CAMBRIA

June 27, 2001

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

Re: **Investigation Report and Risk-Based Corrective Action Analysis**
Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067
Cambria Project # 243-0504

Dear Mr. Hwang:

Cambria Environmental Technology, Inc. (Cambria) has prepared this investigation report and risk-based corrective action (RBCA) analysis on behalf of Equiva Services LLC. The investigation was conducted in accordance with Cambria's February 3, 2000 *Site Investigation Work Plan* which was verbally approved by Mr. Hwang of the Alameda County Health Care Services Agency (ACHCSA) on June 21, 2000. The purpose of this investigation was to collect in-situ vapor and physical soil property samples for a RBCA analysis of the potential risk to offsite receptors posed by hydrocarbons originating from the site. The RBCA was requested in an ACHCSA letter dated November 5, 1999 if concentrations in the next two quarters remained above the agency's calculated Tier 2 level of 162 parts per billion (ppb)benzene.

Cambria's RBCA analysis was based on RBCA guidelines for petroleum release sites provided by the American Society for Testing and Materials (ASTM) Designation E-1739-95[1]. Descriptions of the site and surrounding areas, previous site environmental activities, site investigation results, and results and conclusions of the RBCA analysis are presented below.

SITE BACKGROUND

Site Description: The operating Shell-branded service station is located at the northwest corner of Bancroft and Estudillo Avenues in San Leandro, California (Figures 1 and 2). There are three underground storage tanks (USTs) onsite. The area surrounding the site is primarily residential. The site is approximately 65 feet above mean sea level and slopes very gently towards San

[1] **Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites**, E 1739-95 (Revised December 1996): American Society of Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

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Francisco Bay to the west. San Leandro Creek is located approximately 500 feet northwest of the site.

Waste-Oil Tank Removal: In November 1986, Petroleum Engineering of Santa Rosa, California removed a 550-gallon waste-oil tank and installed a new 550-gallon fiberglass tank in the former tank pit. Immediately following the tank removal, Blaine Tech Services (BTS) of San Jose, California collected soil samples beneath the former tank location at nine feet below grade (fbg). The soil samples contained 83 parts per million (ppm) petroleum oil and grease and 583 ppm total oil and grease (TOG). After additional excavation, BTS collected another soil sample at 9.5 fbg, which contained 89 ppm TOG. No groundwater was encountered in the tankpit.

Well Installation: In March 1990, Weiss Associates (WA) installed groundwater monitoring well MW-1 adjacent to the waste-oil tank. No petroleum constituents were detected in soil samples analyzed from boring MW-1. The maximum total petroleum hydrocarbons as gasoline (TPHg) concentration in groundwater from well MW-1 was 0.51 ppm.

Subsurface Investigation: In February 1992, WA advanced two soil borings upgradient and downgradient of the existing USTs and converted them into monitoring wells MW-2 and MW-3, respectively. A maximum TPHg concentration of 8,800 ppm was detected in boring BH-B, which was converted into monitoring well MW-2. No benzene was detected in this investigation.

Dispenser Replacement Sampling: In October 1995, WA collected soil samples from beneath the former dispensers. A maximum TPHg concentration of 130 ppm was detected in soil sample D-2A located 2 fbg beneath the northern dispenser-island. A maximum benzene concentration of 0.31 ppm was detected in soil sample L-1, located 2 fbg beneath the product piping lines on the south end of the site.

Well Installation: In May 1999, Cambria advanced four borings and converted them into groundwater monitoring wells MW-5, MW-6, MW-7, and MW-8. Soil samples collected from boring MW-5 contained maximum concentrations in soil of 10.5 ppm TPHg at 40.5 fbg, 0.0475 ppm benzene at 35.5 fbg, and 2.25 ppm methyl tertiary butyl ether (MTBE) at 35.5 fbg.

Groundwater Flow Direction: Depth to water ranges from 30.45 to 45.23 fbg. Groundwater flows west to northwesterly as determined from water-level measurements collected between the first quarter 1990 and the fourth quarter 2000.

Site Lithology: Sediments encountered beneath the site consist of sandy silt to between 20 and 30 fbg and silty sand to approximately 35 fbg.

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SITE INVESTIGATION PROCEDURES

Cambria advanced two borings along the west driveway of the Hale Apartments, and four borings along the east driveway of the apartments (Figure 2). The procedures are summarized below. Analytical results for groundwater data, soil chemical data, vapor data, and soil physical data are summarized in Tables 1, 2, 3, and 4, respectively. The analytical reports are presented in Attachment A. Cambria's Standard Field Procedures for Soil and Soil Vapor Sampling and Soil Borings are presented as Attachment B.

FIELD ACTIVITIES

Personnel Present: James Loetterle, Staff Geologist of Cambria
Darren Croteau, Project Manager of Cambria

Permit: Alameda County Public Works Agency permit # W00-354. A copy of the permit is included in Attachment C.

Drilling Dates: June 26-27, 2000.

Drilling Method: Geoprobe.

Number of Borings: Six. (B-1 through B-6) (Figure 2).

Boring Depths: Borings B-1, B-2, B-4, and B-6 were advanced to a depth of 36 fbg. Boring B-3 was advanced to a depth of 35 fbg, and boring B-5 was advanced to a depth of 39 fbg.

Soil Sampling: Soil chemical samples were collected every five feet or at lithologic changes. Soil vapor samples were collected at approximately 5 fbg, 10 fbg, 20 fbg, and 35 fbg. Soil physical samples were collected at approximately 10 fbg and 35 fbg.

Groundwater Sampling: Grab groundwater samples were collected from borings B-1 and B-2, but were not recovered from borings B-3 and B-4. Representative groundwater samples from these areas were obtained from nearby monitoring wells.

Groundwater Depth: Groundwater was encountered in borings B-1 through B-4 at depths ranging from 32.1 to 35.5 fbg. Groundwater was not encountered in borings B-5 or B-6. Groundwater generally flows toward the west-southwest.

Sediment Lithology: This investigation revealed a layer of light brown, moist, gravelly, sandy fill of high estimated permeability to an approximate depth of 2 fbg. The fill is underlain by brown to dark brown sand which is interbedded by 1-foot to 8.5-feet thick beds of light brown to grey/brown, silty sand to the total explored depth of 39 fbg. Cambria's boring logs are presented as Attachment D. A sandy gravel lens was encountered in a previous investigation at approximately 37 to 42 fbg in all borings except for MW-7. Clayey sands extend beneath the sandy gravel to the total previously explored depth of 50 fbg.

Chemical Analysis: Selected soil, and all groundwater samples were analyzed as follows:

- TPHg by modified EPA Method 8015,
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) and MTBE were analyzed by EPA Method 8020.
- All reported concentrations of MTBE were confirmed by EPA Method 8260.

Selected soil vapor samples were analyzed as follows:

- TPHg and BTEX by modified EPA Method TO-3.

Chemical analytical results are presented as Attachment A.

Other selected soil samples were analyzed as follows:

- Fraction organic carbon by EPA Method 415.1,
- Percent moisture by EPA Method 160.3,
- Bulk density and total porosity by API RP-40.

Soil property test results are presented as Attachment E.

Soil Handling: To characterize stockpiled soil for disposal, four brass tubes of soil were collected from the stockpiled soil and then composited by the analytical laboratory. The composite samples were analyzed for TPHg by modified EPA Method 8015; BTEX and MTBE by EPA Method 8020; TTLC lead, STLC lead, and organic lead. Soil cuttings produced from the borings were disposed of at Forward Landfill in Manteca, California on August 10, 2000. (Attachment F)

Backfill Method: The borings were backfilled with neat-cement grout.

INVESTIGATION RESULTS

Hydrocarbon Distribution in Groundwater: No TPHg, benzene, or MTBE was detected in groundwater samples collected from borings B-1 and B-2.

Hydrocarbon Distribution in Soil: The maximum TPHg concentration identified during this investigation was 21.5 ppm in boring B-5 at a depth of 10.5 fbg. The maximum identified benzene concentration was 0.0520 ppm in boring B-3 at a depth of 34.5 fbg. The maximum identified MTBE concentration by EPA method 8260 was 0.243 ppm in boring B-4 at a depth of 35.0 fbg. No TPHg was detected in borings B-2 and B-4. No benzene was detected in borings B-1, B-2, or B-6.

Hydrocarbon Distribution in Soil Vapor: The maximum identified benzene vapor concentration was 1.1 parts per million by volume (ppmv) in boring B-3 at a depth of 32.0 fbg; however, this concentration may be biased due to matrix interferences. The maximum identified benzene vapor concentration that was not biased was 0.0037 ppmv in boring B-1 at a depth of 32.0 fbg.

Soil Physical Properties: Selected soil samples were analyzed for physical properties from the vadose zone at depths of 6.0 to 11.5 fbg, and from the capillary fringe zone at depths of 31.0 to 35.0 fbg. Results of these analyses are presented in Table 4.

RISK ASSESSMENT

To evaluate the potential health risk to offsite occupants, Cambria conducted a human health risk assessment following the guidelines outlined by the ASTM for petroleum release sites.[2] The ASTM-RBCA approach is consistent with the general USEPA and Cal-EPA risk assessment guidance. Cambria's risk assessment consists of a conceptual site model (CSM) and a RBCA analysis.

[2] ASTM Designation E 1739-95, December 1996, *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites*, West Conshoshocken, PA, 19428.

Conceptual Site Model

A CSM describes the relationship between the impacted sources and receptors that may be exposed to chemicals originating from the site. Cambria developed the CSM for the property adjacent to, and east of, the site based on review of available geological and analytical data and on evaluation of potential transport and exposure pathways. The following information is included in the CSM: (a) chemical sources and impacted media, (b) representative chemical of concern (COC) concentrations, (c) potentially exposed receptors and exposure pathways, and (d) the protective target risk selected for the analysis. Our conceptual model for this RBCA analysis is summarized in Table A below.

Cambria's RBCA approach utilizes actual soil-vapor concentrations from beneath the offsite property. Air samples collected during the assessment described above were analyzed for BTEX. However, none of the air samples were analyzed for MTBE. Therefore, the potential human exposure to MTBE was estimated using soil and groundwater analytical data from offsite investigation.

Chemical Sources and Impacted Media: Historical records of site activities and analytical data collected since 1986 indicate that soil and groundwater beneath and near the former Shell site are impacted with petroleum hydrocarbons and MTBE. The COCs addressed in this RBCA analysis are benzene, toluene, ethylbenzene, xylene isomers and MTBE.

Table A: Conceptual Site Model for Risk Assessment

Item	Selected Value	Comment
Contaminant Source Media:	Soil and Groundwater	Gasoline hydrocarbons have been detected in soil and groundwater beneath, and adjacent to, the site.
Chemicals of Concern (COC):	Benzene, Toluene, Ethylbenzene, Xylenes, and MTBE.	These chemicals were detected in representative soil, groundwater and soil-vapor samples.
Representative Soil-Vapor Concentrations (ppmv):	benzene: 1.1 toluene: 0.19 ethylbenzene: 0.10 xylenes: 0.13	Maximum COC concentrations detected in soil vapor samples collected during the June 2000 offsite investigation
Representative Concentration in Subsurface Soil (mg/kg):	MTBE 2.58	Maximum MTBE concentration detected in soil samples collected during the May 1999 well installation investigation
Representative Concentration in Groundwater (mg/L):	MTBE 18.6	Maximum MTBE concentration detected in groundwater samples collected from April 2000 to January 2001 (MW-6).
Target Carcinogenic Risk Level	Residential - 1×10^{-6}	Consistent with Cal-EPA policy (Proposition 65).
Non-Carcinogenic Hazard Quotient:	1.0	Consistent with the USEPA and ASTM default value.
Cancer Slope Factor:	0.1 $(mg/kg/day)^{-1}$	Per Cal-EPA.

BTEX = Benzene, toluene, ethylbenzene, and xylenes.

Potentially Exposed Receptors and Exposure Pathways: The only potentially exposed receptors specifically addressed by this risk analysis are offsite residential occupants. Cambria assumed that COCs may volatilize from the impacted underlying soil and groundwater and migrate to ambient and indoor air on the adjacent property.

An irrigation well is located approximately 150 feet west of the site on the adjacent property. Construction details of the well are unknown. The well is reportedly not used for domestic purposes (irrigation only), has not shown any hydrocarbon or MTBE impact to date, and is, therefore, not considered to be a groundwater ingestion pathway. No other known water wells exist in the vicinity of the site. Therefore, ingestion of impacted groundwater is not considered a complete exposure pathway.

No impacted surface soil (less than 10 fbg) has been encountered or is expected on the offsite property. Therefore, ingestion of, dermal exposure to, and inhalation of particulates from impacted soil are not considered as complete exposure pathways.

Representative COC Concentrations

BTEX COCs in Soil Gas: ASTM's (1996) fate and transport equations include estimation of COC concentrations in the air which occupies the void space of vadose-zone soils. This estimation is carried further to determine exposure to receptors at the endpoint of several specific exposure pathways. Direct measurement of COC vapors in the soil gas circumvents the generalized transport calculations that estimate COC-vapor concentrations in soil, thus providing greater accuracy in determining ultimate exposure.

Cambria collected soil-vapor samples from several depths and locations at the adjacent offsite property, as described in detail above. The highest BTEX concentrations detected in these samples were conservatively used as representative COC concentrations. In general, the highest concentrations were detected at depths just above the water table.

The soil-vapor samples were not analyzed for MTBE. Therefore, representative MTBE concentrations in soil and groundwater were used to estimate health risk.

MTBE in Soil: The highest MTBE concentration detected in soil samples collected during the May 1999 and June 2000 subsurface investigations at the adjacent offsite property was conservatively used as the representative MTBE concentration in subsurface soil. The highest MTBE concentration in soil was detected in the 35.5 fbg sample from the boring for well MW-6, at the upgradient edge of the offsite property. Cummulative soil analytical results are included as Attachment G. Representative concentrations used in this analysis are presented in Table A above.

MTBE in Groundwater: A representative MTBE concentration in groundwater was determined by calculating the arithmetic mean of the highest MTBE concentrations detected in groundwater in the site wells over the last four quarters. The highest MTBE concentrations were detected in well MW-6. Cummulative groundwater analytical results are included in Attachment G. Representative concentrations used in this analysis are presented in Table A above.

Protective Target Risk Levels: Cambria used a $1x10^{-6}$ target cancer-risk level for the residential exposure scenario. This target risk level is the most conservative of the USEPA acceptable excess cancer risk range of $1x10^{-4}$ to $1x10^{-6}$ for public health protection purposes. The target risk level for COCs that exhibit noncarcinogenic effects (any other systemic effects but cancer) such as ethylbenzene, toluene and xylenes is a hazard quotient (HQ) of 1.

RBCA Analysis

Consistent with the RBCA approach adopted by ASTM, Cambria estimated the potential human health risks associated with the site COCs. Where available, we used site-specific data in place of ASTM Tier 1 default values to calculate Tier 2 site-specific target levels (SSTLs). Our assigned values for key input variables and our justification for their use are summarized in Table B below.

Table B: Assigned Key Parameter Values for Tier 2 RBCA Analysis

Parameter	Units	Default Value	Site-Specific Value Used	Justification for Use of Value
Depth to Groundwater	cm	300	10,670	The recent average depth to groundwater beneath the site is Approximately 35 fbg.
Fraction of Organic Carbon	g/g	0.01	0.164	Lowest (most conservative) of two mean values calculated for soils. (Table 4 and Attachment E)
cm = centimeter g = gram				

To calculate SSTLs for the BTEX COCs using soil-vapor concentrations, Cambria incorporated ASTM's fate and transport equations into an Excel® spreadsheet. To calculate MTBE SSTLs, Cambria used the Groundwater Services Inc. 1995 *Tier 1 and Tier 2 RBCA Spreadsheet System*, Version 1.0.1. Output for all calculations is presented in Attachment H.

Of the established COCs, benzene is considered to be the most sensitive and the only known carcinogenic compound. Results of the Tier 2 analysis for benzene only are summarized in Table C below. As indicated, the conservative representative benzene concentrations used in the analysis do not exceed the calculated SSTLs for any of the identified exposure pathways. Because of the conservative nature of this analysis, the calculated cancer risk levels presented in Table C likely overestimate actual health risks to workers or residents.

Table C: Results of Tier 2 RBCA Analysis for Benzene

Exposure Pathway	Calculated Benzene SSTL in Soil Vapor (ppmv)	Representative Soil Vapor Concentration For Benzene (ppmv)	Calculated Excess Cancer Risk	Result
Migration of soil vapor into offsite ambient air.	438.28	3.51	$3x10^{-9}$	Potential cancer risk is below the $1x10^{-6}$ target level
Migration of soil vapor into offsite enclosed spaces	5.98	3.51	$2x10^{-7}$	Potential cancer risk is below the $1x10^{-6}$ target level

RBSL = Risk-based screening level.
All concentrations are in ppm, equivalent to milligrams per kilogram for soil and milligrams per liter for ground water.

All pathways are for a residential scenario, with a target risk level of $1x10^{-6}$

CONCLUSIONS

The results of the analysis indicate that current offsite conditions do not pose a significant risk to offsite occupants directly adjacent to the site.

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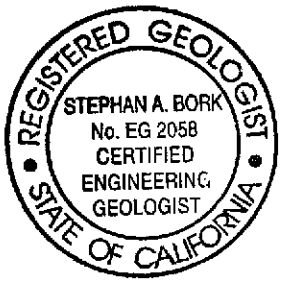
CLOSING

If you have any questions or comments regarding this report, please call Stephan Bork at (510) 420-3344.

Sincerely,
Cambria Environmental Technology, Inc.

