial		Other Environmental Monitoring	X

DRILLING METHOD:

Mud Rotary		Air Rotary		Auger	X
Cable		Other			

DRILLER'S NAME Gregg Drilling
DRILLER'S LICENSE NO. C-57-485-165

WELL PROJECTS
Drill Hole Diameter 10" in. Maximum
Casing Diameter 4" in. Depth 35 ft.
Surface Seal Depth 0 ft. Owner's Well Number MW-10
3 wells

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ in. Depth ___ ft.

STARTING DATE 11/19-21/2003
COMPLETION DATE 11/21/2003

FOR OFFICE USE
PERMIT NUMBER W03-1019
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

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

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

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

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

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

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

G. SPECIAL CONDITIONS MW #1 Attached.

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

APPROVED [signature] DATE 11-7-03

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

APPLICANT'S SIGNATURE [signature] DATE 11/5/2003

PLEASE PRINT NAME Stewart A. Dalz. III

Rev.9-18-02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

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

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

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1784 150th St.
San Leandro, Ca.
2 Soil borings
3 wells

CLIENT
Name Shell Oil Products Co. (US)
Address P.O. Box 7869 Phone (559) 685-1903
City Burbank, Ca 91510 Zip 91510-7869

APPLICANT
Name Cambria Environmental
Fax (510) 420-9170
Address 5900 Hollis St. Ste A Phone (510) 420-3339
City Emeryville, Ca. Zip 94608

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic		Replacement Domestic	
Municipal		Irrigation	
Industrial		Other Environmental Monitoring	X

DRILLING METHOD:

Mud Rotary		Air Rotary		Auger	X
Cable		Other			

DRILLER'S NAME Gregg Drilling
DRILLER'S LICENSE NO. C-57-485165

WELL PROJECTS
Drill Hole Diameter 10" in. Maximum
Casing Diameter 4" in. Depth 35 ft.
Surface Seal Depth 0 ft. Owner's Well Number MW-11
3 wells

GEOTECHNICAL PROJECTS
Number of Borings
Hole Diameter in. Maximum Depth ft.

STARTING DATE 11/19-21/2003
COMPLETION DATE 11/21/2003

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

APPLICANT'S SIGNATURE [signature] DATE 11/5/2003
PLEASE PRINT NAME Stewart A. Dollar III

Rev.9-18-02

FOR OFFICE USE
PERMIT NUMBER W03-1020
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

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

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

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

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

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

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

G. SPECIAL CONDITIONS MW #1 Attached

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

APPROVED [signature] DATE 11/6/03

NOV-05-2003 WED 04:01 PM CITY OF SL ENGINEERING FAX NO. 5105773294 P. 02

MISC

CITY OF SAN LEANDRO
APPLICATION TO PERFORM WORK IN THE PUBLIC RIGHT-OF-WAY

Permit Number: 03501
Date Approved: 11/13/03

Service No. ______

Work Site: 1784 150th Street San Leandro, CA

Applicant: Name Cambria Environmental Address 5900 Hollis St. Ste A Emeryville CA 94608 Tel. 5104203339

Owner: Name Shell Oil Products (US) Address P.O. box 7869, burbank, CA 91510 Tel. 559 6459306

Emergency: Name Stewart Dalie Mobile 510 750 0206 Tel. 5104203339

Purpose of Permit:

☐ Utility ☐ Street Excavation ☐ Curb, Gutter, Sidewalk, Driveway ☒ Other Monitoring Well

Detailed Description and Dimensions of Work: Please see attached work plan, site plan, traffic safety plan & soil boring location map

Plan Submitted: Yes X No ___ Profile Submitted: Yes X No ___

Date Work to be Started: Nov 19th, 2003 Date Work to be Completed: Nov 21st, 2003

Building Permit No: N/A State Encroachment Permit No. N/A

Oro Loma Permit No. N/A Alameda County ~~Flood Control~~ Public Works Permit No. pending 11/5

Excavation and Grading Permit No. NA

Compliance with State Labor Code, in accordance with Section 3800:

☒ Applicant has on file with the City of San Leandro evidence that worker's compensation insurance is carried.

☐ Applicant will not employ anyone and therefore will not be subject to the worker's compensation laws of California.

Statement of State Contractor's License, in accordance with Section 7031.5 of the State Business and Professions Code:

☒ Applicant has State License No. 657-485-165, Class C-57 in full force and effect.

☐ Applicant is exempt from the State Contractor's License Law for the following reason(s):

☒ Applicant has City of San Leandro Business License No. On file

By the application and acceptance of this permit, the undersigned intending to be legally bound does hereby agree that all work performed will be in accordance with all applicable provisions of this permit and all regulations, provisions, and specifications as adopted by the City. Further, the undersigned agrees that this permit is to serve as a guaranty for payment for all permit and/or inspection charges as billed by the City. Any misrepresentation of information requested from the applicant on this form shall make this permit null and void.

Printed Name: Stewart Dalie Signature: [signature] Date: 11/5/03

PLEASE CALL (510) 577-3308 FOR INSPECTIONS 24 HOURS PRIOR TO WORK

SPECIAL PROVISIONS

Backfill Required ALL WORK PER CITY GENERAL

Pavement Section Required PROVISIONS ~~Art. 12 ☐ Col 0" ☐ Res 6" ☐~~

Minimum Depth of Cover ALSO SEE ATTACHED SPECIAL

☒ Traffic Control CONDITIONS.