Stephan A. Bork, C.E.G., C.H.G.
Associate Hydrogeologist



Figures:
1 - Vicinity Map
2 - Site Plan with Soil Vapor Survey Locations

Tables:
1 - Groundwater Analytical Data
2 - Soil Chemical Data
3 - Soil Vapor Data
4 - Soil Physical Data

Attachments:
A - Soil and Groundwater Analytical Results
B - Standard Procedures for Soil and Soil-Vapor Sampling and Soil Borings
C - Alameda County Public Works Agency Permit
D - Boring Logs
E - Soil Property Test Results
F - Soil Disposal Confirmation
G - Cumulative Analytical Summary
H - Risk Analysis Output

cc: Ms. Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, CA 91510-7869

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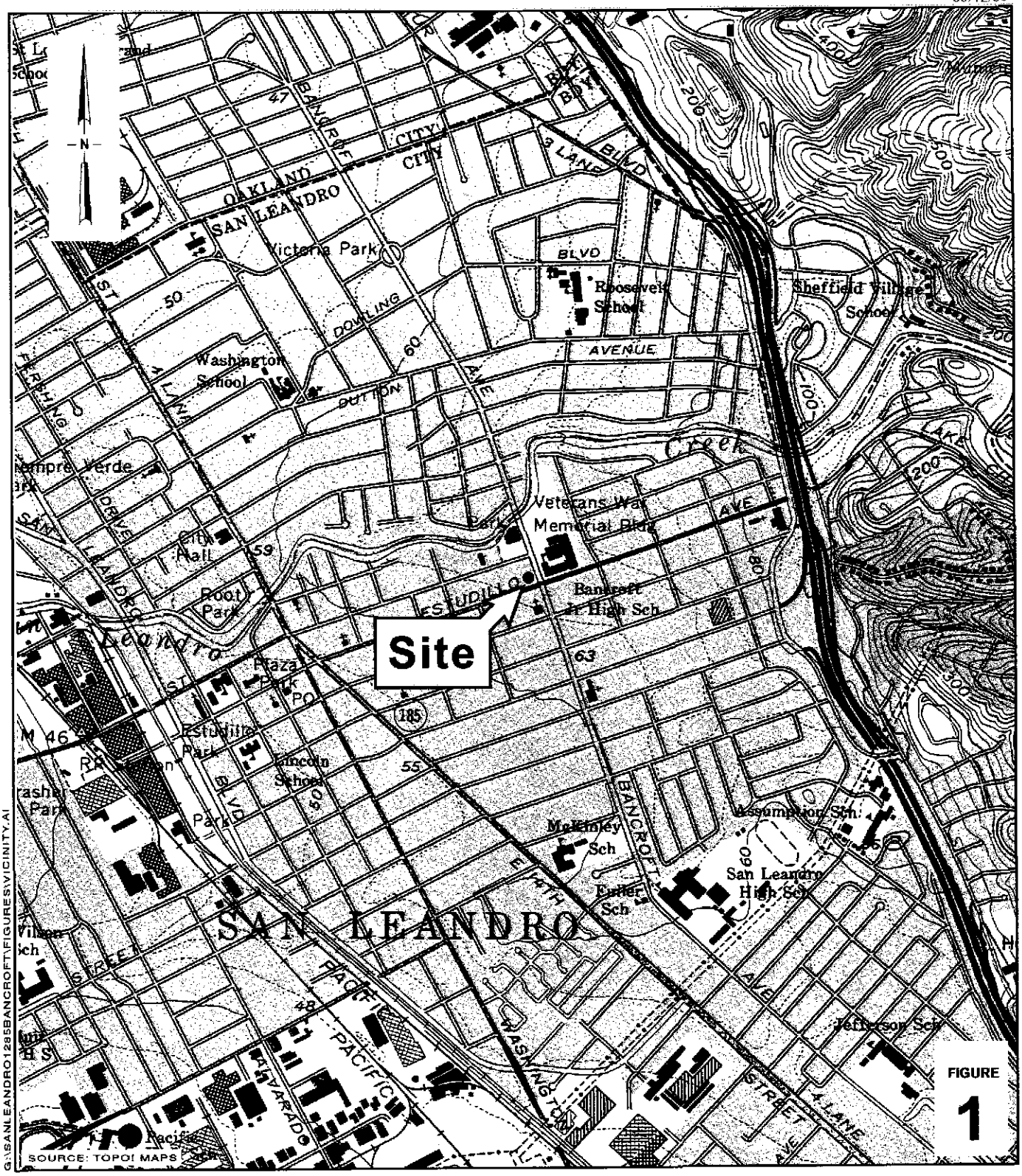

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067

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Vicinity Map

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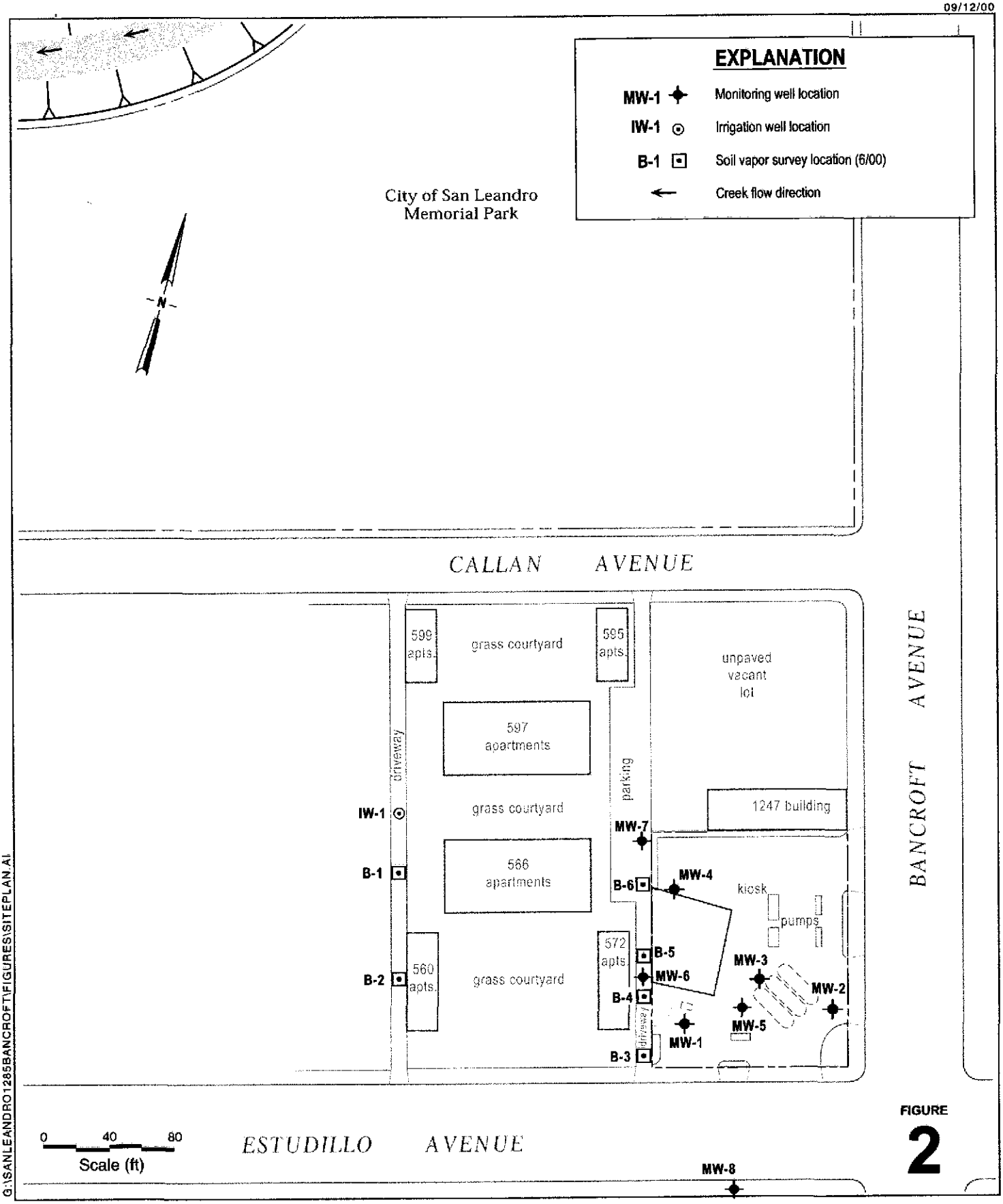

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FIGURE
2

Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, California
Incident #98996067

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Site Plan with Soil Vapor Survey Locations

Table 1. Groundwater Analytical Data - Shell-branded Service Station, Incident # 98996017, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
		← (Concentrations in µg/L) →					
B-1-W	6/26/2000	<50.0	<.0500	<.0500	<.0500	<.0500	<2.50
B-2-W	6/26/2000	<50.0	<.0500	<.0500	<.0500	<.0500	<2.50

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020
MTBE = Methyl tertiary butyl ether by EPA method 8020
µg/L = Micrograms per liter
<n = Below detection limit of n µg/L

Table 2. Soil Chemical Data - Shell-branded Service Station, Incident # 98996067, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA 8020	MTBE EPA 8260
		← (Concentrations in mg/kg) →						
B-1-6.5	6/26/2000	**5.33**	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-1-11.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	**0.00820**	<0.0500	
B-1-17.5	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-1-20.5	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-1-25.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-1-30.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-1-35.5	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-2-6.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	**0.00960**	<0.0500	
B-2-11.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	**0.00970**	<0.0500	
B-2-15.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-2-21.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	**0.00890**	<0.0500	
B-2-25.5	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-2-30.0	6/26/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-5.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-11.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-15.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-21.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-25.0	6/27/2000	<1.0	<0.00500	**0.00730**	<0.00500	<0.00500	<0.0500	
B-3-30.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-3-34.5	6/27/2000	**3.03**	**0.0520**	**0.0228**	**0.0523**	**0.0333**	**0.436**	**0.120**
B-4-7.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-4-11.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-4-15.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-4-20.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	

Table 2. Soil Chemical Data - Shell-branded Service Station, Incident # 98996067, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Date	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE EPA 8020	MTBE EPA 8260
		← (Concentrations in mg/kg) →						
B-4-25.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-4-30.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-4-35.0	6/27/2000	<1.00	**0.0422**	<0.00500	**0.0152**	<0.00500	**0.162**	**0.243**
B-5-7.0	6/27/2000	<1.00	<0.00500	**0.00750**	<0.00500	<0.00500	<0.0500	
B-5-10.5	6/27/2000	**21.5**	<0.00500	**0.430**	<0.00500	<0.00500	<0.0500	
B-5-15.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-5-21.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-5-25.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-5-30.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-5-34.5	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	**0.135**	**0.0425**
B-5-38.5	6/27/2000	**2.82**	**0.0398**	**0.0142**	**0.0744**	**0.299**	**0.251**	**0.0536**
B-6-6.5	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-6-10.5	6/27/2000	**3.92**	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-6-16.5	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-6-20.5	6/27/2000	<1.00	<0.00500	**0.00950**	<0.00500	**0.00700**	<0.0500	
B-6-25.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-6-30.0	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	
B-6-35.5	6/27/2000	<1.00	<0.00500	<0.00500	<0.00500	<0.00500	<0.0500	

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020
MTBE = Methyl tertiary butyl ether by EPA Method 8020 or 8260
mg/kg = milligrams per kilogram
<n = Below detection limit of n mg/kg

Table 3. Soil Vapor Data - Shell-branded Service Station, Incident # 98996067, 1285 Bancroft Avenue, San Leandro California

Sample ID	Date	TPHg C2-C4 Hydrocarbons	TPHg C5 + Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes
		← (Concentrations in ppmv) →					
BV-1-5.5	6/26/2000	<0.055	**0.30**	<0.0025	**0.0076**	<0.0022	**0.011**
BV-1-10.5	6/26/2000	**0.064**	**2.4**	<0.0022	**0.0084**	**0.0055**	**0.022**
BV-1-20.0	6/26/2000	**0.06**	**5.0**	<0.0022	**0.021**	**0.0080**	**0.016**
BV-1-32.0	6/26/2000	**0.15**	**5.5**	**0.0037**	**0.013**	**0.0050**	**0.013**
BV-2-5.0	6/26/2000	<0.070	**2.8**	<0.0028	**0.0087**	**0.0035**	**0.0036**
BV-2-10.0	6/26/2000	<0.060	**3.6**	<0.0024	**0.011**	**0.025**	**0.15**
BV-2-20.0	6/26/2000	**0.11**	**5.1**	**0.0035**	**0.017**	**0.010**	**0.025**
BV-2-32.5	6/26/2000	**0.076**	**7.8**	**0.0024**	**0.027**	**0.015**	**0.024**
BV-3-5.0	6/27/2000	<0.063	**1.9**	<0.0025	**0.020**	**0.0025**	**0.0058**
BV-3-10.0	6/27/2000	<0.13	**2.6**	<0.0053	**0.029**	**0.0066**	**0.0060**
BV-3-10.0-D	6/27/2000	<0.13	**2.6**	<0.0053	**0.0028**	**0.0056**	**0.0050J**
BV-3-20.0	6/27/2000	<0.063	**3.5**	<0.0025	**0.030**	**0.0082**	**0.0088**
BV-3-32.0	6/27/2000	<0.38	**59**	**1.1M**	**0.19**	**0.1**	**0.13M**
BV-4-5.0	6/27/2000	<0.069	**3.0**	<0.0028	**0.014**	**0.0065**	**0.0092M**
BV-4-10.0	6/27/2000	<0.062	**2.0**	<0.0025	**0.013**	**0.0045**	**0.0087**
BV-4-20.0	6/27/2000	<0.062	**3.5**	**0.0057M**	**0.016**	**0.0081**	**0.015**
BV-4-32.0	6/27/2000	<0.064	**4.1**	**0.0038M**	**0.016**	**0.0083**	**0.0096M**
BV-5-5.0	6/27/2000	<0.064	**1.7**	<0.0026	**0.0058**	**0.0028**	<0.0026
BV-5-10.0	6/27/2000	<0.060	**1.3**	**0.0028**	**0.0087**	**0.0026**	**0.0024**
BV-5-20.0	6/27/2000	<0.066	**3.7**	<0.0026	**0.013**	**0.007**	**0.0079M**
BV-5-32.0	6/27/2000	<0.064	**6.7**	**0.0060M**	**0.022**	**0.014**	**0.015M**
BV-6-5.0	6/27/2000	<0.064	**2.6**	<0.0026	**0.0051**	**0.0036**	**0.0033M**
BV-6-10.0	6/27/2000	<0.067	**4.5**	<0.0027	**0.013**	**0.0086**	**0.0093M**

Table 3. Soil Vapor Data - Shell-branded Service Station, Incident # 98996067, 1285 Bancroft Avenue, San Leandro California

Sample ID	Date	TPHg C2-C4 Hydrocarbons	TPHg C5 + Hydrocarbons	Benzene	Toluene	Ethylbenzene	Xylenes
		←		(Concentrations in ppmv)			→
BV-6-20.0	6/27/2000	<0.064	**7.9**	<0.0026	**0.023**	**0.015**	**0.016M**
BV-6-32.0	6/27/2000	<0.066	**6.4**	<0.0026	**0.0018**	**0.011**	**0.012M**
BV-6-32.0-D	6/27/2000	<0.066	**6.6**	<0.0026	**0.018**	**0.011**	**0.013M**

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method T0-3

Benzene, toluene, ethylbenzene, and total xylenes by modified EPA Method T0-3

ppmv = Parts per million by volume

<n = Below detection limit of **n** ppmv

D = Duplicate

M = Reported value may be biased due to apparent matrix interferences

J = Estimated value

Table 4. Soil Physical Data - Shell Service Station, Incident # 98996067, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Date	Fraction Organic Carbon (%)	Percent Moisture (%)	Dry Bulk Density (g/cc)	Natural Bulk Density (g/cc)	Total Porosity (%)
BP-1-11.5	6/26/2000	**0.760**	**15.3**	**1.85**	**2.15**	**29.2**
BP-1-32.5	6/26/2000	**0.182**	**19.1**	**1.64**	**2.03**	**38.4**
BP-2-11.5	6/26/2000	**0.743**	**12.2**	**1.92**	**2.2**	**27.6**
BP-2-31.0	6/26/2000	**0.149**	**10.7**	**1.91**	**2.2**	**28.1**
BP-3-10.5	6/27/2000	**0.613**	**15.0**	**1.57**	**1.98**	**40.0**
BP-3-31.5	6/27/2000	**0.152**	**19.1**	**1.51**	**1.94**	**43.5**
BP-4-11.5	6/27/2000	**0.241**	**12.6**	**1.86**	**2.15**	**29.7**
BP-4-31.5	6/27/2000	**0.271**	**23.2**	**1.56**	**1.97**	**41.4**
BP-5-7.5	6/27/2000	**0.706**	**18.4**	**1.60**	**1.99**	**39.4**
BP-5-34.0	6/27/2000	**0.178**	**15.3**	**1.84**	**2.14**	**30.6**
BP-6-6.0	6/27/2000	**0.643**	**17.1**	**1.70**	**2.05**	**35.3**
BP-6-35.0	6/27/2000	**0.163**	**14.6**	**1.82**	**2.14**	**31.6**
		Average Values*:	**Average Values:**	**Average Values:**	**Average Values:**	**Average Values:**
Approx. 10 fbg		**0.693**	**15.1**	**1.75**	**2.09**	**33.5**
Approx. 32 fbg		**0.165**	**17.0**	**1.71**	**2.07**	**35.6**

Abbreviations and Notes:

Fraction organic carbon by EPA Method 415.1

Percent Moisture by EPA Method 160.3

Bulk Density by API RP-40

Total porosity by API RP-40

Fraction organic carbon and percent moisture samples were analyzed outside of the EPA recommended holding time.

fbg = feet below grade

* = Porosity values from Boring BP-4 rejected as anomalous.