Police & Fire Dept. to be notified 24 hours prior to start: YES ✓ NO ___

PEDESTRIAN SAFETY AND TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

SEE REVERSE SIDE FOR GENERAL PROVISIONS APPLICABLE TO ALL PERMIT WORK

PERMIT IS VALID WHEN SIGNED

Any omission on the part of the City to specify on this permit any rule, regulation, provision, or specification shall not excuse the permittee from complying with all requirements of law and appropriate ordinances and all applicable regulations, provisions, and specifications adopted by the City.

ISSUE FOR CITY ENGINEER

[signature]

INSPECTION RECORD

Date	Comments	Insp	Hrs. Charged

NOTE: ½ hr. minimum charge per inspection stop

Hours forwarded from reverse side ______

TOTAL HOURS CHARGED: ______

FEES

PERMIT FEE: $50 To Acct #3306

RESTORE/INSPECT DEPOSIT: $1075 To CN# ______

STREET CUT FEE: ______ To Acct #3304

TOTAL: $1125

☐ All charges collected at permit issuance

☐ All charges to be billed to CN# 15830

$500 ENVIRONMENTAL REPORT DEPOSIT WILL BE REFUNDED AFTER ENVIRONMENTAL REPORT RECEIVED BY CITY OF S.L. ENVIRONMENTAL SERVICES.

ATTACHMENT C

Boring Logs

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

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-9
JOB/SITE NAME	1784 150th Avenue	**DRILLING STARTED**	19-Nov-03
LOCATION	San Leandro, California	**DRILLING COMPLETED**	19-Nov-03
PROJECT NUMBER	245-0612-010	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	41.84
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	41.65 ft
BORING DIAMETER	8"	**SCREENED INTERVAL**	30 to 35 ft bgs
LOGGED BY	S. Dalie	**DEPTH TO WATER (First Encountered)**	20.0 ft (19-Nov-03)
REVIEWED BY	M. Derby, PE# 55475	**DEPTH TO WATER (Static)**	14.8 ft (20-Nov-03)
REMARKS	Hand augered to 5 fbg, located in Portofino Circle.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	DEPTH (ft bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
						Asphalt.	0.6
					CL	**CLAY**; (CL); Black; very stiff; dry; 85% clay, 15% silt; low plasticity. CLAY with some small sub angular gravel.	
0.1			MW-9 5'	5			
0			MW-9 10'	10		Brownish gray; very stiff to hard; dry; 90% clay, 5% silt; no plasticity.	
						▼	15.0
0.1			MW-9 15'	15	OL	**Silty CLAY**; (OL); Brownish gray; very stiff to hard; dry; 70% clay, 30% silt.	17.5
					SC	**Clayey SAND**; (SC); Brownish gray; medium dense; damp; 45% clay, 55% sand; low plasticity.	
						▽	20.0
3			MW-9 20'	20	GC	**Clayey GRAVEL**; (GC); Brownish gray; medium dense; moist to wet; 25% clay, 5% sand, 70% Gravel.	22.5
					CL	**CLAY**; (CL); Light brown; very stiff to hard; damp; 95% clay, 5% small gravel.	
1.8			MW-9 25'	25			
						Clayey GRAVEL; (GC); Light brown; very dense; saturated; 45% clay, 55% gravel.	27.5
0			MW-9 30'	30	GC		
					GW	**Well Graded GRAVEL**; (GW); Light brown; loose; saturated; 25% coarse sand, 75% gravel.	32.5
0.1			MW-9 34.5'	35			35.0

WELL DIAGRAM: Portland Type I/II; Bentonite Seal; Lonestar Sand #2/12; 2"-diam., 0.010" Slotted Schedule 40 PVC; Bottom of Boring @ 35 ft

WELL LOG (PID/TPHG) G:\SAN LEANDRO 1784 150TH\GINT\SNL1784.GPJ DEFAULT.GDT 1/9/04

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

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-10
JOB/SITE NAME	1784 150th Avenue	**DRILLING STARTED**	20-Nov-03
LOCATION	San Leandro, California	**DRILLING COMPLETED**	20-Nov-03
PROJECT NUMBER	245-0612-010	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	50.98
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	50.64 ft
BORING DIAMETER	10"	**SCREENED INTERVAL**	28 to 32 ft bgs
LOGGED BY	S. Dalie	**DEPTH TO WATER (First Encountered)**	23.5 ft (20-Nov-03)
REVIEWED BY	M. Derby, PE# 55475	**DEPTH TO WATER (Static)**	20.0 ft (20-Nov-03)
REMARKS	Hand augered to 5 fbg.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
						GW		**Asphalt.** **Well Graded GRAVEL**; (GW); Brown; loose; dry; 20% coarse sand, 80% angular gravel.	0.6 3.0
						CL		**CLAY**; (CL); Black; very stiff; dry; 100% clay, no fines.	
0			MW-10 -5'		5				
0.1			MW-10 -10'		10				
3.5			MW-10 -15'		15			Silty CLAY; gray; very stiff; dry; 30% silt, 70% clay.	17.5
						ML		**Clayey SILT**; (ML); Light olive gray; very dense; dry; 30% clay, 70% silt.	
8			MW-10 -20'		20				22.5
						GC		**Clayey GRAVEL**; (GC); Light olive gray; medium dense; moist to wet 30: clay, 70% gravel.	25.0
24			MW-10 -25'		25	GM		**Silty GRAVEL**; (GM); Light olive gray; medium dense; wet; 10% clay, 25% silt, 10% sand, 55% gravel.	27.5
						ML		**Clayey SILT**; (ML);Grayish brown; medium dense; wet; 20% clay, 80% silt.	
111			MW-10 -30'		30				
104			MW-10 -31.5'						32.0

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Lonestar Sand #2/12
- 4"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 32 ft

WELL LOG (PID/TPHG) G:\SAN LEANDRO 1784 150TH\GINTS\SNL1784.GPJ DEFAULT.GDT 1/2/04

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

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	MW-11
JOB/SITE NAME	1784 150th Avenue	**DRILLING STARTED**	20-Nov-03
LOCATION	San Leandro, California	**DRILLING COMPLETED**	20-Nov-03
PROJECT NUMBER	245-0612-010	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	45.94
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	45.58 ft
BORING DIAMETER	10"	**SCREENED INTERVAL**	15 to 25 ft bgs
LOGGED BY	S. Dalie	**DEPTH TO WATER (First Encountered)**	23.5 ft (20-Nov-03) ▽
REVIEWED BY	M. Derby, PE# 55475	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg.		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
								Asphalt.	0.8
						GW		**Well Graded GRAVEL with sand**; (GW); Brown; loose; dry; 30% sand, 70% gravel.	3.0
						GC		**Clayey GRAVEL**; (GC); gray to black; stiff; dry; 40% clay, 60% gravel.	4.0
2.0			MW-11 -5'		5	CL		**Silty CLAY**; (CL); Black; very stiff to hard; dry; 65% clay, 35% silt.	
2.8			MW-11 -10'		10				12.5
						ML		**Clayey SILT**; (ML); Olive gray; dense; dry; 45% clay, 55% silt.	
18			MW-11 -15'		15				
51			MW-11 -20'		20				22.5
						GC		**Clayey GRAVEL**; (GC); Olive gray; medium dense; wet; 25% clay, 5% sand, 70% gravel. ▽	
11			MW-11 -25'		25				25.0

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Lonestar Sand #2/12
- 4"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 25 ft

WELL LOG (PID/TPHG) G:\SAN LEANDRO 1784 150TH\GINT\SNL1784.GPJ DEFAULT.GDT 1/2/04

ATTACHMENT D

Virgil Chavez Well Survey Report

Virgil Chavez Land Surveying
312 Georgia Street, Suite 225
Vallejo, California 94590-5907
(707) 553-2476 • Fax (707) 553-8698

December 17, 2003
Project No.: 2110-77

Stu Dalie
Cambria Environmental
5900 Hollis Street, Suite A
Emeryville, CA 94608

Subject: Monitoring Well Survey
Shell-Branded Service Station
1784 150th Avenue
San Leandro, CA

Dear Stu:

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 completed on December 11, 2003. The benchmark for this survey was a cinch nail in top of catch basin northwest corner of 150th and East 14th Streets. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83). Benchmark Elevation = 36.883 feet (NGVD 29).

Latitude	Longitude	Northing	Easting	Elev.	Desc.
				41.84	RIM MW-9
37.7093743	-122.1253944	2084844.41	6091501.49	41.65	TOC MW-9
				50.98	RIM MW-10
37.7092599	-122.1245814	2084798.68	6091735.90	50.64	TOC MW-10
				45.94	RIM MW-11
37.7090252	-122.1248290	2084714.46	6091662.80	45.58	TOC MW-11

LICENSED LAND SURVEYOR
VIRGIL D. CHAVEZ
No. 6323
Exp. 12-31-06
STATE OF CALIFORNIA

Sincerely,

Virgil D. Chavez, PLS 6323

ATTACHMENT E

Certified Laboratory Report

SEVERN TRENT STL

Submission#: 2003-11-0806

Cambria Environmental Emeryville

December 09, 2003

5900 Hollis Street, Ste. A
Emeryville, CA 94608

Attn.: Stu Dalie

Project#: 245-0612
Project: 98996068
Site: 1784 150th Street, San Leandro, CA

Dear Mr. Dalie:

Attached is our report for your samples received on 11/21/2003 15:25
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 01/05/2004 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: vvancil@stl-inc.com

Sincerely,

Vincent Vancil
Project Manager

SEVERN TRENT STL

Submission #: 2003-11-0806

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Stu Dalie

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-9-5`	11/19/2003 10:00	Soil	1
MW-9-10`	11/19/2003 10:10	Soil	2
MW-9-15`	11/19/2003 10:15	Soil	3
MW-9-20`	11/19/2003 10:20	Soil	4
MW-9-25`	11/19/2003 10:35	Soil	5
MW-9-30`	11/19/2003 10:40	Soil	6
MW-9-35`	11/19/2003 11:00	Soil	7
MW-11-5`	11/20/2003 08:00	Soil	8
MW-11-10`	11/20/2003 08:10	Soil	9
MW-11-15`	11/20/2003 08:15	Soil	10
MW-11-20`	11/20/2003 08:30	Soil	11
MW-10-5`	11/20/2003 10:30	Soil	13
MW-10-10`	11/20/2003 10:45	Soil	14
MW-10-15`	11/20/2003 10:50	Soil	15
MW-10-20`	11/20/2003 11:00	Soil	16
MW-10-25`	11/20/2003 11:15	Soil	17
MW-10-30`	11/20/2003 11:30	Soil	18