ATTACHMENT A

Soil and Groundwater Analytical Results

Sequoia
Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

31 July, 2000

Darryk Ataide
Cambria - Oakland (Shell)
1144 65th St. Suite C
Oakland, CA 94608

RE: 1285 Bancroft Ave.
Sequoia Report: MJG0029

Enclosed are the results of analyses for samples received by the laboratory on 07/03/00 18:28. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ted Terrasas
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/31/00 11:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-W	MJG0029-01	Water	06/26/00 00:00	07/03/00 18:28
B-2-W	MJG0029-02	Water	06/26/00 00:00	07/03/00 18:28

Ted Terrasas, Project Manager

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/31/00 11:10

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-W (MJG0029-01) Water Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0G07002	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.6 %*	*70-130*		"	"	"	"	
B-2-W (MJG0029-02) Water Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0G06001	07/06/00	07/06/00	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*70-130*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/31/00 11:10

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G06001 - EPA 5030B [P/T]										
Blank (0G06001-BLK1)				Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.32*		"	*10.0*		*93.2*	*70-130*			
LCS (0G06001-BS1)				Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	225	50.0	ug/l	250		90.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.42*		"	*10.0*		*94.2*	*70-130*			
Matrix Spike (0G06001-MS1)		**Source: MJG0055-02**		Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	220	50.0	ug/l	250	ND	88.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	*11.3*		"	*10.0*		*113*	*70-130*			
Matrix Spike Dup (0G06001-MSD1)		**Source: MJG0055-02**		Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	221	50.0	ug/l	250	ND	88.4	60-140	0.454	25	
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*70-130*			
Batch 0G07002 - EPA 5030B [P/T]										
Blank (0G07002-BLK1)				Prepared & Analyzed: 07/07/00						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.53*		"	*10.0*		*95.3*	*70-130*			

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/31/00 11:10

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G07002 - EPA 5030B [P/T]										
LCS (0G07002-BS1)				Prepared & Analyzed: 07/07/00						
Purgeable Hydrocarbons	223	50.0	ug/l	250		89.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	*13.7*		"	*10.0*		*137*	*70-130*			*S-02*
Matrix Spike (0G07002-MS1)		**Source: MJF0957-02**		Prepared & Analyzed: 07/07/00						
Purgeable Hydrocarbons	229	50.0	ug/l	250	ND	91.6	60-140			
Surrogate: a,a,a-Trifluorotoluene	*11.8*		"	*10.0*		*118*	*70-130*			
Matrix Spike Dup (0G07002-MSD1)		**Source: MJF0957-02**		Prepared & Analyzed: 07/07/00						
Purgeable Hydrocarbons	228	50.0	ug/l	250	ND	91.2	60-140	0.438	25	
Surrogate: a,a,a-Trifluorotoluene	*11.7*		"	*10.0*		*117*	*70-130*			

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/31/00 11:10

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Seal# No:_____

Date: 6/27/00
Page 1 of 1

Site Address: 1285 Bancroft Ave, San Leandro

WIC#: Incident # 98996067

Shell Engineer: Karen Petryna
Phone No.:
Fax #:

Consultant Name & Address: CAMBRIA ENVIRONMENTAL
1144 65th St. Suite C, Oakland, CA 94608

Consultant Contact: Darryk Atwicke
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: [signature]

Printed Name: Tom Loetterle

LAB: Sequoia MJ60029

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 & MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-1-W	6/26			✓		4											Confirm all detected	
B-2-W	6/26			✓		4											MTBE by EPA 8260	

CHECK ONE (1) BOX ONLY — C/D1

G.W. Monitoring	☐	4441
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ _____

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

UST AGENCY: _____

Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
[signature]	James Loetterle	6/27	18:07	[signature]	6-30-00 1346	7/3	10:20
Relinquished By (signature): [signature]	Printed Name: CHRIS LARSEN	Date:	Time:	Received (signature): [signature] (MH)	Printed Name: C. Bartholomay	Date: 7/3/00	Time: 18:28
Relinquished By (signature):	Printed Name:	Date:	Time:				

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Sequoia Analytical

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20 July, 2000

Darryk Ataide
Cambria - Oakland (Shell)
1144 65th St. Suite C
Oakland, CA 94608

RE: 1285 Bancroft Ave.
Sequoia Report: MJG0028

Enclosed are the results of analyses for samples received by the laboratory on 07/03/00 18:28. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ted Terrasas
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-6.5	MJG0028-01	Soil	06/26/00 00:00	07/03/00 18:28
B-1-11.0	MJG0028-02	Soil	06/26/00 00:00	07/03/00 18:28
B-1-17.5	MJG0028-03	Soil	06/26/00 00:00	07/03/00 18:28
B-1-20.5	MJG0028-04	Soil	06/26/00 00:00	07/03/00 18:28
B-1-25.0	MJG0028-05	Soil	06/26/00 00:00	07/03/00 18:28
B-1-30.0	MJG0028-06	Soil	06/26/00 00:00	07/03/00 18:28
B-1-35.5	MJG0028-07	Soil	06/26/00 00:00	07/03/00 18:28
B-2-6.0	MJG0028-08	Soil	06/26/00 00:00	07/03/00 18:28
B-2-11.0	MJG0028-09	Soil	06/26/00 00:00	07/03/00 18:28
B-2-15.0	MJG0028-10	Soil	06/26/00 00:00	07/03/00 18:28
B-2-21.0	MJG0028-11	Soil	06/26/00 00:00	07/03/00 18:28
B-2-25.5	MJG0028-12	Soil	06/26/00 00:00	07/03/00 18:28
B-2-30.0	MJG0028-13	Soil	06/26/00 00:00	07/03/00 18:28
B-3-5.0	MJG0028-14	Soil	06/27/00 00:00	07/03/00 18:28
B-3-11.0	MJG0028-15	Soil	06/27/00 00:00	07/03/00 18:28
B-3-15.0	MJG0028-16	Soil	06/27/00 00:00	07/03/00 18:28
B-3-21.0	MJG0028-17	Soil	06/27/00 00:00	07/03/00 18:28
B-3-25.0	MJG0028-18	Soil	06/27/00 00:00	07/03/00 18:28
B-3-30.0	MJG0028-19	Soil	06/27/00 00:00	07/03/00 18:28
B-3-34.5	MJG0028-20	Soil	06/27/00 00:00	07/03/00 18:28
B-4-7.0	MJG0028-21	Soil	06/27/00 00:00	07/03/00 18:28
B-4-11.0	MJG0028-22	Soil	06/27/00 00:00	07/03/00 18:28
B-4-15.0	MJG0028-23	Soil	06/27/00 00:00	07/03/00 18:28
B-4-20.0	MJG0028-24	Soil	06/27/00 00:00	07/03/00 18:28
B-4-25.0	MJG0028-25	Soil	06/27/00 00:00	07/03/00 18:28
B-4-30.0	MJG0028-26	Soil	06/27/00 00:00	07/03/00 18:28
B-4-35.0	MJG0028-27	Soil	06/27/00 00:00	07/03/00 18:28
B-5-7.0	MJG0028-28	Soil	06/27/00 00:00	07/03/00 18:28
B-5-10.5	MJG0028-29	Soil	06/27/00 00:00	07/03/00 18:28

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ted Terrasas, Project Manager

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-5-15.0	MJG0028-30	Soil	06/27/00 00:00	07/03/00 18:28
B-5-21.0	MJG0028-31	Soil	06/27/00 00:00	07/03/00 18:28
B-5-25.0	MJG0028-32	Soil	06/27/00 00:00	07/03/00 18:28
B-5-30.0	MJG0028-33	Soil	06/27/00 00:00	07/03/00 18:28
B-5-34.5	MJG0028-34	Soil	06/27/00 00:00	07/03/00 18:28
B-5-38.5	MJG0028-35	Soil	06/27/00 00:00	07/03/00 18:28
B-6-6.5	MJG0028-36	Soil	06/27/00 00:00	07/03/00 18:28
B-6-10.5	MJG0028-37	Soil	06/27/00 00:00	07/03/00 18:28
B-6-16.5	MJG0028-38	Soil	06/27/00 00:00	07/03/00 18:28
B-6-20.5	MJG0028-39	Soil	06/27/00 00:00	07/03/00 18:28
B-6-25.0	MJG0028-40	Soil	06/27/00 00:00	07/03/00 18:28
B-6-30.0	MJG0028-41	Soil	06/27/00 00:00	07/03/00 18:28
B-6-35.5	MJG0028-42	Soil	06/27/00 00:00	07/03/00 18:28

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-6.5 (MJG0028-01) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	**5.33**	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*73.5 %*	*60-140*		"	"	"	"	
B-1-11.0 (MJG0028-02) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.00820**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.5 %*	*60-140*		"	"	"	"	
B-1-17.5 (MJG0028-03) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-20.5 (MJG0028-04) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.5 %*		*60-140*		"	"	"	
B-1-25.0 (MJG0028-05) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.0 %*		*60-140*		"	"	"	
B-1-30.0 (MJG0028-06) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*72.5 %*		*60-140*		"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-35.5 (MJG0028-07) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.5 %*	*60-140*		"	"	"	"	
B-2-6.0 (MJG0028-08) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/07/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.00960**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.0 %*	*60-140*		"	"	"	"	
B-2-11.0 (MJG0028-09) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.00970**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2-15.0 (MJG0028-10) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.0 %*	*60-140*		"	"	"	"	
B-2-21.0 (MJG0028-11) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.00890**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.0 %*	*60-140*		"	"	"	"	
B-2-25.5 (MJG0028-12) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2-30.0 (MJG0028-13) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.5 %*	*60-140*		"	"	"	"	
B-3-5.0 (MJG0028-14) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*76.5 %*	*60-140*		"	"	"	"	
B-3-11.0 (MJG0028-15) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3-15.0 (MJG0028-16) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*79.5 %*	*60-140*		"	"	"	"	
B-3-21.0 (MJG0028-17) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*75.5 %*	*60-140*		"	"	"	"	
B-3-25.0 (MJG0028-18) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	**0.00730**	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3-30.0 (MJG0028-19) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G07003	07/07/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.0 %*	*60-140*		"	"	"	"	
B-3-34.5 (MJG0028-20) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	**3.03**	1.00	mg/kg	1	0G08001	07/08/00	07/08/00	DHS LUFT	P-01
Benzene	**0.0520**	0.00500	"	"	"	"	"	"	
Toluene	**0.0228**	0.00500	"	"	"	"	"	"	
Ethylbenzene	**0.0523**	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.0333**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	**0.436**	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*78.5 %*	*60-140*		"	"	"	"	
B-4-7.0 (MJG0028-21) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/11/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*73.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4-11.0 (MJG0028-22) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/11/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*67.5 %*	*60-140*		"	"	"	"	
B-4-15.0 (MJG0028-23) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*90.0 %*	*60-140*		"	"	"	"	
B-4-20.0 (MJG0028-24) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4-25.0 (MJG0028-25) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/08/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*79.0 %*	*60-140*		"	"	"	"	
B-4-30.0 (MJG0028-26) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*60-140*		"	"	"	"	
B-4-35.0 (MJG0028-27) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/11/00	DHS LUFT	
Benzene	**0.0422**	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	**0.0152**	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	**0.162**	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*68.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5-7.0 (MJG0028-28) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	**0.00750**	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*66.5 %*	*60-140*		"	"	"	"	
B-5-10.5 (MJG0028-29) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	**21.5**	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	**0.430**	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*74.5 %*	*60-140*		"	"	"	"	
B-5-15.0 (MJG0028-30) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*79.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5-21.0 (MJG0028-31) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*60-140*		"	"	"	"	
B-5-25.0 (MJG0028-32) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/09/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*79.5 %*	*60-140*		"	"	"	"	
B-5-30.0 (MJG0028-33) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5-34.5 (MJG0028-34) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	**0.135**	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*60-140*		"	"	"	"	
B-5-38.5 (MJG0028-35) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	**2.82**	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	P-01
Benzene	**0.0398**	0.00500	"	"	"	"	"	"	
Toluene	**0.0142**	0.00500	"	"	"	"	"	"	
Ethylbenzene	**0.0744**	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.299**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	**0.251**	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*60-140*		"	"	"	"	
B-6-6.5 (MJG0028-36) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6-10.5 (MJG0028-37) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	**3.92**	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	P-03
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.0 %*	*60-140*		"	"	"	"	
B-6-16.5 (MJG0028-38) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.0 %*	*60-140*		"	"	"	"	
B-6-20.5 (MJG0028-39) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G08001	07/08/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	**0.00950**	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	**0.00700**	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*62.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6-25.0 (MJG0028-40) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G10004	07/10/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*63.5 %*	*60-140*		"	"	"	"	
B-6-30.0 (MJG0028-41) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G10004	07/10/00	07/10/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*77.5 %*	*60-140*		"	"	"	"	
B-6-35.5 (MJG0028-42) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G10004	07/10/00	07/11/00	DHS LUFT	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.5 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell) 1144 65th St. Suite C Oakland CA, 94608	Project: 1285 Bancroft Ave. Project Number: 1285 Bancroft Ave./ San Leandro Project Manager: Darryk Ataide	**Reported:** 07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G08001 - EPA 5030B [P/T]										
Blank (0G08001-BLK1)			Prepared & Analyzed: 07/08/00							
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Benzene	ND	0.00500	"							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Methyl tert-butyl ether	ND	0.0500	"							
Surrogate: 4-Bromofluorobenzene	*0.176*		"	*0.200*		*88.0*	*60-140*			
LCS (0G08001-BS1)			Prepared & Analyzed: 07/08/00							
Purgeable Hydrocarbons	252	1.00	mg/kg	5.00		5040	70-130			
Surrogate: 4-Bromofluorobenzene	*0.163*		"	*0.200*		*81.5*	*60-140*			
Matrix Spike (0G08001-MS1)		Source: MJG0028-38	Prepared: 07/08/00 Analyzed: 07/10/00							
Benzene	0.160	0.00500	mg/kg	0.200	ND	80.0	60-140			
Toluene	0.170	0.00500	"	0.200	ND	85.0	60-140			
Ethylbenzene	0.182	0.00500	"	0.200	ND	91.0	60-140			
Xylenes (total)	0.547	0.00500	"	0.600	ND	91.2	60-140			
Surrogate: 4-Bromofluorobenzene	*0.0933*		"	*0.200*		*46.6*	*60-140*			*Q-01*
Matrix Spike Dup (0G08001-MSD1)		Source: MJG0028-38	Prepared: 07/08/00 Analyzed: 07/10/00							
Benzene	0.164	0.00500	mg/kg	0.200	ND	82.0	60-140	2.47	25	
Toluene	0.174	0.00500	"	0.200	ND	87.0	60-140	2.33	25	
Ethylbenzene	0.185	0.00500	"	0.200	ND	92.5	60-140	1.63	25	
Xylenes (total)	0.557	0.00500	"	0.600	ND	92.8	60-140	1.81	25	
Surrogate: 4-Bromofluorobenzene	*0.125*		"	*0.200*		*62.5*	*60-140*			
Batch 0G10004 - EPA 5030B [P/T]										
Blank (0G10004-BLK1)			Prepared & Analyzed: 07/10/00							
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Benzene	ND	0.00500	"							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Methyl tert-butyl ether	ND	0.0500	"							
Surrogate: 4-Bromofluorobenzene	*0.205*		"	*0.200*		*102*	*60-140*			

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G10004 - EPA 5030B [P/T]										
Blank (0G10004-BLK2)				Prepared: 07/10/00 Analyzed: 07/11/00						
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Benzene	ND	0.00500	"							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Methyl tert-butyl ether	ND	0.0500	"							
Surrogate: 4-Bromofluorobenzene	*0.195*		"	*0.200*		*97.5*	*60-140*			
LCS (0G10004-BS1)				Prepared & Analyzed: 07/10/00						
Benzene	0.194	0.00500	mg/kg	0.200		97.0	70-130			
Toluene	0.200	0.00500	"	0.200		100	70-130			
Ethylbenzene	0.212	0.00500	"	0.200		106	70-130			
Xylenes (total)	0.629	0.00500	"	0.600		105	70-130			
Surrogate: 4-Bromofluorobenzene	*0.188*		"	*0.200*		*94.0*	*60-140*			
LCS (0G10004-BS2)				Prepared & Analyzed: 07/10/00						
Purgeable Hydrocarbons	5.70	1.00	mg/kg	5.00		114	70-130			
Surrogate: 4-Bromofluorobenzene	*0.171*		"	*0.200*		*85.5*	*60-140*			
Matrix Spike (0G10004-MS1)		**Source: MJG0030-06**		Prepared: 07/10/00 Analyzed: 07/11/00						
Benzene	0.169	0.00500	mg/kg	0.200	ND	84.5	60-140			
Toluene	0.183	0.00500	"	0.200	0.00830	87.3	60-140			
Ethylbenzene	0.191	0.00500	"	0.200	0.00730	91.8	60-140			
Xylenes (total)	0.597	0.00500	"	0.600	0.0360	93.5	60-140			
Surrogate: 4-Bromofluorobenzene	*0.174*		"	*0.200*		*87.0*	*60-140*			
Matrix Spike Dup (0G10004-MSD1)		**Source: MJG0030-06**		Prepared: 07/10/00 Analyzed: 07/11/00						
Benzene	0.172	0.00500	mg/kg	0.200	ND	86.0	60-140	1.76	25	
Toluene	0.181	0.00500	"	0.200	0.00830	86.3	60-140	1.10	25	
Ethylbenzene	0.191	0.00500	"	0.200	0.00730	91.8	60-140	0	25	
Xylenes (total)	0.609	0.00500	"	0.600	0.0360	95.5	60-140	1.99	25	
Surrogate: 4-Bromofluorobenzene	*0.168*		"	*0.200*		*84.0*	*60-140*			

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

MTBE Confirmation by EPA Method 8260A - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G17013 - EPA 5030B [P/T]										
Blank (0G17013-BLK1)				Prepared & Analyzed: 07/14/00						
Methyl tert-butyl ether	ND	0.500	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	*0.00859*		"	*0.0100*		*85.9*	*70-130*			
LCS (0G17013-BS1)				Prepared & Analyzed: 07/14/00						
Methyl tert-butyl ether	0.00728	0.00200	mg/kg	0.0100		72.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.00853*		"	*0.0100*		*85.3*	*70-130*			
LCS Dup (0G17013-BSD1)				Prepared & Analyzed: 07/14/00						
Methyl tert-butyl ether	0.00788	0.00200	mg/kg	0.0100		78.8	70-130	7.92	25	
Surrogate: 1,2-Dichloroethane-d4	*0.00893*		"	*0.0100*		*89.3*	*70-130*			
Batch 0G17021 - EPA 5030B [P/T]										
Blank (0G17021-BLK1)				Prepared & Analyzed: 07/17/00						
Methyl tert-butyl ether	ND	0.00200	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	*0.00880*		"	*0.0100*		*88.0*	*70-130*			
LCS (0G17021-BS1)				Prepared & Analyzed: 07/17/00						
Methyl tert-butyl ether	0.00741	0.00200	mg/kg	0.0100		74.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.00883*		"	*0.0100*		*88.3*	*70-130*			
LCS Dup (0G17021-BSD1)				Prepared & Analyzed: 07/17/00						
Methyl tert-butyl ether	0.00876	0.00200	mg/kg	0.0100		87.6	70-130	16.7	25	
Surrogate: 1,2-Dichloroethane-d4	*0.00862*		"	*0.0100*		*86.2*	*70-130*			

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	07/20/00 10:29

Notes and Definitions

I-02	This sample was analyzed outside of the EPA recommended holding time.
P-01	Chromatogram Pattern: Gasoline C6-C12
P-03	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
Q-01	The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 1 of 6