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Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-9-5**	Lab ID:	2003-11-0806 - 1
Sampled:	11/19/2003 10:00	Extracted:	11/25/2003 11:43
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 11:43	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 11:43	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 11:43	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 11:43	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 11:43	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 11:43	
Surrogate(s)						
1,2-Dichloroethane-d4	88.8	70	%	1.00	11/25/2003 11:43	
Toluene-d8	100.4	81	%	1.00	11/25/2003 11:43	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-9-10'	Lab ID:	2003-11-0806 - 2
Sampled:	11/19/2003 10:10	Extracted:	11/25/2003 12:02
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 12:02	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:02	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:02	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:02	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 12:02	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 12:02	
Surrogate(s)						
1,2-Dichloroethane-d4	83.6	70	%	1.00	11/25/2003 12:02	
Toluene-d8	105.9	81	%	1.00	11/25/2003 12:02	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-9-15'**	Lab ID:	2003-11-0806 - 3
Sampled:	11/19/2003 10:15	Extracted:	11/25/2003 12:20
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 12:20	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:20	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:20	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 12:20	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 12:20	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 12:20	
Surrogate(s)						
1,2-Dichloroethane-d4	91.4	70	%	1.00	11/25/2003 12:20	
Toluene-d8	101.0	81	%	1.00	11/25/2003 12:20	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-9-20'	Lab ID:	2003-11-0806 - 4
Sampled:	11/19/2003 10:20	Extracted:	11/25/2003 13:16
Matrix:	Soil	QC Batch#:	2003/11/25-1A 69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 13:16	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:16	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:16	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:16	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 13:16	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 13:16	
Surrogate(s)						
1,2-Dichloroethane-d4	89.6	70	%	1.00	11/25/2003 13:16	
Toluene-d8	107.6	81	%	1.00	11/25/2003 13:16	

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Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-9-25**	Lab ID:	2003-11-0806 - 6
Sampled:	11/19/2003 10:35	Extracted:	11/25/2003 13:35
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 13:35	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:35	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:35	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:35	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 13:35	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 13:35	
Surrogate(s)						
1,2-Dichloroethane-d4	93.3	70	%	1.00	11/25/2003 13:35	
Toluene-d8	93.9	81	%	1.00	11/25/2003 13:35	

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Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-9-30**	Lab ID:	2003-11-0806 - 6
Sampled:	11/19/2003 10:40	Extracted:	11/25/2003 13:54
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 13:54	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:54	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:54	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 13:54	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 13:54	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 13:54	
Surrogate(s)						
1,2-Dichloroethane-d4	91.2	70	%	1.00	11/25/2003 13:54	
Toluene-d8	95.7	81	%	1.00	11/25/2003 13:54	

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Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-9-35	Lab ID:	2003-11-0806 - 7
Sampled:	11/19/2003 11:00	Extracted:	11/25/2003 14:12
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 14:12	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:12	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:12	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:12	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 14:12	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 14:12	
Surrogate(s)						
1,2-Dichloroethane-d4	86.6	70	%	1.00	11/25/2003 14:12	
Toluene-d8	96.4	81	%	1.00	11/25/2003 14:12	

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Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-11-5**	Lab ID:	2003-11-0806 - 8
Sampled:	11/20/2003 08:00	Extracted:	11/25/2003 14:30
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 14:30	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:30	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:30	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:30	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 14:30	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 14:30	
Surrogate(s)						
1,2-Dichloroethane-d4	93.4	70	%	1.00	11/25/2003 14:30	
Toluene-d8	106.5	81	%	1.00	11/25/2003 14:30	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-11-10**	Lab ID:	2003-11-0806 - 9
Sampled:	11/20/2003 08:10	Extracted:	11/25/2003 14:49
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 14:49	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:49	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:49	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 14:49	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 14:49	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 14:49	
Surrogate(s)						
1,2-Dichloroethane-d4	87.1	70	%	1.00	11/25/2003 14:49	
Toluene-d8	93.1	81	%	1.00	11/25/2003 14:49	

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Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-11-15	Lab ID:	2003-11-0806 - 10
Sampled:	11/20/2003 08:15	Extracted:	11/25/2003 15:08
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 15:08	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:08	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:08	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:08	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 15:08	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 15:08	
Surrogate(s)						
1,2-Dichloroethane-d4	88.6	70	%	1.00	11/25/2003 15:08	
Toluene-d8	106.0	81	%	1.00	11/25/2003 15:08	

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Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-11-20**	Lab ID:	2003-11-0806 - 11
Sampled:	11/20/2003 08:30	Extracted:	11/26/2003 12:23
Matrix:	Soil	QC Batch#:	2003/11/26-1C.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1.8	1.0	mg/Kg	1.00	11/26/2003 12:23	g
Benzene	ND	0.0050	mg/Kg	1.00	11/26/2003 12:23	
Toluene	ND	0.0050	mg/Kg	1.00	11/26/2003 12:23	
Ethyl benzene	0.0084	0.0050	mg/Kg	1.00	11/26/2003 12:23	
Total xylenes	0.013	0.0050	mg/Kg	1.00	11/26/2003 12:23	
Methyl tert-butyl ether (MTBE)	0.039	0.0050	mg/Kg	1.00	11/26/2003 12:23	
Surrogate(s)						
1,2-Dichloroethane-d4	87.9	70	%	1.00	11/26/2003 12:23	
Toluene-d8	92.3	81	%	1.00	11/26/2003 12:23	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-5**	Lab ID:	2003-11-0806 - 13
Sampled:	11/20/2003 10:30	Extracted:	11/25/2003 15:45
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 15:45	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:45	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:45	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 15:45	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 15:45	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 15:45	
Surrogate(s)						
1,2-Dichloroethane-d4	99.6	70	%	1.00	11/25/2003 15:45	
Toluene-d8	90.7	81	%	1.00	11/25/2003 15:45	

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Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-10'**	Lab ID:	2003-11-0806 - 14
Sampled:	11/20/2003 10:45	Extracted:	11/25/2003 16:03
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 16:03	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:03	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:03	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:03	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 16:03	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 16:03	
Surrogate(s)						
1,2-Dichloroethane-d4	95.2	70	%	1.00	11/25/2003 16:03	
Toluene-d8	82.7	81	%	1.00	11/25/2003 16:03	

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Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-15**	Lab ID:	2003-11-0806 - 15
Sampled:	11/20/2003 10:50	Extracted:	11/25/2003 16:22
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 16:22	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:22	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:22	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:22	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 16:22	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 16:22	
Surrogate(s)						
1,2-Dichloroethane-d4	87.6	70	%	1.00	11/25/2003 16:22	
Toluene-d8	94.5	81	%	1.00	11/25/2003 16:22	

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Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-20'**	Lab ID:	2003-11-0806 - 16
Sampled:	11/20/2003 11:00	Extracted:	11/25/2003 16:40
Matrix:	Soil	QC Batch#:	2003/11/25-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 16:40	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:40	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:40	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 16:40	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 16:40	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 16:40	
Surrogate(s)						
1,2-Dichloroethane-d4	85.0	70	%	1.00	11/25/2003 16:40	
Toluene-d8	105.6	81	%	1.00	11/25/2003 16:40	

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Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-25**	Lab ID:	2003-11-0806 - 17
Sampled:	11/20/2003 11:15	Extracted:	11/25/2003 19:15
Matrix:	Soil	QC Batch#:	2003/11/25-2A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	11/25/2003 19:15	
Benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 19:15	
Toluene	ND	0.0050	mg/Kg	1.00	11/25/2003 19:15	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	11/25/2003 19:15	
Total xylenes	ND	0.0050	mg/Kg	1.00	11/25/2003 19:15	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	11/25/2003 19:15	
Surrogate(s)						
1,2-Dichloroethane-d4	92.1	70	%	1.00	11/25/2003 19:15	
Toluene-d8	93.9	81	%	1.00	11/25/2003 19:15	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

Attn.: Stu Dalie

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-10-30	Lab ID:	2003-11-0806 - 18
Sampled:	11/20/2003 11:30	Extracted:	11/25/2003 19:34
Matrix:	Soil	QC Batch#:	2003/11/25-2A.69

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	14	4.6	mg/Kg	4.59	11/25/2003 19:34	g
Benzene	ND	0.023	mg/Kg	4.59	11/25/2003 19:34	
Toluene	ND	0.023	mg/Kg	4.59	11/25/2003 19:34	
Ethyl benzene	ND	0.023	mg/Kg	4.59	11/25/2003 19:34	
Total xylenes	ND	0.023	mg/Kg	4.59	11/25/2003 19:34	
Methyl tert-butyl ether (MTBE)	ND	0.023	mg/Kg	4.59	11/25/2003 19:34	
Surrogate(s)						
1,2-Dichloroethane-d4	91.5	70	%	4.60	11/25/2003 19:34	
Toluene-d8	94.0	81	%	4.60	11/25/2003 19:34	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/11/25-1A.69**

MB: 2003/11/25-1A.69-011 — Date Extracted: 11/25/2003 10:11

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.000	mg/Kg	11/25/2003 10:11	
Gasoline	ND	1.000	mg/Kg	11/25/2003 10:11	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	11/25/2003 10:11	
Benzene	ND	0.0050	mg/Kg	11/25/2003 10:11	
Toluene	ND	0.0050	mg/Kg	11/25/2003 10:11	
Ethyl benzene	ND	0.0050	mg/Kg	11/25/2003 10:11	
Total xylenes	ND	0.0050	mg/Kg	11/25/2003 10:11	
Surrogates(s)					
1,2-Dichloroethane-d4	90.2	70-121	%	11/25/2003 10:11	
Toluene-d8	97.8	81-117	%	11/25/2003 10:11	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — Soil — **QC Batch # 2003/11/25-2A.69**

MB: 2003/11/25-2A.69-044 — Date Extracted: 11/25/2003 18:44

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.000	mg/Kg	11/25/2003 18:44	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	11/25/2003 18:44	
Benzene	ND	0.0050	mg/Kg	11/25/2003 18:44	
Toluene	ND	0.0050	mg/Kg	11/25/2003 18:44	
Ethyl benzene	ND	0.0050	mg/Kg	11/25/2003 18:44	
Total xylenes	ND	0.0050	mg/Kg	11/25/2003 18:44	
Surrogates(s)					
1,2-Dichloroethane-d4	92.8	70-121	%	11/25/2003 18:44	
Toluene-d8	93.0	81-117	%	11/25/2003 18:44	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/11/26-1C.69**

MB: 2003/11/26-1C.69-047 — Date Extracted: 11/26/2003 09:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1.000	mg/Kg	11/26/2003 09:47	
Benzene	ND	0.0050	mg/Kg	11/26/2003 09:47	
Toluene	ND	0.0050	mg/Kg	11/26/2003 09:47	
Ethyl benzene	ND	0.0050	mg/Kg	11/26/2003 09:47	
Total xylenes	ND	0.0050	mg/Kg	11/26/2003 09:47	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	11/26/2003 09:47	
Surrogates(s)					
1,2-Dichloroethane-d4	85.7	70-121	%	11/26/2003 09:47	
Toluene-d8	105.9	81-117	%	11/26/2003 09:47	

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — **Soil** — **QC Batch # 2003/11/25-1A.69**