Site Address: 1285 Bancroft Ave, San Leandro

WIC#: Incident # 98996067

Shell Engineer: Karen Petryna | Phone No.: | Fax #:

Consultant Name & Address: Cambria Env. Tech. Inc. 1144 65th St. Oakland CA 94608

Consultant Contact: Derryk Altaide | Phone No.: (510) 420-3339 | Fax #: (510) 420-9170

Comments:

Sampled by: James Loetherle

Printed Name: James Loetherle

LAB: Sequoia MJG0028

CHECK ONE (1) BOX ONLY | CT/DT
- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME
- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT. 3 16 20

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 / # MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-1-6.5	6/26	01	✓			1						*						
B-1-11.0		02																
B-1-17.5		03																
B-1-20.5		04																
B-1-25.0		05																
B-1-30.0		06																
B-1-35.5		07																
B-2-6.0	↓	08	↓			↓												

* Confirm all detected MTBE by EPA 8260

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	James Loetherle					6-30-00 @ 1346	
	CHRIS LARSEN	7/3	15:07		CHRIS LARSEN		12:00
					Bartholomay	7/3/00	18:58

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

End Of Chain of Custody

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 1 of 6

Site Address: 1285 Bancroft Ave, San Leandro CA
~~WIC#:~~ Brendent # 98996067

Shell Engineer: Karen Petryna | Phone No.: | Fax #:

Consultant Name & Address: Cambria Env. Tech. Inc. 1144 65th St. Oakland CA 94608

Consultant Contact: Darryk Ataide | Phone No.: (510) 420-3339 | Fax #: (510) 420-9170

Comments:

Sampled by: [signature]

Printed Name: James Coetterle

LAB: Sequoia MJ60028

CHECK ONE (1) BOX ONLY | C1/D1

- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020/+MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-2-11.0	6/26	09	✓			1						*						
B-2-15.0	"	10	"			"						"						
B-2-21.0	"	11	"			"						"						
B-2-25.5	"	12	"			"						"						
B-2-30.0	"	13	"			"						"					* Confirm all detected MTBE by EPA 8260	
B-3-6.0	6/27	14																
B-3-11.0	"	15	"			"												

Relinquished By (signature): James Coetterle	Printed Name: James Coetterle	Date:	Received (signature): [signature]
Relinquished By (signature): Chris Larsen	Printed Name: CHRIS LARSEN	Time:	Received (signature): Chris Larsen
Relinquished By (signature):	Printed Name:	Date:	Received (signature): [signature]
		Time:	

Printed Name:	Date:
6-30-00 1345	Time:
Printed Name: CHRIS CARSEN	Date: 7/3
	Time: 1410
Printed Name: Bartholomay	Date: 7/3/00
	Time: 18:28

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

End Of One of Copies

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 3 of 6

Site Address: 1285 Bancroft Ave, San Leandro
~~WIC#~~: Incident # 98996067

Shell Engineer: Karen Petryna
Phone No.:
Fax #:

Consultant Name & Address: Cambria Env. Tech. Inc. 1144 65th St. Oakland CA 94608

Consultant Contact: Darryk Atwater
Phone No.: (510) 420-3339
Fax #: (510) 420-9170

Comments:

Sampled by:

Printed Name: James Loetterle

LAB: Sequoia MJ60028

CHECK ONE (1) BOX ONLY	C/D?	TURN AROUND TIME
G.W. Monitoring	☐ 4461	24 hours ☐
Site Investigation	☒ 4441	48 hours ☐
Soil Classify/Disposal	☐ 4442	15 days ☒ (Normal)
Water Classify/Disposal	☐ 4443	Other ☐ ____
Soil/Air Rem. or Sys. O & M	☐ 4452	NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.
Water Rem. or Sys. O & M	☐ 4453	
Other	☐	

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 & MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-3-15.0	6/27	16	✓			1												
B-3-21.0		17																
B-3-25.0		18																
B-3-30.0		19																
B-3-34.5		20																
B-4-7.0		21																
B-4-11.0		22																
B-4-15.0		23																

Confirm all detected MTBE by EPA 8260

Relinquished By (signature):	Printed Name: James Loetterle	Date:	Received (signature):	Printed Name: G 30 00 1345	Date:
Relinquished By (signature):	Printed Name: CHRIS LARSEN	Time: Date: 7/3 Time: 15:07	Received (signature):	Printed Name: CHRIS LARSEN	Time: 14:00 Date: 7/3/00
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: Bartholomay	Time: 1828

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Last Of One, If Copies

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 4 of 6

Site Address: 1285 Bancroft Ave, San Leandro
~~WIC#~~ Incident #
9899 6067

Shell Engineer: Karen Petryna
Phone No.:
Fax #:

Consultant Name & Address: Cambria Env. Tech. Inc.
1144 65th St. Oakland CA 94608

Consultant Contact: Darryl Hamide
Phone No.: (510) 420-3339
Fax #: (510) 420-9170

Comments:

Sampled by: [signature]

Printed Name: James Coe Harlan

LAB: Sequoia MJ60028

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring	4461	24 hours
Site Investigation	4441	48 hours
Soil Classify/Disposal	4442	15 days (Normal)
Water Classify/Disposal	4443	Other
Soil/Air Rem. or Sys. O & M	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M	4453	
Other		

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 & MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-4-20.0	6/27	24	✓			1												
B-4-25.0		25																
B-4-30.0		26																
B-4-35.0		27															* Confirm all detected MTBE by EPA 8260	
B-5-7.0		28																
B-5-10.5		29																
B-5-15.0		30																
B-5-21.0	✓	31	✓			↓						↓						

Relinquished By (signature): [signature]	Printed Name: James Coe Harlan	Date:	Time:	Received (signature): [signature]	Printed Name: 6-30-00 1345	Date:	Time:
Relinquished By (signature): [signature]	Printed Name: CHRIS LARSEN	Date: 7/3	Time: 18:57	Received (signature): [signature]	Printed Name: CHRIS LARSEN	Date: 7/3	Time: 19:00
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature): [signature]	Printed Name: Bartholomay	Date: 7/3/00	Time: 18:38

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Chain of Custody

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 6/27/00 T.L
Page 5 of 6

LAB: Sequoia MJ66028

Site Address: 1285 Bancroft, San Leandro
WIC#: Incident # 98996067

Shell Engineer: Karen Petryna | Phone No.: | Fax #:

Consultant Name & Address: Cambria Env. Tech. Inc 1144 65th St. Oakland CA 94608

Consultant Contact: Danyk Afcide | Phone No.: (510) 420-3339 | Fax #: (510) 420-9170

Comments:

Sampled by:

Printed Name: James Loetterle

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 / + MTBE	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-5-25.0	6/27	32	✓			1												
B-5-30.0		33																
B-5-34.5		34																
B-5-38.5		35																
B-6-6.5		36																
B-6-10.5		37																
B-6-16.5		38																
B-6-20.5		39																

* Confirm all detected MTBE by EPA 8260

CHECK ONE (1) BOX ONLY | CT/DI

- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

UST AGENCY: ____

Relinquished By (signature):	Printed Name: James Loetterle	Date:	Received (signature):	Printed Name: C-30-00 1345	Date:
		Time:			Time:
Relinquished By (signature):	Printed Name: CHRIS LARSEN	Date: 7/3	Received (signature):	Printed Name: CHRIS LARSEN	Date: 6/28/00
		Time: 1807			Time:
Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name: Bartholomay	Date: 7/3/00
		Time:			Time: 1808

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev 04 Orig. of Cust.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 6 of

Site Address: 1285 Bancroft Ave, San Leandro
~~WIC #~~ Incident # 98926067

Shell Engineer: Karen Petryna
Phone No.: _____
Fax #: _____

Consultant Name & Address: Cambria Env. Tech, Inc. 1144 65th St. Oakland CA 94608

Consultant Contact: Darryl Atindao
Phone No.: (510) 420-3339
Fax #: (510) 420-9170

Comments: _____

Sampled by: [signature]

Printed Name: Jens Coetterle

LAB: Equico MJ60028

CHECK ONE (1) BOX ONLY	C/D?	TURN AROUND TIME
G.W. Monitoring ☐	4461	24 hours ☐
Site Investigation ☒	4441	48 hours ☐
Soil Classify/Disposal ☐	4442	15 days ☒ (Normal)
Water Classify/Disposal ☐	4443	Other ☐ ____
Soil/Air Rem. or Sys. O & M ☐	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M ☐	4453	
Other ☐		

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 + MTBE			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
B-6-25.0	6/27	40	✓			1						✓							* Confirm all detected	
B-6-30.0	↓	41	↓			↓						↓							MTBE by EPA 8260	
B-6-35.5	↓	42	↓			↓						↓								

Relinquished By (signature): [signature]	Printed Name: Jens Coetterle	Date:	Received (signature): [signature]	Printed Name: 6-30-00 1345	Date:
Relinquished By (signature): Chris Larsen	Printed Name: CHRIS LARSEN	Time:	Received (signature): Chris Larsen	Printed Name: CHRIS LARSEN	Time:
Relinquished By (signature):	Printed Name:	Date: 7/3 Time: 18:07	Received (signature): [signature]	Printed Name: Bartholomay	Date: 7/3/00 Time: 18:28
		Date: Time:			

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

White-Lab Copy, Yellow-Copy of Chain of Custody

@AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0006542A

Work Order Summary

CLIENT:	Mr. James Loetterle Cambria Environmental Technology 1144 65th Street Suite B Oakland, CA 94608	**BILL TO:**	Mr. James Loetterle Cambria Environmental Technology 1144 65th Street Suite B Oakland, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	242-0504 1285 Bankroft Ave
DATE RECEIVED:	6/30/00		
DATE COMPLETED:	7/8/00		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	BV-1-5.5	TO-3	2.5 "Hg
02A	BV-1-10.5	TO-3	5.5 "Hg
03A	BV-1-20.0	TO-3	3.0 "Hg
04A	BV-1-32.0	TO-3	6.5 "Hg
05A	BV-2-5.0	TO-3	8.5 "Hg
06A	BV-2-10.0	TO-3	5.0 "Hg
07A	BV-2-20.0	TO-3	3.0 "Hg
08A	BV-2-32.5	TO-3	3.0 "Hg
09A	BV-3-5.0	TO-3	6.0 "Hg
10A	BV-3-10.0	TO-3	12.5 "Hg
10AA	BV-3-10.0 Duplicate	TO-3	12.5 "Hg
11A	BV-3-20.0	TO-3	6.0 "Hg
12A	BV-3-32.0	TO-3	7.0 "Hg
13A	BV-4-5.0	TO-3	8.0 "Hg
14A	BV-4-10.0	TO-3	5.5 "Hg
15A	BV-4-20.0	TO-3	5.5 "Hg
16A	Method Spike	TO-3	NA
17A	Lab Blank	TO-3	NA
17B	Lab Blank	TO-3	NA
17C	Lab Blank	TO-3	NA

CERTIFIED BY: _____ DATE: 7/10/00

For Laboratory Director

Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567

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

LABORATORY NARRATIVE
TO-3
Cambria Environmental Technology
Workorder# 0006542A

Fifteen 1 Liter Summa Canister samples were received on June 30, 2000. The laboratory performed analysis via modified EPA Method TO-3 for Benzene, Toluene, Ethylbenzene, Xylenes and Total Petroleum Hydrocarbons (TPH). BTEX was analyzed via GC/PID and TPH via GC/FID. The TPH results are calculated using the response of Gasoline. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. See the data sheets for the reporting limits for each compound.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The hydrocarbon profile present in all samples did not match that of commercial gasoline. Results are reported as gasoline.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME : BV-1-5.5

ID#: 0006542A-01A

EPA Method TO-3 GC/PID/FID

File Name:	**d070517**	**Date of Collection:**	**6/26/00**
Dil. Factor:	**2.20**	**Date of Analysis:**	**7/5/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0071	Not Detected	Not Detected
Toluene	0.0022	0.0084	0.0076	0.029
Ethyl Benzene	0.0022	0.0097	Not Detected	Not Detected
Total Xylenes	0.0022	0.0097	0.011	0.047
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.055	0.23	0.30	1.2
C2-C4 Hydrocarbons ref. to Gasoline	0.055	0.10	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	85	75-125
Fluorobenzene (FID)	101	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-1-10.5

ID#: 0006542A-02A

EPA Method TO-3 GC/PID/FID

File Name:	**d070518**	**Date of Collection:**	**6/26/00**
Dil. Factor:	**2.47**	**Date of Analysis:**	**7/5/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0080	Not Detected	Not Detected
Toluene	0.0025	0.0095	0.0084	0.032
Ethyl Benzene	0.0025	0.011	0.0055	0.024
Total Xylenes	0.0025	0.011	0.022	0.096
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.062	0.26	2.4	10
C2-C4 Hydrocarbons ref. to Gasoline	0.062	0.11	0.064	0.12

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	80	75-125
Fluorobenzene (FID)	96	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-1-20.0

ID#: 0006542A-03A

EPA Method TO-3 GC/PID/FID

File Name:	**d070519**	**Date of Collection:**	**6/26/00**
Dil. Factor:	**2.24**	**Date of Analysis:**	**7/5/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0073	Not Detected	Not Detected
Toluene	0.0022	0.0086	0.021	0.080
Ethyl Benzene	0.0022	0.0099	0.0080	0.035
Total Xylenes	0.0022	0.0099	0.016	0.068
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.056	0.23	5.0	21
C2-C4 Hydrocarbons ref. to Gasoline	0.056	0.10	0.060	0.11

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	87	75-125
Fluorobenzene (FID)	105	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-1-32.0

ID#: 0006542A-04A

EPA Method TO-3 GC/PID/FID

File Name:	**d070520**	**Date of Collection: 6/26/00**
Dil. Factor:	**2.58**	**Date of Analysis: 7/5/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	0.0037	0.012
Toluene	0.0026	0.0099	0.013	0.049
Ethyl Benzene	0.0026	0.011	0.0050	0.022
Total Xylenes	0.0026	0.011	0.013	0.057
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	5.5	23
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	0.15	0.28

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	82	75-125
Fluorobenzene (FID)	98	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-2-5.0

ID#: 0006542A-05A

EPA Method TO-3 GC/PID/FID

File Name:	**d070521**	**Date of Collection: 6/26/00**	
Dil. Factor:	**2.82**	**Date of Analysis: 7/5/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0028	0.0092	Not Detected	Not Detected
Toluene	0.0028	0.011	0.0087	0.033
Ethyl Benzene	0.0028	0.012	0.0035	0.015
Total Xylenes	0.0028	0.012	0.0036	0.016
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.070	0.29	2.8	12
C2-C4 Hydrocarbons ref. to Gasoline	0.070	0.13	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	87	75-125
Fluorobenzene (FID)	102	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-2-10.0

ID#: 0006542A-06A

EPA Method TO-3 GC/PID/FID

File Name:	**d070616**	**Date of Collection:**	**6/26/00**
Dil. Factor:	**2.42**	**Date of Analysis:**	**7/6/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0024	0.0078	Not Detected	Not Detected
Toluene	0.0024	0.0093	0.011	0.042
Ethyl Benzene	0.0024	0.011	0.025	0.11
Total Xylenes	0.0024	0.011	0.15	0.64
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.060	0.25	3.6	15
C2-C4 Hydrocarbons ref. to Gasoline	0.060	0.11	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	78	75-125
Fluorobenzene (FID)	94	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-2-20.0

ID#: 0006542A-07A

EPA Method TO-3 GC/PID/FID

File Name:	**d070617**	**Date of Collection:**	**6/26/00**
Dil. Factor:	**2.24**	**Date of Analysis:**	**7/6/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0073	0.0035	0.011
Toluene	0.0022	0.0086	0.017	0.065
Ethyl Benzene	0.0022	0.0099	0.010	0.045
Total Xylenes	0.0022	0.0099	0.025	0.11
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.056	0.23	5.1	21
C2-C4 Hydrocarbons ref. to Gasoline	0.056	0.10	0.11	0.21

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	83	75-125
Fluorobenzene (FID)	100	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-2-32.5

ID#: 0006542A-08A

EPA Method TO-3 GC/PID/FID

File Name:	**d070618**	**Date of Collection:**	***6/26/00***
Dil. Factor:	**2.24**	**Date of Analysis:**	***7/6/00***

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0073	0.0024	0.0080
Toluene	0.0022	0.0086	0.027	0.10
Ethyl Benzene	0.0022	0.0099	0.015	0.066
Total Xylenes	0.0022	0.0099	0.024	0.10
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.056	0.23	7.8	32
C2-C4 Hydrocarbons ref. to Gasoline	0.056	0.10	0.076	0.14

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	102	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-3-5.0

ID#: 0006542A-09A

EPA Method TO-3 GC/PID/FID

File Name:	**d070619**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.53**	**Date of Analysis:**	**7/6/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0082	Not Detected	Not Detected
Toluene	0.0025	0.0097	0.020	0.078
Ethyl Benzene	0.0025	0.011	0.0025	0.011
Total Xylenes	0.0025	0.011	0.0058	0.026
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.063	0.26	1.9	7.8
C2-C4 Hydrocarbons ref. to Gasoline	0.063	0.12	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	86	75-125
Fluorobenzene (FID)	103	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-3-10.0

ID#: 0006542A-10A

EPA Method TO-3 GC/PID/FID

File Name:	**d070721**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**5.26**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0053	0.017	Not Detected	Not Detected
Toluene	0.0053	0.020	0.029	0.11
Ethyl Benzene	0.0053	0.023	0.0066	0.029
Total Xylenes	0.0053	0.023	0.0060	0.027
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.13	0.55	2.6	11
C2-C4 Hydrocarbons ref. to Gasoline	0.13	0.24	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	108	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-3-10.0 Duplicate

ID#: 0006542A-10AA

EPA Method TO-3 GC/PID/FID

File Name:	**d070722**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**5.26**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0053	0.017	Not Detected	Not Detected
Toluene	0.0053	0.020	0.028	0.11
Ethyl Benzene	0.0053	0.023	0.0056	0.025
Total Xylenes	0.0053	0.023	0.0050 J	0.022 J
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.13	0.55	2.6	11
C2-C4 Hydrocarbons ref. to Gasoline	0.13	0.24	Not Detected	Not Detected

J = Estimated value.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	85	75-125
Fluorobenzene (FID)	108	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-3-20.0

ID#: 0006542A-11A

EPA Method TO-3 GC/PID/FID

File Name:	d070621	**Date of Collection:**	6/27/00
Dil. Factor:	2.53	**Date of Analysis:**	7/6/00

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0082	Not Detected	Not Detected
Toluene	0.0025	0.0097	0.030	0.11
Ethyl Benzene	0.0025	0.011	0.0082	0.036
Total Xylenes	0.0025	0.011	0.0088	0.039
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.063	0.26	3.5	15
C2-C4 Hydrocarbons ref. to Gasoline	0.063	0.12	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	88	75-125
Fluorobenzene (FID)	106	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-3-32.0

ID#: 0006542A-12A

EPA Method TO-3 GC/PID/FID

File Name:	**d070710**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**15.1**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.015	0.049	1.1 M	3.6 M
Toluene	0.015	0.058	0.19	0.73
Ethyl Benzene	0.015	0.067	0.10	0.46
Total Xylenes	0.015	0.067	0.13 M	0.57 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.38	1.6	59	240
C2-C4 Hydrocarbons ref. to Gasoline	0.38	0.69	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	81	75-125
Fluorobenzene (FID)	104	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-4-5.0

ID#: 0006542A-13A

EPA Method TO-3 GC/PID/FID

File Name:	**d070622**	**Date of Collection: 6/27/00**	
Dil. Factor:	**2.76**	**Date of Analysis: 7/6/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0028	0.0090	Not Detected	Not Detected
Toluene	0.0028	0.010	0.014	0.056
Ethyl Benzene	0.0028	0.012	0.0065	0.028
Total Xylenes	0.0028	0.012	0.0092 M	0.041 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.069	0.29	3.0	12
C2-C4 Hydrocarbons ref. to Gasoline	0.069	0.13	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	86	75-125
Fluorobenzene (FID)	104	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-4-10.0

ID#: 0006542A-14A

EPA Method TO-3 GC/PID/FID

File Name:	**d070708**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.47**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0080	Not Detected	Not Detected
Toluene	0.0025	0.0095	0.013	0.050
Ethyl Benzene	0.0025	0.011	0.0045	0.020
Total Xylenes	0.0025	0.011	0.0087	0.038
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.062	0.26	2.0	8.2
C2-C4 Hydrocarbons ref. to Gasoline	0.062	0.11	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	105	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-4-20.0

ID#: 0006542A-15A

EPA Method TO-3 GC/PID/FID

File Name:	**d070709**	**Date of Collection: 6/27/00**	
Dil. Factor:	**2.47**	**Date of Analysis: 7/7/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0080	0.0057 M	0.018 M
Toluene	0.0025	0.0095	0.016	0.062
Ethyl Benzene	0.0025	0.011	0.0081	0.036
Total Xylenes	0.0025	0.011	0.015	0.066
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.062	0.26	3.5	15
C2-C4 Hydrocarbons ref. to Gasoline	0.062	0.11	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	81	75-125
Fluorobenzene (FID)	101	75-125

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SAMPLE NAME : Method Spike

ID#: 0006542A-16A

EPA Method TO-3 GC/PID/FID

File Name:	**d070703**		**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	% Recovery
Benzene	0.0010	0.0032	88
Toluene	0.0010	0.0038	91
Ethyl Benzene	0.0010	0.0044	87
Total Xylenes	0.0010	0.0044	89
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	120
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	120

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	91	75-125
Fluorobenzene (FID)	118	75-125

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0006542A-17A

EPA Method TO-3 GC/PID/FID

File Name:	**d070504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/5/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0044	Not Detected	Not Detected
Total Xylenes	0.0010	0.0044	Not Detected	Not Detected
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	Not Detected	Not Detected
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	83	75-125
Fluorobenzene (FID)	104	75-125

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0006542A-17B

EPA Method TO-3 GC/PID/FID

File Name:	**d070604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/6/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0044	Not Detected	Not Detected
Total Xylenes	0.0010	0.0044	Not Detected	Not Detected
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	Not Detected	Not Detected
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	86	75-125
Fluorobenzene (FID)	104	75-125

AIR TOXICS LTD.

SAMPLE NAME : Lab Blank

ID#: 0006542A-17C

EPA Method TO-3 GC/PID/FID

File Name:	**d070706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0044	Not Detected	Not Detected
Total Xylenes	0.0010	0.0044	Not Detected	Not Detected
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	Not Detected	Not Detected
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	83	75-125
Fluorobenzene (FID)	105	75-125

AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Sample Transportation Notice
Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by completed written disclosure of presence of any hazardous substances known or suspected by client. Client further warrants that any sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable local, State, Federal, national, and International laws, regulations and ordinances of any kind. D.O.T. HAZMAT Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Nº 027307

CHAIN-OF-CUSTODY RECORD

Contact Person: James Loetterle
Company: Cambria Environmental Technology Inc.
Address: 1144 66th St. City: Oakland State: CA Zip: 94608
Phone: (510) 420-3336 FAX: (510) 420-9170
Collected By: Signature: [signature]

Project info:
P.O. #:
Project #: 272-0504
Project Name: Equiva

Turn Around Time:
☑ Normal
☐ Rush ____ Specify

JD 7-5-00

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
01A	BV-1-5.5	6-26-00/11:31	TPHg & BTEX by EPA method TO-3		3.0	2.5"Hg
02A	BV-1-10.5	6-26-00/11:48			6.0	5.5"Hg
03A	BV-1-20.0	6-26-00/12:48			3.5	3.0"Hg
04A	BV-1-32.0	6-26-00/13:20			6.5	6.5"Hg
05A	BV-2-5.0	6-26-00/14:17			8.0	8.5"Hg
06A	BV-2-10.0	6-26-00/14:32			5.0	5.0"Hg
07A	BV-2-20.0	6-26-00/14:56			3.5	3.0"Hg
08A	BV-2-32.5	6-26-00/15:29			2.0	3.0"Hg

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Relinquished By: (Signature) Date/Time: [signature] 18:40 6-27-00 Print Name:
Relinquished By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time: 6/30/00 Danielle Burgess 950
Received By: (Signature) Date/Time:

Notes: Detection limit of .001 ppm for BTEX.

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	8803944815 37	DB	6/30/00 950	—	Good	Yes No (None) N/A	00065 42A

Form 1293 rev. 06

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Sample Transportation Notice
Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by completed written disclosure of presence of any hazardous substances known or suspected by client. Client further warrants that any sample containing any hazardous substance which is to be delivered to LAB will be packaged, labeled, transported and delivered properly and in accordance with applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. D.O.T. HAZMAT Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

Nº 027309

Contact Person: James Loetterle
Company: Cambria Environmental Technology Inc.
Address: 1144 65th St. City: Oakland State: CA Zip: 94608
Phone: (510) 420-333 FAX: (510) 420-9170
Collected By: Signature: Tom Ent

Project info:
P.O. #:
Project #: 242-0504
Project Name: Equiva

Turn Around Time:
☑ Normal
☐ Rush ____ Specify

(3D) 7.5.00

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
09A	BV-3-5.0	6-27-00 / 7:27	TPHg & BTEX by EPA method TO-3	28.0	6.5	6.0"Hg
10A	BV-3-10.0	6-27-00 / 7:40		28.5	13.5	12.5"Hg
11A	BV-3-20.0	6-27-00 / 7:57		28.5	7.0	6.0"Hg
12A	BV-3-32.0	6-27-00 / 8:20		28.5	7.5	7.0"Hg
13A	BV-4-5.0	6-27-00 / 9:11		29.0	9.0	8.0"Hg
14A	BV-4-10.0	6-27-00 / 9:23		29.5	6.0	5.5"Hg
15A	BV-4-20.0	6-27-00 / 9:38		29.5	5.5	5.5"Hg
	BV-4-32.0	6-27-00 / 10:01		30.0	7.5	
	BV-5-5.0	6-27-00 / 10:47		29.5	7.0	
	BV-5.0-10.0	6-27-00 / 11:06		30.0	5.0	

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Relinquished By: (Signature) Date/Time: Tom Ent 18:40/6-27-00 Print Name:
Relinquished By: (Signature) Date/Time: Received By: (Signature) Date/Time: Darnell Burgess 6/30/00 955
Relinquished By: (Signature) Date/Time: Received By: (Signature) Date/Time:

Notes: Detection limit of .001 ppm for BTEX.

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8203 9448 1531	DB	6/30/00 955	—	Good	Yes No (None) N/A	00065424

Form 1293 rev. 06

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0006542B

Work Order Summary

CLIENT:	Mr. James Loetterle Cambria Environmental Technology 1144 65th Street Suite B Oakland, CA 94608	**BILL TO:**	Mr. James Loetterle Cambria Environmental Technology 1144 65th Street Suite B Oakland, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	242-0504 1285 Bankroft Ave
DATE RECEIVED:	6/30/00		
DATE COMPLETED:	7/10/00		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
16A	BV-4-32.0	TO-3	6.5 "Hg
17A	BV-5-5.0	TO-3	6.5 "Hg
18A	BV-5-10.0	TO-3	5.0 "Hg
19A	BV-5-20.0	TO-3	7.0 "Hg
20A	BV-5-32.0	TO-3	6.5 "Hg
21A	BV-6-5.0	TO-3	6.5 "Hg
22A	BV-6-10.0	TO-3	7.5 "Hg
23A	BV-6-20.0	TO-3	6.5 "Hg
24A	BV-6-32.0	TO-3	7.0 "Hg
24AA	BV-6-32.0 Duplicate	TO-3	7.0 "Hg
25A	Method Spike	TO-3	NA
26A	Lab Blank	TO-3	NA

CERTIFIED BY: _____ DATE: 7/14/00

FOR Laboratory Director

Certfication numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, AZ ELAP - AZ0567

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

LABORATORY NARRATIVE
TO-3
Cambria Environmental Technology
Workorder# 0006542B

Nine 1 Liter Summa Canister samples were received on June 30, 2000. The laboratory performed analysis via modified EPA Method TO-3 for Benzene, Toluene, Ethylbenzene, Xylenes and Total Petroleum Hydrocarbons (TPH). BTEX was analyzed via GC/PID and TPH via GC/FID. The TPH results are calculated using the response of Gasoline. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. See the data sheets for the reporting limits for each compound.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The hydrocarbon profile present in all samples did not match that of commercial gasoline. Results are reported as gasoline.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

AIR TOXICS LTD.

SAMPLE NAME : BV-4-32.0

ID#: 0006542B-16A

EPA Method TO-3 GC/PID/FID

File Name:	**d070711**	**Date of Collection: 6/27/00**	
Dil. Factor:	**2.58**	**Date of Analysis: 7/7/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	0.0038 M	0.012 M
Toluene	0.0026	0.0099	0.016	0.062
Ethyl Benzene	0.0026	0.011	0.0083	0.036
Total Xylenes	0.0026	0.011	0.0096 M	0.042 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	4.1	17
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	107	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-5-5.0

ID#: 0006542B-17A

EPA Method TO-3 GC/PID/FID

File Name:	**d070712**	**Date of Collection: 6/27/00**	
Dil. Factor:	**2.58**	**Date of Analysis: 7/7/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	Not Detected	Not Detected
Toluene	0.0026	0.0099	0.0058	0.022
Ethyl Benzene	0.0026	0.011	0.0028	0.012
Total Xylenes	0.0026	0.011	Not Detected	Not Detected
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	1.7	7.1
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	83	75-125
Fluorobenzene (FID)	106	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-5-10.0

ID#: 0006542B-18A

EPA Method TO-3 GC/PID/FID

File Name:	**d070713**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.42**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0024	0.0078	0.0028	0.0090
Toluene	0.0024	0.0093	0.0087	0.033
Ethyl Benzene	0.0024	0.011	0.0026	0.012
Total Xylenes	0.0024	0.011	0.0024	0.011
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.060	0.25	1.3	5.5
C2-C4 Hydrocarbons ref. to Gasoline	0.060	0.11	Not Detected	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	87	75-125
Fluorobenzene (FID)	111	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-5-20.0

ID#: 0006542B-19A

EPA Method TO-3 GC/PID/FID

File Name:	**d070714**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.64**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0086	Not Detected	Not Detected
Toluene	0.0026	0.010	0.013	0.050
Ethyl Benzene	0.0026	0.012	0.0070	0.031
Total Xylenes	0.0026	0.012	0.0079 M	0.035 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.066	0.27	3.7	15
C2-C4 Hydrocarbons ref. to Gasoline	0.066	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	106	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-5-32.0

ID#: 0006542B-20A

EPA Method TO-3 GC/PID/FID

File Name:	**d070715**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.58**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	0.0060 M	0.019 M
Toluene	0.0026	0.0099	0.022	0.084
Ethyl Benzene	0.0026	0.011	0.014	0.060
Total Xylenes	0.0026	0.011	0.015 M	0.066 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	6.7	28
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	87	75-125
Fluorobenzene (FID)	109	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-6-5.0

ID#: 0006542B-21A

EPA Method TO-3 GC/PID/FID

File Name:	**d070716**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.58**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	Not Detected	Not Detected
Toluene	0.0026	0.010	0.0051	0.020
Ethyl Benzene	0.0026	0.011	0.0036	0.016
Total Xylenes	0.0026	0.011	0.0033 M	0.014 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	2.6	11
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

***Container Type:* 1 Liter Summa Canister**

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	106	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-6-10.0

ID#: 0006542B-22A

EPA Method TO-3 GC/PID/FID

File Name:	**d070717**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.69**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0027	0.0087	Not Detected	Not Detected
Toluene	0.0027	0.010	0.013	0.049
Ethyl Benzene	0.0027	0.012	0.0086	0.038
Total Xylenes	0.0027	0.012	0.0093 M	0.041 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.067	0.28	4.5	18
C2-C4 Hydrocarbons ref. to Gasoline	0.067	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	86	75-125
Fluorobenzene (FID)	108	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-6-20.0

ID#: 0006542B-23A

EPA Method TO-3 GC/PID/FID

File Name:	**d070718**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.58**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0084	Not Detected	Not Detected
Toluene	0.0026	0.0099	0.023	0.089
Ethyl Benzene	0.0026	0.011	0.015	0.066
Total Xylenes	0.0026	0.011	0.016 M	0.071 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.064	0.27	7.9	33
C2-C4 Hydrocarbons ref. to Gasoline	0.064	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	84	75-125
Fluorobenzene (FID)	105	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-6-32.0

ID#: 0006542B-24A

EPA Method TO-3 GC/PID/FID

File Name:	**d070719**	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.64**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0086	Not Detected	Not Detected
Toluene	0.0026	0.010	0.018	0.067
Ethyl Benzene	0.0026	0.011	0.011	0.048
Total Xylenes	0.0026	0.012	0.012 M	0.053 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.066	0.27	6.4	27
C2-C4 Hydrocarbons ref. to Gasoline	0.066	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	85	75-125
Fluorobenzene (FID)	109	75-125

AIR TOXICS LTD.

SAMPLE NAME : BV-6-32.0 Duplicate

ID#: 0006542B-24AA

EPA Method TO-3 GC/PID/FID

File Name:	*d070720*	**Date of Collection:**	**6/27/00**
Dil. Factor:	**2.64**	**Date of Analysis:**	**7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0026	0.0086	Not Detected	Not Detected
Toluene	0.0026	0.010	0.018	0.069
Ethyl Benzene	0.0026	0.011	0.011	0.048
Total Xylenes	0.0026	0.012	0.013 M	0.057 M
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.066	0.27	6.6	28
C2-C4 Hydrocarbons ref. to Gasoline	0.066	0.12	Not Detected	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	86	75-125
Fluorobenzene (FID)	110	75-125

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SAMPLE NAME : Method Spike

ID#: 0006542B-25A

EPA Method TO-3 GC/PID/FID

File Name:	**d070703**		**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 7/7/00**

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	% Recovery
Benzene	0.0010	0.0032	88
Toluene	0.0010	0.0038	91
Ethyl Benzene	0.0010	0.0044	87
Total Xylenes	0.0010	0.0044	89
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	120
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	120

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	91	75-125
Fluorobenzene (FID)	118	75-125

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SAMPLE NAME : Lab Blank

ID#: 0006542B-26A

EPA Method TO-3 GC/PID/FID

File Name:	**d070706**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 7/7/00**	

Compound	Det. Limit (ppmv)	Det. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0044	Not Detected	Not Detected
Total Xylenes	0.0010	0.0044	Not Detected	Not Detected
TPH (C5+ Hydrocarbons) ref. to Gasoline	0.025	0.10	Not Detected	Not Detected
C2-C4 Hydrocarbons ref. to Gasoline	0.025	0.046	Not Detected	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Fluorobenzene (PID)	83	75-125
Fluorobenzene (FID)	105	75-125

AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

CHAIN-OF-CUSTODY RECORD

Nº 027309

Contact Person: James Loetterle
Company: Cambria Environmental Technology Inc.
Address: 1144 65th St. City: Oakland State: CA Zip: 94608
Phone: (510) 420-3339 FAX: (510) 420-9170
Collected By: Signature: Tom Tutt

Project info:
P.O. #
Project # 242-0504
Project Name: Equiva

Turn Around Time:
☑ Normal
☐ Rush ____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
	BV-3-5.0	6-27-00 / 7:27	TPHg & BTEX by EPA method TO-3	28.0	6.5	
	BV-3-10.0	6-27-00 / 7:40		28.5	13.5	
	BV-3-20.0	6-27-00 / 7:57		28.5	7.0	
	BV-3-32.0	6-27-00 / 8:20		28.5	7.5	
	BV-4-5.0	6-27-00 / 9:11		27.0	1.0	
	BV-4-10.0	6-27-00 / 9:23		29.5	6.0	
	BV-4-20.0	6-27-00 / 9:38		29.5	5.5	
16A	BV-4-32.0	6-27-00 / 10:01		30.0	7.5	6.5"Hg
17A	BV-5-5.0	6-27-00 / 10:47		29.5	7.0	6.5"Hg
18A	BV-5-10.0	6-27-00 / 11:06		30.0	5.0	5.0"Hg

Relinquished By: (Signature) Date/Time: 18:40/6-27-00 Print Name:
Relinquished By: (Signature) Date/Time:
Relinquished By: (Signature) Date/Time:

Received By: (Signature) Date/Time: 6/30/00 955
Received By: (Signature) Date/Time:

Notes: Detection limit of .001 ppm for BTEX.