LCS 2003/11/25-1A.69-034 — Extracted: 11/25/2003 — Analyzed: 11/25/2003 10:34

LCSD 2003/11/25-1A.69-052 — Extracted: 11/25/2003 — Analyzed: 11/25/2003 09:52

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0481	0.0476	0.05	96.2	95.2	1.0	65-165	20		
Benzene	0.0442	0.0415	0.05	88.4	83.0	6.3	69-129	20		
Toluene	0.0508	0.0496	0.05	101.6	99.2	2.4	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	434	433	500	86.8	86.6		70-121			
Toluene-d8	463	477	500	92.6	95.4		81-117			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike | **Soil** | **QC Batch # 2003/11/25-2A.69**

LCS 2003/11/25-2A.69-006 Extracted: 11/25/2003 Analyzed: 11/25/2003 18:06

LCSD 2003/11/25-2A.69-025 Extracted: 11/25/2003 Analyzed: 11/25/2003 18:25

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0443	0.0490	0.05	88.6	98.0	10.1	65-165	20		
Benzene	0.0515	0.0459	0.05	103.0	91.8	11.5	69-129	20		
Toluene	0.0546	0.0450	0.05	109.2	90.0	19.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	460	450	500	92.0	90.0		70-121			
Toluene-d8	525	434	500	105.0	86.8		81-117			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — **Soil** — **QC Batch # 2003/11/26-1C.69**

LCS 2003/11/26-1C.69-008 — Extracted: 11/26/2003 — Analyzed: 11/26/2003 09:08

LCSD 2003/11/26-1C.69-029 — Extracted: 11/26/2003 — Analyzed: 11/26/2003 09:29

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	0.0463	0.0429	0.05	92.6	85.8	7.6	69-129	20		
Toluene	0.0508	0.0541	0.05	101.6	108.2	6.3	70-130	20		
Methyl tert-butyl ether (MTBE)	0.0428	0.0454	0.05	85.6	90.8	5.9	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	415	412	500	83.0	82.4		70-121			
Toluene-d8	458	493	500	91.6	98.6		81-117			

Gas/BTEX/MTBE by 8260B (C6-C12)

Cambria Environmental Emeryville

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Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Legend and Notes

Analysis Flag

o

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

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

SEVERN TRENT STL

Submission #: 2003-11-0806

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

Attn.: Stu Dalie

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-11-24.5'	11/20/2003 08:45	Soil	12
MW-10-31.5'	11/20/2003 11:45	Soil	19

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

Attn.: Stu Dalie

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Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-11-24.5'**	Lab ID:	2003-11-0806 - 12
Sampled:	11/20/2003 08:45	Extracted:	12/1/2003 11:30
Matrix:	Soil	QC Batch#:	2003/12/01-03.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	330	50	mg/Kg	1.00	12/04/2003 10:23	
Benzene	ND	0.50	mg/Kg	1.00	12/04/2003 10:23	
Toluene	1.6	0.50	mg/Kg	1.00	12/04/2003 10:23	
Ethyl benzene	4.8	0.50	mg/Kg	1.00	12/04/2003 10:23	
Total xylenes	29	0.50	mg/Kg	1.00	12/04/2003 10:23	
Methyl tert-butyl ether (MTBE)	1.4	0.50	mg/Kg	1.00	12/04/2003 10:23	
Surrogate(s)						
1,2-Dichloroethane-d4	82.3	76-130	%	1.00	12/04/2003 10:23	
Toluene-d8	99.5	78-115	%	1.00	12/04/2003 10:23	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

Attn.: Stu Dalie

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-10-31.5**	Lab ID:	2003-11-0806 - 19
Sampled:	11/20/2003 11:45	Extracted:	12/1/2003 11:30
Matrix:	Soil	QC Batch#:	2003/12/01-3A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	230	50	mg/Kg	1.00	12/03/2003 14:52	
Benzene	ND	0.50	mg/Kg	1.00	12/03/2003 14:52	
Toluene	ND	0.50	mg/Kg	1.00	12/03/2003 14:52	
Ethyl benzene	2.2	0.50	mg/Kg	1.00	12/03/2003 14:52	
Total xylenes	1.5	0.50	mg/Kg	1.00	12/03/2003 14:52	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	1.00	12/03/2003 14:52	
Surrogate(s)						
1,2-Dichloroethane-d4	76.0	76-130	%	1.00	12/03/2003 14:52	
Toluene-d8	89.0	78-115	%	1.00	12/03/2003 14:52	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

Attn.: Stu Dalie

5900 Hollis Street, Ste. A
Emeryville, CA 94608
Phone: (510) 420-3339 Fax: (510) 420-9170

Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/12/01-03.66**

MB: 2003/12/01-03.66-036 — Date Extracted: 12/01/2003 13:36

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	mg/Kg	12/01/2003 13:36	
Benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Toluene	ND	0.50	mg/Kg	12/01/2003 13:36	
Ethyl benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Total xylenes	ND	0.50	mg/Kg	12/01/2003 13:36	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	12/01/2003 13:36	
Surrogates(s)					
1,2-Dichloroethane-d4	98.0	76-130	%	12/01/2003 13:36	
Toluene-d8	94.8	78-115	%	12/01/2003 13:36	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

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Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/12/01-3A.66**

MB: 2003/12/01-3A.66-036 — Date Extracted: 12/01/2003 13:36

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	mg/Kg	12/01/2003 13:36	
Benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Toluene	ND	0.50	mg/Kg	12/01/2003 13:36	
Ethyl benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Total xylenes	ND	0.50	mg/Kg	12/01/2003 13:36	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	12/01/2003 13:36	
Surrogates(s)					
1,2-Dichloroethane-d4	98.0	76-130	%	12/01/2003 13:36	
Toluene-d8	94.8	78-115	%	12/01/2003 13:36	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

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Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — **Soil** — **QC Batch # 2003/12/01-03.66**

LCS 2003/12/01-03.66-048 — Extracted: 12/01/2003 — Analyzed: 12/01/2003 12:48

LCSD 2003/12/01-03.66-012 — Extracted: 12/01/2003 — Analyzed: 12/01/2003 13:12

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	9360	9530	10000	93.6	95.3	1.8	69-129	20		
Toluene	9460	9610	10000	94.6	96.1	1.6	70-130	20		
Methyl tert-butyl ether (MTBE)	9120	9140	10000	91.2	91.4	0.2	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	244	251	250	97.6	100.4		76-130			
Toluene-d8	231	243	250	92.4	97.2		78-115			

Gas/BTEXFuel Oxygenates by 8260B (High Level)

Cambria Environmental Emeryville

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Project: 245-0612
98996068

Received: 11/21/2003 15:25

Site: 1784 150th Street, San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Laboratory Control Spike — **Soil** — **QC Batch # 2003/12/01-3A.66**

LCS 2003/12/01-3A.66-048 — Extracted: 12/01/2003 — Analyzed: 12/01/2003 12:48

LCSD 2003/12/01-3A.66-012 — Extracted: 12/01/2003 — Analyzed: 12/01/2003 13:12

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	9.36	9.53	10.0	93.6	95.3	1.8	69-129	20		
Toluene	9.46	9.61	10.0	94.6	96.1	1.6	70-130	20		
Methyl tert-butyl ether (MTBE)	9.12	9.14	10.0	91.2	91.4	0.2	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	244	251	250	97.6	100.4		76-130			
Toluene-d8	231	243	250	92.4	97.2		78-115			

LAB: STL San francisco

2003 SHELL Chain Of Custody Record

80523

11 D802

Lab Identification (if necessary):
Address: 1220 Quarry lane
City, State, Zip: Pleasanton CA, 94566

Shell Project Manager to be Invoiced:

- ☑ SCIENCE & ENGINEERING — Karen Petryna
- ☐ TECHNICAL SERVICES
- ☐ CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 6 0 6 8

SAP or CRMT NUMBER (TS/CRMT): [redacted] 1 3 6 0 1 9

DATE: 11/20/03

page 3 of 3

SAMPLING COMPANY: Cambria Environmental	LOG CODE: CETO
SITE ADDRESS (Street and City): 1784 150th Street, San Leandro CA	GLOBAL ID NO.: T0600101230
ADDRESS: 5900 Hollis St. Ste A, Emeryville, CA	
EDF DELIVERABLE TO (Responsible Party or Designee): shelloaklandedf@cambria-env.com	PHONE NO.: 510-420-3339
E-MAIL: sdalie@cambria-env.com	CONSULTANT PROJECT NO.: 245-0612
PROJECT CONTACT (Hardcopy or PDF Report to): Stu Dalie	SAMPLER NAME(S) (Print): Stu Dalie
TELEPHONE: 510-420-3339	FAX: 510-420-9170
E-MAIL: sdalie@cambria-env.com	LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ______

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

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

Please cc results to sdalie@cambria-env.com & mmunz@cambria-env.com

REQUESTED ANALYSIS

Field Sample Identification	Sampling Date	Sampling Time	Matrix	No. of Cont.	TPH - Gas, Purgeable	BTEX	TBA	MTBE (8260B - 0.5ppb RL)	TAME, DIPE, ETBE (see notes)	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B- ___)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes (On ICE) Field point ID / TEMPERATURE ON RECEIPT C°
MW-10-5'	11/20/03	1030	Soil	1	X	X		X																	MW-10
MW-10-10'	↓	1045	↓	1	X	X		X																	
MW-10-15'	↓	1050	↓	1	X	X		X																	
MW-10-20'	↓	1100	↓	1	X	X		X																	
MW-10-25'	↓	1115	↓	1	X	X		X																	
MW-10-30'	↓	1130	↓	1	X	X		X																	
MW-10-31.5'	↓	1145	↓	1	X	X		X																	

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	Safe Location, Emeryville office refridgerator; Stewart Dalie	11/20/03	8:00 A.M
[signature]	[signature]	11/21/03	15:25
[signature]	[signature] Mounak 11/21/03/1625	11/21/03	16:25

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

10/16/00 Revision

LAB: STL San francisco

2003 SHELL Chain Of Custody Record 0826 — 80523

Lab Identification (if necessary):
Address: 1220 Quarry lane
City, State, Zip: Pleasanton CA, 94566

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

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 6 0 6 8

SAP or CRMT NUMBER (TS/CRMT): 1 3 6 0 1 9

DATE: 11/20/03

PAGE ~~of~~ Page 2 of 3

SAMPLING COMPANY: Cambria Environmental	LOG CODE: CETO
SITE ADDRESS (Street and City): 1784 150th Street, San Leandro CA	GLOBAL ID NO.: T0600101230
ADDRESS: 5900 Hollis St. Ste A, Emeryville, CA	
EDF DELIVERABLE TO (Responsible Party or Designee): shellbaklandedf@cambria-env.com	PHONE NO.: 510-420-3339
E-MAIL: sdalie@cambria-env.com	CONSULTANT PROJECT NO.: 245-0612
PROJECT CONTACT (Hardcopy or PDF Report to): Stu Dalie	SAMPLER NAME(S) (Print): Stu Dalie
TELEPHONE: 510-420-3339	FAX: 510-420-9170
E-MAIL: sdalie@cambria-env.com	LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ____