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex	820B 9448 1537	DB	6/30/00 955	—	Good	Yes No (None) N/A	0006542B

Form 1293 rev. 06

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AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Nº 027308

CHAIN-OF-CUSTODY RECORD

Contact Person: James Loeffler
Company: Cambria Environmental Technology Inc.
Address: 1144 65th St. City: Oakland State: CA Zip: 94608
Phone: (510) 420-3336 FAX: (510) 420-9170
Collected By: Signature: [signature]

Project info:
P.O. #:
Project #: 242-0504
Project Name: Equiva

Turn Around Time:
☑ Normal
☐ Rush ____ Specify

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum Initial	Final	Receipt
19A	BV-5-20.0	6-27-00 / 11:21	TPHg & BTEX by EPA method TO-3	30.0	7.5	7.0 "Hg
20A	BV-5-32.0	6-27-00 / 11:47		30.0	6.5	6.5 "Hg
21A	BV-6-5.0	6-27-00 / 13:14		30.0	6.5	6.5 "Hg
22A	BV-6-10.0	6-27-00 / 13:~~28~~ 27	J.L.	30.0	7.5	7.5 "Hg
23A	BV-6-20.0	6-27-00 / 13:44		30.0	6.5	6.5 "Hg
24A	BV-6-32.0	6-27-00 / 14:10		30.0	7.0	7.0 "Hg

30 7.5.0

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Relinquished By: (Signature) Date/Time: 18:40/6-27-00 Print Name:
Received By: (Signature) Date/Time: 6/30/00 Print Name: Darrell Burgess 955
Relinquished By: (Signature) Date/Time:
Received By: (Signature) Date/Time:

Notes: Detection limit of .001 ppm for BTEX

Lab Use Only	Shipper Name	Air Bill #	Opened By:	Date/Time	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
	fed ex	820394481537	DB	6/30/00 955	—	good	Yes No (None) N/A	000654 2B

Form 1293 rev. 06

Sequoia
Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

3 August, 2000

Darryk Ataide
Cambria - Oakland (Shell)
1144 65th St. Suite C
Oakland, CA 94608

RE: 1285 Bancroft Ave.
Sequoia Report: MJG0027

Enclosed are the results of analyses for samples received by the laboratory on 07/03/00 18:28. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ted Terrasas
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1	MJG0027-01	Soil	06/27/00 00:00	07/03/00 18:28
S-2	MJG0027-02	Soil	06/27/00 00:00	07/03/00 18:28
S-3	MJG0027-03	Soil	06/27/00 00:00	07/03/00 18:28
S-4	MJG0027-04	Soil	06/27/00 00:00	07/03/00 18:28
S(1-4)	MJG0027-05	Soil	06/27/00 00:00	07/03/00 18:28

Ted Terrasas, Project Manager

Sequoia Analytical

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Morgan Hill, CA 95037
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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Total Purgeable Hydrocarbons by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-1 (MJG0027-01) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G06003	07/06/00	07/06/00	DHS LUFT	
Surrogate: 4-Bromofluorobenzene		*83.5 %*	*60-140*		"	"	"	"	
S-2 (MJG0027-02) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G06003	07/06/00	07/06/00	DHS LUFT	
Surrogate: 4-Bromofluorobenzene		*79.5 %*	*60-140*		"	"	"	"	
S-3 (MJG0027-03) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G06003	07/06/00	07/06/00	DHS LUFT	
Surrogate: 4-Bromofluorobenzene		*81.5 %*	*60-140*		"	"	"	"	
S-4 (MJG0027-04) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Purgeable Hydrocarbons	ND	1.00	mg/kg	1	0G06003	07/06/00	07/06/00	DHS LUFT	
Surrogate: 4-Bromofluorobenzene		*82.5 %*	*60-140*		"	"	"	"	

Sequoia Analytical

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Morgan Hill, CA 95037
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www.sequoialabs.com

Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-1 (MJG0027-01) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Diesel Range Hydrocarbons	**65.1**	4.00	mg/kg	4	0G06030	07/06/00	07/10/00	DHS LUFT	D-15
Surrogate: n-Pentacosane		*317 %*	*50-150*		"	"	"	"	*S-02*
S-2 (MJG0027-02) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Diesel Range Hydrocarbons	**3.20**	1.00	mg/kg	1	0G06030	07/06/00	07/07/00	DHS LUFT	D-15
Surrogate: n-Pentacosane		*77.8 %*	*50-150*		"	"	"	"	
S-3 (MJG0027-03) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Diesel Range Hydrocarbons	**1.80**	1.00	mg/kg	1	0G06030	07/06/00	07/07/00	DHS LUFT	D-15
Surrogate: n-Pentacosane		*83.8 %*	*50-150*		"	"	*07/07/00*	"	
S-4 (MJG0027-04) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Diesel Range Hydrocarbons	**35.5**	2.00	mg/kg	2	0G06030	07/06/00	07/10/00	DHS LUFT	D-15
Surrogate: n-Pentacosane		*347 %*	*50-150*		"	"	"	"	*S-02*

Sequoia Analytical

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Morgan Hill, CA 95037
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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

MTBE by DHS LUFT

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S(1-4) (MJG0027-05) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Methyl tert-butyl ether	ND	0.0500	mg/kg	1	0G07003	07/07/00	07/10/00	EPA 8020A	
Benzene	ND	0.00500	"	"	"	"	"	"	
Toluene	ND	0.00500	"	"	"	"	"	"	
Ethylbenzene	ND	0.00500	"	"	"	"	"	"	
Xylenes (total)	ND	0.00500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.0 %*	*60-140*		"	"	"	"	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S(1-4) (MJG0027-05) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Lead	ND	10.0	mg/kg	2	0G20012	07/20/00	07/20/00	EPA 6010A	

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Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

STLC CAM Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S(1-4) (MJG0027-05) Soil Sampled: 06/27/00 00:00 Received: 07/03/00 18:28									
Lead	ND	0.200	mg/l	1	0G27013	07/12/00	07/27/00	EPA 6010A	

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1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Organic Lead by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S(1-4) (MJG0027-05) Soil Sampled: 06/26/00 00:00 Received: 07/03/00 18:28									
Organic Lead	ND	1.0	mg/kg	5	0G06017	07/06/00	07/07/00	DHS LUFT	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Total Purgeable Hydrocarbons by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G06003 - EPA 5030B [P/T]										
Blank (0G06003-BLK1)				Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Surrogate: 4-Bromofluorobenzene	*0.197*		"	*0.200*		*98.5*	*60-140*			
LCS (0G06003-BS1)				Prepared & Analyzed: 07/06/00						
Purgeable Hydrocarbons	5.57	1.00	mg/kg	5.00		111	70-130			
Surrogate: 4-Bromofluorobenzene	*0.167*		"	*0.200*		*83.5*	*60-140*			
Matrix Spike (0G06003-MS1)		**Source: MJG0027-01**		Prepared: 07/06/00 Analyzed: 07/07/00						
Purgeable Hydrocarbons	4.35	1.00	mg/kg	5.00	ND	87.0	60-140			
Surrogate: 4-Bromofluorobenzene	*0.121*		"	*0.200*		*60.5*	*60-140*			
Matrix Spike Dup (0G06003-MSD1)		**Source: MJG0027-01**		Prepared: 07/06/00 Analyzed: 07/07/00						
Purgeable Hydrocarbons	4.38	1.00	mg/kg	5.00	ND	87.6	60-140	0.687	25	
Surrogate: 4-Bromofluorobenzene	*0.133*		"	*0.200*		*66.5*	*60-140*			
Batch 0G07003 - EPA 5030B [P/T]										
Blank (0G07003-BLK1)				Prepared & Analyzed: 07/07/00						
Purgeable Hydrocarbons	ND	1.00	mg/kg							
Surrogate: 4-Bromofluorobenzene	*0.167*		"	*0.200*		*83.5*	*60-140*			

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G06030 - EPA 3550A										
Blank (0G06030-BLK1)				Prepared: 07/06/00 Analyzed: 07/07/00						
Diesel Range Hydrocarbons	ND	1.00	mg/kg							
Surrogate: n-Pentacosane	*1.50*		"	*1.67*		*89.8*	*50-150*			
LCS (0G06030-BS1)				Prepared: 07/06/00 Analyzed: 07/07/00						
Diesel Range Hydrocarbons	14.5	1.00	mg/kg	16.7		86.8	60-140			
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*50-150*			
Matrix Spike (0G06030-MS1)		**Source: MJG0023-01**		Prepared: 07/06/00 Analyzed: 07/07/00						
Diesel Range Hydrocarbons	167	1.00	mg/kg	16.7	41.2	753	50-150			Q-02
Surrogate: n-Pentacosane	*1.40*		"	*1.67*		*83.8*	*50-150*			
Matrix Spike Dup (0G06030-MSD1)		**Source: MJG0023-01**		Prepared: 07/06/00 Analyzed: 07/07/00						
Diesel Range Hydrocarbons	143	1.00	mg/kg	16.7	41.2	610	50-150	15.5	50	Q-02
Surrogate: n-Pentacosane	*0.900*		"	*1.67*		*53.9*	*50-150*			

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1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G07003 - EPA 5030B [P/T]										
Blank (0G07003-BLK1)				Prepared & Analyzed: 07/07/00						
Methyl tert-butyl ether	ND	0.0500	mg/kg							
Benzene	ND	0.00500	"							
Toluene	ND	0.00500	"							
Ethylbenzene	ND	0.00500	"							
Xylenes (total)	ND	0.00500	"							
Surrogate: 4-Bromofluorobenzene	*0.167*		"	*0.200*		*83.5*	*60-140*			
LCS (0G07003-BS1)				Prepared & Analyzed: 07/07/00						
Benzene	0.186	0.00500	mg/kg	0.200		93.0	70-130			
Toluene	0.197	0.00500	"	0.200		98.5	70-130			
Ethylbenzene	0.209	0.00500	"	0.200		105	70-130			
Xylenes (total)	0.629	0.00500	"	0.600		105	70-130			
Surrogate: 4-Bromofluorobenzene	*0.188*		"	*0.200*		*94.0*	*60-140*			
Matrix Spike (0G07003-MS1)		**Source: MJG0028-01**		Prepared & Analyzed: 07/07/00						
Benzene	0.168	0.00500	mg/kg	0.200	ND	84.0	60-140			
Toluene	0.176	0.00500	"	0.200	ND	88.0	60-140			
Ethylbenzene	0.182	0.00500	"	0.200	ND	91.0	60-140			
Xylenes (total)	0.559	0.00500	"	0.600	ND	93.2	60-140			
Surrogate: 4-Bromofluorobenzene	*0.156*		"	*0.200*		*78.0*	*60-140*			
Matrix Spike Dup (0G07003-MSD1)		**Source: MJG0028-01**		Prepared & Analyzed: 07/07/00						
Benzene	0.155	0.00500	mg/kg	0.200	ND	77.5	60-140	8.05	25	
Toluene	0.179	0.00500	"	0.200	ND	89.5	60-140	1.69	25	
Ethylbenzene	0.165	0.00500	"	0.200	ND	82.5	60-140	9.80	25	
Xylenes (total)	0.507	0.00500	"	0.600	ND	84.5	60-140	9.76	25	
Surrogate: 4-Bromofluorobenzene	*0.152*		"	*0.200*		*76.0*	*60-140*			

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1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G20012 - EPA 3050B										
Blank (0G20012-BLK1)				Prepared & Analyzed: 07/20/00						
Lead	ND	4.00	mg/kg							
LCS (0G20012-BS1)				Prepared & Analyzed: 07/20/00						
Lead	19.0	4.00	mg/kg	20.0		95.0	80-120			
Matrix Spike (0G20012-MS1)		**Source: MJG0329-01**		Prepared & Analyzed: 07/20/00						
Lead	58.1	10.0	mg/kg	50.0	ND	98.2	80-120			
Matrix Spike Dup (0G20012-MSD1)		**Source: MJG0329-01**		Prepared & Analyzed: 07/20/00						
Lead	60.9	10.0	mg/kg	50.0	ND	104	80-120	4.71	20	

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1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

STLC CAM Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G27013 - 3113B/No Digestion										
Blank (0G27013-BLK1)				Prepared & Analyzed: 07/27/00						
Lead	ND	0.200	mg/l							
Blank (0G27013-BLK2)				Prepared & Analyzed: 07/27/00						
Lead	ND	0.200	mg/l							
Blank (0G27013-BLK3)				Prepared & Analyzed: 07/27/00						
Lead	ND	0.200	mg/l							
Blank (0G27013-BLK4)				Prepared & Analyzed: 07/27/00						
Lead	ND	0.200	mg/l							
Blank (0G27013-BLK5)				Prepared & Analyzed: 07/27/00						
Lead	ND	0.200	mg/l							
Blank (0G27013-BLK6)				Prepared: 07/27/00 Analyzed: 08/01/00						
Lead	ND	0.200	mg/l							
LCS (0G27013-BS1)				Prepared & Analyzed: 07/27/00						
Lead	1.99	0.200	mg/l	2.00		99.5	80-120			
Matrix Spike (0G27013-MS1)		**Source: MJF0979-03**		Prepared & Analyzed: 07/27/00						
Lead	1.91	0.200	mg/l	2.00	ND	95.5	80-120			
Matrix Spike Dup (0G27013-MSD1)		**Source: MJF0979-03**		Prepared & Analyzed: 07/27/00						
Lead	1.90	0.200	mg/l	2.00	ND	95.0	80-120	0.525	20	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Organic Lead by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G06017 - LUFT-DHS										
Blank (0G06017-BLK1)				Prepared: 07/06/00	Analyzed: 07/07/00					
Organic Lead	ND	1.0	mg/kg							
LCS (0G06017-BS1)				Prepared: 07/06/00	Analyzed: 07/07/00					
Organic Lead	13.9	1.0	mg/kg	20.0		69.5	10-110			
LCS Dup (0G06017-BSD1)				Prepared: 07/06/00	Analyzed: 07/07/00					
Organic Lead	14.2	1.0	mg/kg	20.0		71.0	10-110	2.14	20	
Matrix Spike (0G06017-MS1)	Source: W006741-01			Prepared: 07/06/00	Analyzed: 07/07/00					
Organic Lead	ND	1.0	mg/kg	20.0	ND		0-62			Q-02
Matrix Spike Dup (0G06017-MSD1)	Source: W006741-01			Prepared: 07/06/00	Analyzed: 07/07/00					
Organic Lead	ND	1.0	mg/kg	20.0	ND		0-62		20	Q-02

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Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 16:52

Notes and Definitions

D-15	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
Q-02	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 1 of 1

Site Address: 1285 Bancroft Ave, San Leandro
~~WIC #: Incident #~~
98996067

Shell Engineer: Karen Petryna
Phone No.:
Fax #:

Consultant Name & Address: CAMBRIA ENVIRONMENTAL
1144 65th St. Suite C, Oakland, CA 94608

Consultant Contact: Danyk Atienda
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: ~~Chris Larsen~~

Printed Name: James Loetherle

Analysis Required

LAB: Sequoia

CHECK ONE (1) BOX ONLY — C/D1

- G.W. Monitoring ☐ 4441
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ _____

NOTE: Notify lab as soon as Possible of 24/48 hr. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of cont.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) + MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Test for Disposal As per attached instructions	If TTLC ≥ 50 ppm TTLC lead - If STLC ≥ 10 ppm then run STLC	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	6/27		✓				X		X	4 pt				X			then run organic lead			
S-2	↓		↓				X		X					X						MJG0027
S-3							X		X					X						
S-4							X		X					X						

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
James Loetherle	James Loetherle				6-30-00 1345		
Chris Larsen	CHRIS LARSEN	7/3	15:07	Chris Larsen	CHRIS LARSEN	7/3	14:00

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

ISSUED DATE: 05/23/97
CANCELS ISSUE: 03/05/97
ISSUED BY: RLG

MATERIAL: MINIMUM SOIL ANALYSIS FOR UST SOIL WITH GASOLINE OR DIESEL CONTAMINATION

USE FOR ARIZONA , CALIFORNIA AND NEVADA WASTE ONLY!!!

NOTE: ANALYSES ARE BASED ON CHARACTERIZATION MINIMUM. YOU MUST BE SURE THAT THE FACILITY WILL TAKE THE FOLLOWING AS ACCEPTANCE. FURTHER ANALYSIS MAY BE REQUIRED FOR CHARACTERIZATION UPON REVIEW BY THE WASTE TEAM MEMBER OR TO MEET DISPOSAL SITE REQUIREMENTS. IF THE MATERIAL IS RETURNED TO CONSULTANT, COPIES OF ALL TRANSPORTATION DOCUMENTS MUST BE SENT TO THE WASTE DISPOSAL COORDINATOR FOR RECORDING WHEN PROJECT IS COMPLETE.

MINIMUM REQUIRED TESTING

MJG6027

Note: If material is to be sent to a BFI facility EPA METHOD 8010 must be run IN ADDITION to the following analysis prior to requesting profile approval:

TPH = TOTAL PETROLEUM HYDROCARBONS, DHS GC-FID MOD 8015
GASOLINE OR DIESEL AS REQUIRED.

BTXE = EPA 8020 + MTBE

CAM METALS = TTLC LEAD, STLC LEAD IF TTLC => 50 MG/KG AND/OR
ORGANIC LEAD IF TTLC => 13 MG/KG

AQUATIC BIOASSAY (FISH TOX) IS ONLY TO BE RUN ON SAMPLES WITH **GREATER THAN 5000 PPM TPH.** COMPOSITE A MAXIMUM OF 4 SAMPLES.

AQUATIC BIOASSAY (FISH TOX) = PART 800 OF "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER (15TH EDITION)"

LABORATORY INSTRUCTIONS (MINIMUM GUIDELINES ONLY)

- 8015/8020 TO BE BILLED AS "COMBO" WITHOUT EXCEPTION
- TPH REQUIRED FOR ALL SAMPLES.
- ALL OTHER TESTS REQUIRED TO BE RUN ON COMPOSITE(S). MAXIMUM 4 SAMPLES PER COMPOSITE.
- STLC REQUIRED FOR METALS WITH TTLC VALUE 10 X STLC MAXIMUM.
- ORGANIC ANALYSIS REQUIRED FOR TTLC LEAD OF 13 MG/KG OR GREATER.
- LABORATORY IS TO SUPPLY QA/QC INFORMATION WITH ALL ANALYTICAL REPORTS.
- MAIL OR FAX ALL ANALYSIS TO PERSON REQUESTING ANALYSIS.

ATTACHMENT B

Standard Field Procedures for Soil and Soil-Vapor Sampling and Soil Borings

STANDARD FIELD PROCEDURES FOR SOIL AND SOIL VAPOR SAMPLING

This document describes Cambria Environmental Technology's standard field methods for soil and soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil and soil vapor samples are collected and analyzed to characterize subsurface contaminant distribution and to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Soil Sampling

Soil samples are collected using lined samplers driven into undisturbed sediments beyond the bottom of the borehole. The vertical location of each soil sample is determined by measuring the distance from the middle of the soil sample tube to the end of the drive rod used to advance the sampler. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Sampling equipment is washed prior to and between samples to prevent cross-contamination. Trisodium phosphate or an equivalent EPA-approved detergent is used to wash equipment.

Sample Storage, Handling and Transport

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

Soil Vapor Sampling

Hand push soil vapor sampling method assures sample collection to shallow depths in most hydrogeologic environments. A hollow vapor probe is pushed into the ground, rather than augured, and the stratigraphy forms a vapor seal between the surface and subsurface environments ensuring that the surface and subsurface gases do not mix. Once the desired soil vapor sampling depth has been reached, the field technician installs disposable polyethylene tubing with a threaded adapter that screws into the bottom of the rods. The screw adapter ensures that the vapor sample comes directly from the bottom of the drill rods and does not mix with other vapor from inside the rod or from the ground surface. The operator then pulls up on the rods and exposes the desired stratigraphy by leaving an expendable drive point at the maximum depth. The required volume of soil vapor is then purged through the polyethylene tubing using a standard vacuum pump. The soil vapor can be sampled for direct injection into a field gas chromatograph, pumped into inert tedlar bags using a "bell jar" sampling device, or allowed to enter a Summa vacuum canister. Once collected, the vapor sample is transported under chain-of-custody to a state-certified laboratory. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure. Drilling and sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

STANDARD FIELD PROCEDURES FOR SOIL AND SOIL VAPOR SAMPLING CONT'D

Sample Storage, Handling and Transport

Samples are stored out of direct sunlight in coolers and transported under chain-of-custody to a state-certified analytic laboratory.

Field Screening

After collecting a vapor sample for laboratory analysis, Cambria often collects an additional vapor sample for field screening using a portable photo-ionization detector (PID), flame-ionization detector (FID), or GasTech combustible gas detector to measure volatile hydrocarbon vapor concentrations. These measurements are used along with the field observations, odors, stratigraphy and ground water depth to help select the best location for additional borings to be advanced during the field mobilization.

Grouting

The borings are filled to the ground surface with neat cement.

STANDARD FIELD PROCEDURES FOR SOIL BORINGS

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

Objectives

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

Soil Classification/Logging

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

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

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or hydraulic push technologies. At least one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments beyond the bottom of the borehole. The vertical location of each soil sample is determined by measuring the distance from the middle of the soil sample tube to the end of the drive rod used to advance the split barrel sampler. All sample depths use the ground surface immediately adjacent to the boring as a datum. The horizontal location of each boring is measured in the field from an onsite permanent reference using a measuring wheel or tape measure.

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

Sample Storage, Handling and Transport

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

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable photoionization detector (PID) measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. PID measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch type sampler or are collected from the open borehole using bailers. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory.

Duplicates and Blanks

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

Grouting

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

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite on top of and covered by plastic sheeting. At least four individual soil samples are collected from the stockpiles for later compositing at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples. Soil cuttings are transported by licenced waste haulers and disposed in secure, licenced facilities based on the composite analytic results.

Ground water removed during sampling and/or rinsate generated during decontamination procedures are stored onsite in sealed 55 gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Disposal of the water is based on the analytic results for the well samples. The water is either pumped out using a vacuum truck for transport to a licenced waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

F:\TEMPLATE\SOPS\BORINGSLH.WPD

ATTACHMENT C

Alameda County Public Works Agency Permit

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD, CA 94544
PHONE (510) 670-5554
FAX (510) 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1285 Bancroft Ave San Leandro CA 94577

CLIENT
Name Equiva Services LLC
Address PO Box 7869 Phone
City Burbank CA Zip 91510-7869

APPLICANT
Name James Loetterle - Cambria Environmental Technology
Address 1144 65th St. Suite B Fax
City Oakland CA Zip 94608 Phone (510) 420-3336

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other N/A	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☑ Hydraulic Push		

DRILLER'S LICENSE NO. Gregg Drilling C57 # 485165

WELL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter ____ in. Depth ____ ft.
Surface Seal Depth ____ ft. Number ____

GEOTECHNICAL PROJECTS
Number of Borings 6 Maximum
Hole Diameter 2 in. Depth 35 ft.

ESTIMATED STARTING DATE June 26, 2000
ESTIMATED COMPLETION DATE June 27, 2000

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

APPLICANT'S SIGNATURE [signature] DATE 6-5-00

FOR OFFICE USE

PERMIT NUMBER W00-354
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 work the 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 a cement grout/sand mixture. Upper 2-3 ft. replace in kind or with compacted cuttings.

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

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED Frank L Codd DATE 6-5-00

ATTACHMENT D

Boring Logs

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-1
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	26-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	26-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	32.1 ft (26-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼

REMARKS Hand augered to 5 fbg. Located in west driveway of Hale Apartments adjacent to parking area.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							Fill; light brown; moist; 20% silt, 70% sand, 10% gravel; high estimated permeability.	2.0	
							Sandy SILT (ML); brown; moist; 10% clay, 70% silt, 20% sand.		
		BV-1- 5.5		5					
		B-1-6 .5					@ 6.5' - dark brown; moist; 15% clay, 50% silt, 35% fine sand; low plasticity, low estimated permeability.		
				10					
		BV-1- 10.5					@ 11' - 15% clay, 45% silt, 40% fine sand.		
		B-1-1 1.0			ML				
		BP-1- 11.5		15					
		B-1-1 7.5					@ 17.5' - brown; 25% clay, 45% silt, 30% fine sand; medium plasticity.		◄ Portland Type I/II
		BV-1- 20.0		20			@ 20' - soft; irridescent sheen is visible.		
		B-1-2 0.5							
								23.5	
							Silty SAND (SM); brown; moist.		
		B-1-2 5.0		25			@ 25' - 10% clay, 40% silt, 50% sand; low plasticity; moderate estimated permeability.		
					SM				
		B-1-3 0.0		30			@ 30' - light brown; damp; 3% clay, 22% silt, 75% sand; no plasticity; moderate estimated permeability.		
							▽	32.0	
		BV-1- 32.0					**Sandy SILT** (ML); brown; wet; 5% clay, 45% silt, 40% sand; low plasticity; moderate estimated permeability.		
		BP-1- 32.5			ML				
				35					
		B-1-3 5.5						36.0	Bottom of Boring @ 36 ft

WELL LOG (PID) G:\SANLEA-1\GINT\SNL1285.GPJ DEFAULT.GDT 10/9/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-2
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	26-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	26-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	33.0 ft (26-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg. Located in west driveway of Hale Apartments adjacent to 560 Estudillo Ave.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; light brown; moist; 20% silt, 70% sand, 10% gravel; high estimated permeability.	2.0	
					ML		**Sandy SILT** (ML); brown; moist; 5% clay, 70% silt, 25% fine sand; low plasticity; moderate estimated permeability.		
		BV-2- 5.0		5				6.0	
		B-2-6 .0			SM		**Silty SAND** (SM); light brown; moist; 5% clay, 45% silt, 50% fine sand; no plasticity; moderate estimated permeability.	7.0	
							Sandy SILT (ML); brown; moist; 10% clay, 60% silt, 30% fine sand; low plasticity; moderate estimated permeability; contains rootlets.		
		BV-2- 10.0		10			@ 10' - 5% clay, 55% silt, 40% sand.		
		B-2-1 1.0							
		BP-2- 11.5					@ 13' - light brown; 15% clay, 60% silt, 25% fine sand; no plasticity.		
		B-2-1 5.0		15					
					ML		@ 17' - brown; 15% clay, 60% silt, 25% fine sand; low plasticity; contains rust stains.		Portland Type I/II
		BV-2- 20.0		20					
		B-2-2 1.0					@ 21' - dark brown; 10% clay, 60% silt, 30% sand.		
							@ 24' - 10% clay, 50% silt, 40% sand.		
		B-2-2 5.5		25					
							@ 28' - 10% clay, 60% silt, 30% sand.		
		B-2-3 0.0		30				30.5	
		BP-2- 31.0					**Silty SAND** (SM); brown; moist; 5% clay, 25% silt, 70% sand; no plasticity; moderate estimated permeability. ▽		
		BV-2- 32.5			SM				
				35				36.0	Bottom of Boring @ 36 ft

WELL LOG (PID) G:\SANLEA~1\GINT\SNL1285.GPJ DEFAULT.GDT 9/29/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-3
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	27-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	27-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	34.9 ft (27-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼

REMARKS Hand augered to 5 fbg. Located in east driveway of Hale Apratments adjacent to 572 Estudillo Ave.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; light brown; moist; 20% silt, 70% sand, 10% gravel.	2.0	
							Sandy SILT (ML); dark brown, moist.		
		BV-3- 5.0		5					
		B-3-6 .0					@ 6' - 15% clay, 60% silt, 25% fine sand; low to medium plasticity, moderate estimated permeability.		
							@ 9' - 15% clay, 55% silt, 30% sand; contains rust stains.		
		BV-3- 10.0		10					
		BP-3- 10.5							
		B-3-1 1.0			ML		@ 13' - 10% clay, 55% silt, 35% sand; low plasticity.		
		B-3-1 5.0		15			@ 15' - light brown; 10% clay, 50% silt, 40% sand.		
							@ 17' - 10% clay, 60% silt, 30% sand; low to medium plasticity.		◄ Portland Type I/II
		BV-3- 20.0		20					
		B-3-2 1.0					@ 21' - contains organics.		
							@ 23' - brown; damp; 5% clay, 55% silt, 40% sand; low plasticity.		
		B-3-2 5.0		25				26.0	
					SM		**Silty SAND** (SM); brown; damp; 5% clay, 35% silt, 60% fine sand; low plasticity; moderate estimated permeability; contains rust stains.	28.0	
					ML		**Sandy SILT** (ML); brown; damp; 5% clay, 50% silt, 45% fine sand; low plasticity; moderate estimated permeability; contains rust stains.	30.0	
		B-3-3 0.0		30			**Silty SAND** (SM); grey/brown; wet; 5% clay, 45% silt, 50% sand; low plasticity; moderate estimated permeability.		
		BP-3- 31.5			SM		@ 32' - brown.		
		BV-3- 32.0							
		B-3-3 4.5		35			@ 34' - grey/brown. ▽	35.0	Bottom of Boring @ 35 ft

WELL LOG (PID) G:\SANLEA~1\GINT\SNL1285.GPJ DEFAULT.GDT 10/9/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-4
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	27-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	27-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	35.5 ft (27-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼

REMARKS Hand augered to 5 fbg. Located in east driveway of Hale Apartments adjacent to entrance to 572 Estudillo Ave.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; light brown; moist; 20% silt, 70% sand, 10% gravel; no plasticity; high estimated permeability.	2.0	
							Sandy SILT (ML); dark brown; moist.		
		BV-4- 5.0		5			@ 5' - 5% clay, 70% silt, 25% fine sand; low plasticity; moderate estimated permeability; contains rust stains.		
		B-4-7 .0					@ 7' - 5% clay, 60% silt, 35% fine to medium sand.		
				10			@ 9' - 5% clay, 70% silt, 25% fine sand.		
		BV-4- 10.0							
		B-4-1 1.0					@ 11' - 5% clay, 60% silt, 30% fine sand, 5% medium sand.		
		BP-4- 11.5					@ 12' - 3% clay, 50% silt, 47% sand; contains rust stains.		
					ML		@ 14' - 5% clay, 70% silt, 25% fine sand; contains organics.		
		B-4-1 5.0		15					
							@ 17' - firm.		◄ Portland Type I/II
							@ 19' - irridescent sheen is visible		
		B-4-1 9.5		20			@ 20' - 5% clay, 55% silt, 40% sand.		
		BV-4- 20.0							
							@ 23' - light brown; 5% clay, 55% silt, 35% fine sand, 5% medium sand.		
		B-4-2 5.0		25					
								27.0	
							Silty SAND (SM); light brown; damp; 5% clay, 45% silt, 50% sand; low plasticity; moderate estimated permeability.		
		B-4-3 0.0		30			@ 29' - 5% clay, 20% silt; 75% sand; no plasticity; high estimated permeability.		
					SM		@ 30' - brown; wet; 10% silt; 90% fine to medium sand.		
		BP-4- 31.5					@ 31' - 5% clay, 20% silt, 75% sand; low to no plasticity; contains rust stains.		
		BV-4- 32.0							
		B-4-3 5.0		35			@ 35' - saturated; 5% clay, 45% silt, 50% sand; moderate estimated permeability. ▽	36.0	Bottom of Boring @ 36 ft

WELL LOG (PID) G:\SANLEA-1\GINT\SNL1285.GPJ DEFAULT.GDT 9/29/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-5
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	27-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	27-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg. Located in east driveway of Hale Apartments adjacent to northeast corner of 572Estudillo Ave.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; light brown; moist; 20% silt, 70% sand, 10% gravel; no plasticity; high estimated permeability.	2.0	
							Sandy SILT (ML); dark brown; moist.		
		BV-5- 5.0		5					
		B-5-7 .0					@ 6' - soft; 10% clay, 70% silt, 20% sand; low to medium plasticity; moderate estimated permeability.		
		BP-5- 7.5							
		BV-5- 10.0		10			@ 10' - firm; 5% clay, 60% silt, 35% fine sand; low plasticity; moderrate estimated permeability; contains organics and rust stains.		
		B-5-1 0.5							
					ML		@ 13' - 5% clay, 50% silt, 45% sand.		
		B-5-1 5.0		15					
							@ 17' - very stiff; 10% clay, 70% silt, 20% sand.		
							@ 19' - brown; 10% clay, 55% silt, 35% sand; irridescent sheen is visible.		Portland Type I/II
		BV-5- 20.0		20					
		B-5-2 1.0					@ 22' - light brown; 5% clay, 50% silt, 45% fine sand.		
							@ 24' - 10% clay, 55% silt, 35% sand.		
		B-5-2 5.0		25				26.0	
							Silty SAND (SM); light brown; damp; 5% clay, 30% silt, 65% fine to coarse sand; low plasticity; high estimated permeability; contains rust stains and organics; irridescent sheen is visible.		
		B-5-3 0.0		30	SM				
		BV-5- 32.0					@ 33' - wet; 10% clay, 15% silt, 75% sand.		
		BP-5- 34.0						35.0	
		B-5-3 4.5		35			**Sandy SILT** (ML); brown; wet; 10% clay, 70% silt, 20% sand; low plasticity; moderate estimated permeability; contains organics.		
					ML				
		B-5-3 8.5					@ 38' - soft; saturated; 30% clay; 60% silt; 10% sand; high plasticity; low estimated permeability.	39.0	Bottom of Boring @ 39 ft

WELL LOG (PID) G:\SANLEA-1\GINT\SNL1285.GPJ DEFAULT.GDT 9/29/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	B-6
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	27-Jun-00
LOCATION	1285 Bancroft Avenue, San Leandro, California	**DRILLING COMPLETED**	27-Jun-00
PROJECT NUMBER	242-0504	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼

REMARKS Hand augered to 5 fbg. Located in east driveway of Hale Apartments adjacent to parking area.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	
							FILL; light brown; moist; 20% silt, 70% sand, 10% gravel; no plasticity; high estimated permeability.	2.0	
							Sandy SILT (ML); dark brown; moist; 15% clay, 70% silt, 15% sand; medium plasticity; low estimated permeability.		
		BV-6- 5.0		5					
		BP-6- 6.5							
				10	ML		@ 9' - 10% clay, 65% silt, 25% sand; low plasticity; moderate estimated permeability. @ 10' - 5% clay, 65% silt, 30% fine to medium sand; contains organics.		
		BV-6- 10.0 B-6-1 0.5							
							@ 13' - firm; 5% clay, 70% silt, 25% fine sand.		
				15					
		B-6-1 6.5							Portland Type I/II
				20			@ 19' - light brown; 5% clay, 55% silt, 40% sand; no plasticity	20.0	
		BV-6- 20.0 B-6-2 0.5			SM		**Silty SAND** (SM); light brown; moist; 5% clay, 40% silt, 55% sand; low plasticity; moderate estimated permeability; contains organics.		
								24.0	
					ML		**Sandy SILT** (ML); light brown; moist; 5% clay, 55% silt, 40% sand; low plasticity; moderate estimated permeability.	25.0	
		B-6-2 5.0		25			**Silty SAND** (SM); light brown; moist; 5% clay, 40% silt, 55% fine to medium sand, low plasticity; moderate estimated permeability. @ 27' - contains organics.		
		B-6-3 0.0		30	SM		@ 30' - 3% clay, 20% silt, 77% fine to coarse sand; no plasticity; high estimated permeability. @ 31' - 20% silt, 80% fine sand; very high estimated permeability. @ 32' - wet.		
		BV-6- 31.5							
		BP-6- 35.0 B-6-3 5.5		35			@ 34' - 5%clay, 30% silt, 65% fine sand; low plasticity; moderate estimated permeability; contains organics and rust stains.	36.0	Bottom of Boring @ 36 ft

WELL LOG (PID) G:\SANJEA-1\GINT\SNL1285.GPJ DEFAULT.GDT 9/29/00

ATTACHMENT E

Soil Property Test Results

Sequoia
Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

3 August, 2000

Darryk Ataide
Cambria - Oakland (Shell)
1144 65th St. Suite C
Oakland, CA 94608

RE: 1285 Bancroft Ave.
Sequoia Report: MJG0031

Enclosed are the results of analyses for samples received by the laboratory on 07/03/00 18:28. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ted Terrasas
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 14:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BP-1-11.5	MJG0031-01	Soil	06/26/00 00:00	07/03/00 18:28
BP-1-32.5	MJG0031-02	Soil	06/26/00 00:00	07/03/00 18:28
BP-2-11.5	MJG0031-03	Soil	06/26/00 00:00	07/03/00 18:28
BP-2-31.0	MJG0031-04	Soil	06/26/00 00:00	07/03/00 18:28
BP-3-10.5	MJG0031-05	Soil	06/27/00 00:00	07/03/00 18:28
BP-3-31.5	MJG0031-06	Soil	06/27/00 00:00	07/03/00 18:28
BP-4-11.5	MJG0031-07	Soil	06/27/00 00:00	07/03/00 18:28
BP-4-31.5	MJG0031-08	Soil	06/27/00 00:00	07/03/00 18:28
BP-5-7.5	MJG0031-09	Soil	06/27/00 00:00	07/03/00 18:28
BP-5-34.0	MJG0031-10	Soil	06/27/00 00:00	07/03/00 18:28
BP-6-6.0	MJG0031-11	Soil	06/27/00 00:00	07/03/00 18:28
BP-6-35.0	MJG0031-12	Soil	06/27/00 00:00	07/03/00 18:28

Ted Terrasas, Project Manager

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 14:57

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BP-1-11.5 (MJG0031-01) Soil	**Sampled: 06/26/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.760**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**15.3**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-1-32.5 (MJG0031-02) Soil	**Sampled: 06/26/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.182**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**19.1**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-2-11.5 (MJG0031-03) Soil	**Sampled: 06/26/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.743**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**12.2**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-2-31.0 (MJG0031-04) Soil	**Sampled: 06/26/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.149**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**10.7**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-3-10.5 (MJG0031-05) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.613**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**15.0**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-3-31.5 (MJG0031-06) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.152**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**19.1**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-4-11.5 (MJG0031-07) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.241**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**12.6**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 14:57

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BP-4-31.5 (MJG0031-08) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.271**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**23.2**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-5-7.5 (MJG0031-09) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.706**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**18.4**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-5-34.0 (MJG0031-10) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.178**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**15.3**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-6-6.0 (MJG0031-11) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.643**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**17.1**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02
BP-6-35.0 (MJG0031-12) Soil	**Sampled: 06/27/00 00:00**	**Received: 07/03/00 18:28**							
Fractional Organic Carbon	**0.163**	0.0200	%	1	0G11019	07/11/00	07/11/00	EPA 415.1	
Moisture	**14.6**	0.0100	"	"	0G07023	07/06/00	07/06/00	EPA 160.3	I-02

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 14:57

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0G07023 - General Preparation										
Duplicate (0G07023-DUP1)		**Source: MJG0031-04**		Prepared & Analyzed: 07/06/00						
Moisture	10.0	0.0100	%		10.7			6.76	20	I-02
Batch 0G11019 - General Preparation										
Blank (0G11019-BLK1)				Prepared & Analyzed: 07/11/00						
Fractional Organic Carbon	ND	0.0200	%							
Duplicate (0G11019-DUP1)		**Source: MJG0031-02**		Prepared & Analyzed: 07/11/00						
Fractional Organic Carbon	0.186	0.0200	%		ND				15	

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Cambria - Oakland (Shell)	Project: 1285 Bancroft Ave.	
1144 65th St. Suite C	Project Number: 1285 Bancroft Ave./ San Leandro	**Reported:**
Oakland CA, 94608	Project Manager: Darryk Ataide	08/03/00 14:57

Notes and Definitions

I-02	This sample was analyzed outside of the EPA recommended holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Core Lab

Sequoia Analytical
(Morgan Hill)
MJG0031

CL File No.: 57111-00161

Sample ID	Sample Date	Total Porosity %	Bulk Density Dry g/cc	Bulk Density Natural g/cc	Matrix Density g/cc	Description
MJG0031-01	26-Jun-00	29.2	1.85	2.15	2.62	Gray v clayey vf-vcgr sandy silt
MJG0031-02	26-Jun-00	38.4	1.64	2.03	2.67	Gray v clayey vfgr sandy silt
MJG0031-03	26-Jun-00	27.6	1.92	2.20	2.66	Gray v clayey vfgr sandy silt
MJG0031-04	26-Jun-00	28.1	1.91	2.20	2.66	Gray v clayey v silty vf-cgr sand
MJG0031-05	26-Jun-00	40.3	1.57	1.98	2.64	Gray v clayey silt
MJG0031-06	26-Jun-00	43.5	1.51	1.94	2.67	Gray v clayey silt
MJG0031-07	26-Jun-00	29.7	1.86	2.15	2.64	Gray v clayey vfgr sandy silt
MJG0031-08	26-Jun-00	41.4	1.56	1.97	2.66	Gray v clayey silt
MJG0031-09	26-Jun-00	39.4	1.60	1.99	2.64	Gray v clayey silt
MJG0031-10	26-Jun-00	30.6	1.84	2.14	2.65	Gray v clayey vf-fgr sandy silt
MJG0031-11	26-Jun-00	35.3	1.70	2.05	2.63	Gray v clayey silt
MJG0031-12	26-Jun-00	31.6	1.82	2.14	2.66	Gray v clayey silt

Grain and pore volumes were determined by Boyle's Law methods as per API RP-40.
Sample densities and total porosity were calculated as per API RP-40.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/27/00
Page 1 of 2

Site Address: 1285 Bancroft Ave, San Leandro
Incident #: 98996067

Shell Engineer: Karen Petryna
Phone No.: Fax #:

Consultant Name & Address: CAMBRIA ENVIRONMENTAL
1144 65th St. Suite C, Oakland, CA 94608

Consultant Contact: James Loetterle
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by:

Printed Name: James Loetterle

LAB: Sequoia MTG0031

CHECK ONE (1) BOX ONLY — C/D1

- G.W. Monitoring [ ] 4441
- Site Investigation [X] 4441
- Soil Classify/Disposal [ ] 4442
- Water Classify/Disposal [ ] 4443
- Soil/Air Rem. or Sys. O & M [ ] 4452
- Water Rem. or Sys. O & M [ ] 4453
- Other [ ]

TURN AROUND TIME

- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ] _____

(NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Soil Physical Properties - 1) Dry Bulk Density 2) Moisture Content 3) Porosity 4) Fraction Organic Content	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
BP-1-11.5	6-26		✓			1							✓						
BP-1-32.5	6-26																		
BP-2-11.5	6-26																		
BP-2-31.0	6-26																		
BP-3-10.5	6-27																		
BP-3-31.5	6-27																		
BP-4-11.5	6-27																		
BP-4-31.5	6-27		▼			▼							▼						

	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Relinquished by (signature):	James Loetterle				6-30-00 1315		
Relinquished by (signature):	CHRIS LARSEN	7/3	1807	Received (signature):	CHRIS LARSEN	7/3	1110
Relinquished by (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name: C. Bartholomay	7/3/00	15:28

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date:
Page 2 of 2

Site Address: 1285 Bancroft Ave, San Leandro

Incident #: 98996067

Shell Engineer: Karen Petryna

Phone No.:

Fax #:

Consultant Name & Address: CAMBRIA ENVIRONMENTAL
1144 65th St. Suite C, Oakland, CA 94608

Consultant Contact:

Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: ~~Chris~~

Printed Name: Tomas Loetherle

LAB: Sequoia MJ60031

CHECK ONE (1) BOX ONLY	C1/D1
G.W. Monitoring	☐ 4441
Site Investigation	☒ 4441
Soil Classify/Disposal	☐ 4442
Water Classify/Disposal	☐ 4443
Soil/Air Rem. or Sys. O & M	☐ 4452
Water Rem. or Sys. O & M	☐ 4453
Other	☐

TURN AROUND TIME
24 hours ☐
48 hours ☐
15 days ☒ (Normal)
Other ☐ _____

NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Soil Physical Properties: 1) Dry Bulk Density 2) Moisture Content 3) Porosity 4) Fraction Organic Carbon	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
BP-5-7.5	6/27		✓			1							✓						
BP-5-34.0	"		"			"							"						
BP-6-6.0	"		"			"							"						
BP-6-35.0	↓		↓			↓							↓						

Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:
	Tomas Loetherle	Time:		6-30-00 1345	Time:
Relinquished By (signature):	Printed Name:	Date: 7/3	Received (signature):	Printed Name:	Date: 7/3
	CHRIS LARSEN	Time: 1200		CHRIS LARSEN	Time: 1400
Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:
		Time:			Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Page Order of Custody

ATTACHMENT F

Soil Disposal Confirmation

DISPOSAL CONFIRMATION

Consultant	CAMBRIA
Contact	DARRYK ATAIDE
Phone \ Fax	510-420-9170
Client	SHELL OIL
Station # \ Wic#	CRMT# LAM000001, INCIDENT# 98996067
Site Address	1285 BANCROFT AVE
City \ State	SAN LEANDRO
Estimated Tons	3 YARDS
Actual Tons	0.19 TONS
Disposal Date	8-10-00
Disposal Facility	FORWARD LANDFILL
Contact	BRAD BONNER
Phone	800-204-4242
Transporter	MANLEY & SONS TRUCKING
Contact	TIM MANLEY
Phone \ Fax	916-381-6864 \ 381-1573
Date \ Time	8-14-00
Invoice#	10627

ATTACHMENT G

Cumulative Analytical Summary

Table 1. Soil Boring Analytic Data - Shell-branded Service Station - WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Depth	TPHG	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
		← (Concentrations reported in mg/kg) →					
May 17, 1998 Samples:							
MW-6 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (10.5)	10.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (15.5)	15.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (20.5)	20.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (25.5)	25.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (30.5)	30.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-6 (35.5)	35.5'	273	2.58 (2.58)	1.12	1.31	3.1	14.2
MW-6 (40.5)	40.5'	96.1	1.31	0.665	1.07	1.25	5.51
MW-6 (45.5)	45.5'	1.83	1.47	0.0151	0.0173	0.0141	0.0875
MW-7 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (10.5)	10.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (15.5)	15.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (20.5)	20.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (25.5)	25.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (30.5)	30.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (35.5)	35.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (40.5)	40.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-7 (45.5)	45.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
May 18, 1998 Samples:							
MW-5 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-5 (10.5)	10.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-5 (15.5)	15.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-5 (20.5)	20.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-5 (30.5)	30.5'	<1.0	1.08	<0.0050	<0.0050	<0.0050	<0.0050

Table 1. Soil Boring Analytic Data - Shell-branded Service Station - WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Sample ID	Depth	TPHG	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
		← (Concentrations reported in mg/kg) →					
MW-5 (35.5)	35.5'	1.91	4.68 (2.25)	0.0475	<0.0050	0.0172	0.0159
MW-5 (40.5)	40.5'	10.5	0.093	0.0279	0.486	0.179	1.02
MW-5 (45.5)	45.5'	6.67	<0.050	0.0264	0.0346	0.0298	77
May 19, 1998 Samples:							
MW-8 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (10.5)	10.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (15.5)	15.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (20.5)	20.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (25.5)	25.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (30.5)	30.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (35.5)	35.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (40.5)	40.5'	<1.0	0.212 (0.210)	<0.0050	<0.0050	<0.0050	<0.0050
MW-8 (45.5)	45.5'	<1.0	0.0532	<0.0050	<0.0050	<0.0050	<0.0050

Abbreviations/Notes:

TPPH = Total purgable petroleum hydrocarbons as gasoline by modified EPA Method 8015.
TEPH = Total extractable petroleum hydrocarbons as diesel by modified EPA Method 8015.
Benzene, ethylbenzene, toluene, xylenes by EPA Method 8020.
MTBE = Methyl tert-butyl ether by EPA Method 8020. Parenthesis indicate confirmation analysis by EPA Method 8260
<n = Below detection limits for n milligrams per kilograms

WELL CONCENTRATIONS
Shell-branded Service Station
1285 Bancroft Avenue
San Leandro, CA
Wic #204-6852-0703

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	03/13/1990	NA	NA	NA	NA	NA	NA	NA	NA	66.29	42.65	23.64	NA
MW-1	06/12/1990	NA	NA	NA	NA	NA	NA	NA	NA	66.29	43.14	23.15	NA
MW-1	09/13/1990	NA	NA	NA	NA	NA	NA	NA	NA	66.29	44.71	21.58	NA
MW-1	12/18/1990	NA	NA	NA	NA	NA	NA	NA	NA	66.29	45.23	21.06	NA
MW-1	03/07/1991	NA	NA	NA	NA	NA	NA	NA	NA	66.29	43.32	22.97	NA
MW-1	06/07/1991	NA	NA	NA	NA	NA	NA	NA	NA	66.29	42.18	24.11	NA
MW-1	09/17/1991	50a	160a	<0.5	<0.5	<0.5	<0.5	NA	NA	66.29	44.85	21.44	NA
MW-1	03/01/1992	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	66.29	41.56	24.73	NA
MW-1	06/03/1992	<50	NA	0.8	<0.5	0.9	<0.5	NA	NA	66.29	40.74	25.55	NA
MW-1	09/01/1992	<50	NA	<0.5	5.8	5.3	7.2	NA	NA	66.29	43.05	23.24	NA
MW-1	12/07/1992	68	NA	<0.5	0.8	<0.5	1.2	NA	NA	66.29	44.19	22.10	NA
MW-1	03/01/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.29	34.96	31.33	NA
MW-1 (D)	03/01/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.29	34.96	31.33	NA
MW-1	06/22/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.29	36.75	29.54	NA
MW-1	09/09/1993	200a	NA	16	5.2	2	<0.5	NA	NA	66.29	39.36	26.93	NA
MW-1	12/13/1993	89a	NA	3.4	<0.5	<0.5	<0.5	NA	NA	66.29	40.74	25.55	NA
MW-1	03/03/1994	65a	NA	2.6	<0.5	<0.5	<0.5	NA	NA	66.29	38.40	27.89	NA
MW-1	07/27/1994	180	NA	30	1.8	2.6	5	NA	NA	66.90	40.49	26.41	NA
MW-1 (D)	07/27/1994	240	NA	25	2.2	2.2	4	NA	NA	66.90	40.49	26.41	NA
MW-1	08/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	66.90	40.84	26.06	NA
MW-1	10/05/1994	<50	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	66.90	41.98	24.92	NA
MW-1	11/11/1994	NA	NA	NA	NA	NA	NA	NA	NA	66.90	41.34	25.56	NA
MW-1	12/29/1994	NA	NA	NA	NA	NA	NA	NA	NA	66.90	42.06	24.84	NA
MW-1	01/04/1995	<50	NA	2.4	<0.5	<0.5	<0.5	NA	NA	66.90	39.90	27.00	NA
MW-1 (D)	01/04/1995	<50	NA	2.5	<0.5	<0.5	<0.5	NA	NA	66.90	39.90	27.00	NA
MW-1	04/14/1995	<50	NA	<0.5	0.5	<0.5	<0.5	NA	NA	66.90	31.02	35.88	NA

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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1 (D)	04/14/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.90	31.02	35.88	NA
MW-1	07/12/1995	<50	NA	1.2	0.8	<0.5	<0.5	NA	NA	66.90	34.61	32.29	NA
MW-1	12/14/1995	380	NA	230	9	1.1	49	NA	NA	66.90	39.24	27.66	NA
MW-1	01/10/1996	60	NA	3.5	<0.5	<0.5	0.5	NA	NA	66.90	38.34	28.56	NA
MW-1	04/25/1996	<50	NA	3.3	2.4	1.2	5.4	NA	NA	66.90	31.95	34.95	NA
MW-1	07/09/1996	810	NA	29	7.3	<5.0	11	1,800	NA	66.90	34.45	32.45	NA
MW-1	10/02/1996	<125	NA	3.1	<1.2	<1.2	<1.2	960	NA	66.90	37.72	29.18	NA
MW-1	01/09/1997	<250	NA	<2.5	<2.5	<2.5	<2.5	510	NA	66.90	32.25	34.65	NA
MW-1	04/09/1997	<50	NA	<0.5	<0.5	<0.5	<0.5	130	NA	66.90	32.90	34.00	NA
MW-1	07/02/1997	<250	NA	60	7.6	4.2	18	1,300	NA	66.90	36.65	30.25	NA
MW-1	10/24/1997	<500	NA	140	<5.0	12	40	2,600	NA	66.90	39.75	27.15	4.5
MW-1	01/08/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	170	NA	66.90	36.31	30.59	4.0
MW-1 b	04/14/1998	72	NA	0.82	4.9	1.8	13	2.7	NA	66.90	26.37	40.53	2.2
MW-1	07/15/1998	<50	NA	2.5	1.5	<0.50	<0.50	12	NA	66.90	31.23	35.67	2.4
MW-1	10/13/1998	<50	NA	3.2	0.69	<0.50	1.1	29	NA	66.90	35.69	31.21	1.3
MW-1	01/22/1999	567	NA	79.7	120	21.4	99.9	193	190	66.90	35.32	31.58	1.2
MW-1	04/16/1999	<50	NA	0.69	1.1	1.2	<0.50	8.2	NA	66.90	31.76	35.14	1.0
MW-1	07/22/1999	<50	NA	<0.500	<0.500	<0.500	<0.500	<5.00	2.17	66.90	23.21	43.69	2.1/2.0
MW-1	12/08/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	66.90	33.27	33.63	2.2/2.1
MW-1	01/07/2000	<50.0	NA	0.631	0.577	<0.500	1.25	14.1	NA	66.90	38.17	28.73	d
MW-1	04/05/2000	153	NA	12.4	21.2	6.65	28.3	50.1	NA	66.90	30.45	36.45	2.0/2.3
MW-1	07/12/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	66.90	34.29	32.61	4.4/3.8
MW-1	10/19/2000	129	NA	7.76	19.6	7.84	33.3	31.3	NA	66.90	36.87	30.03	3.9/4.7
MW-1	**01/15/2001**	**201**	**NA**	**7.58**	**29.9**	**9.64**	**42.9**	**24.9**	**NA**	**66.90**	**36.99**	**29.91**	**2.7/3.0**
MW-2	03/01/1992	910	<50	11	5.2	50	140	NA	NA	66.91	41.57	25.34	NA

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MW-2	06/03/1992	1,400	NA	33	16	150	240	NA	NA	66.91	40.56	26.35	NA
MW-2	09/01/1992	230	NA	5.2	4.1	15	19	NA	NA	66.91	42.94	23.97	NA
MW-2 (D)	09/01/1992	320	NA	5.6	5	18	220	NA	NA	66.91	42.94	23.97	NA
MW-2	12/07/1992	240	NA	1.5	1.3	9.5	9.9	NA	NA	66.91	44.13	22.78	NA
MW-2 (D)	12/07/1992	<50	NA	1.7	1	13	12	NA	NA	66.91	44.13	22.78	NA
MW-2	03/01/