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

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

Please cc results to sdalie@cambria-env.com & mmunz@cambria-env.com

REQUESTED ANALYSIS

Field Sample Identification	Sampling Date	Sampling Time	Matrix	No. of Cont.	TPH - Gas, Purgeable	BTEX	TBA	MTBE (8260B - 0.5ppb RL)	TAME, DIPE, ETBE (see notes)	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTM D1946)	Test for Disposal (4B-___)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
MW-11-5'	11/20/03	800	Soil	1	X	X		X																	MW-11
MW-11-10'	↓	810	↓	1	X	X		X																	↓
MW-11-15'	↓	815	↓	1	X	X		X																	↓
MW-11-20'	↓	830	↓	1	X	X		X																	↓
MW-11-24.5'	↓	845	↓	1	X	X		X																	↓

On ICE — Field point ID

TEMPERATURE ON RECEIPT C°:

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Stuart A. Dalie	Safe Location, Emeryville office refridgeerator, Stewart Dalie	11/20/03	8:00 A.M
[signature]	[signature]	11/21/03	16:25
[signature]	W. Vounat 11/21/03 1625	11/21/03	16:25

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client. 10/23/03 Revision

LAB: STL San francisco

2003 SHELL/Chain of Custody Record

80523

Lab Identification (if necessary):

Address: 1220 Quarry lane

City, State, Zip: Pleasanton CA, 04566

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING — Karen Petryna

☐ TECHNICAL SERVICES

☐ GMT HOUSTON

INCIDENT NUMBER (S&E ONLY): 98996068

SAP or CRMT NUMBER (TS/CRMT): 136019

DATE: 11/20/03

Page 1 of 3

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
Cambria Environmantal	CETO	1784 150th Street, San Leandro CA	T0600101230

ADDRESS:	EDF DELIVERABLE TO (Responsible Party or Designee):	PHONE NO.:	E-MAIL:	CONSULTANT PROJECT NO.:
5900 Hollis St. Ste A, Emeryville, CA	shelleestanderf@cambria-env.com	510-420-3339	sdalie@cambria-env.com	245-0812

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	E-MAIL:
Stu Dalie	510-420-3339	510-420-9170	sdalie@cambria-env.com

SAMPLER NAME(S) (Print): Stu Dalie

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: _____

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

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

Please cc results to sdalie@cambria-env.com & mmunz@cambria-env.com

REQUESTED ANALYSIS

LAB NO.	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	TBA	MTBE (8260B - 0.5ppb RL)	TAME, DIPE, ETBE(see notes)	Ethanol (8260B)	Methanol	EDB & 1,2-DCA (8260B)	EPA 5035 Extraction for Volatiles	VOCs Halogenated/Aromatic (8021B)	TRPH (418.1)	Vapor VOCs BTEX / MTBE (TO-15)	Vapor VOCs Full List (TO-15)	Vapor TPH (ASTM 3416m)	Vapor Fixed Gases (ASTMD1946)	Test for Disposal (48~)	Test for Disposal, see attached	TPH - Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See Note	TEMPERATURE ON RECEIPT C°
1	MW-9-5'	11/19/03	10:00	Soil	1	X	X		X																	
2	MW-9-10'		10:10			X	X		X																	
3	MW-9-15'		10:15			X	X		X																	
4	MW-9-20'		10:20			X	X		X																	
5	MW-9-25'		10:35			X	X		X																	
6	MW-9-30'		10:40			X	X		X																	
7	MW-9-34.5'-35'		11:00			X	X		X																	

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

6.0°C On ICE. Field point ID: MW-9

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Safe Location, Emeryville office refridgeerator. Stewart Dalie	11/20/03	8:00 A.M
Relinquished by: (Signature)	Received by: (Signature)	Date: 11/21/03	Time: 15:25
Relinquished by: (Signature)	Received by: (Signature) Nauna C. 11/21/03 16:25	Date: 11/21/03	Time: 16:25

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

10/18/00 Revision

ATTACHMENT F

Soil Disposal Confirmation Report

MANLEY & SONS TRUCKING, INC.
ROCK
SAND
DEMO
FILL DIRT
TOP SOIL
CA 009430
(916) 381-6864

Hazardous Waste Hauler (Registration #2843)

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

Disposal Confirmation

Request for Transportation Received: 12/01/03

Consultant Information

Company:	Cambria Environmental
Contact:	Stu Dalie
Phone:	510 420-3339
Fax:	510 420-9170

Site Information

Station #:	N/A
Street Address:	1784 150th Street
City, State, ZIP:	San Leandro, CA
Customer:	Shell Oil Company RESA-0023-LDC
RIPR #:	30478
SAP # / Location:	136019
Incident #:	98996068
Location / WIC #:	204-6857-1404
Environmental Engineer:	Karen Petryna
Material Description:	Contaminated Soil
Estimated Quantity:	4 – 5 Yards
Service Requested Date:	
Disposal Facility:	Forward
Contact:	Griffith, Joe
Phone:	800-204-4242
Approval #:	2522
Date of Disposal:	3.29 Tons
Actual Tonnage	
Transporter:	Manley & Sons Trucking, Inc.
Contact:	Glenell Manley
Phone:	916 381-6864
Fax:	916 381-1573
Invoice:	
Date of Invoice:	

ATTACHMENT G

Well Driller's Completion Reports

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED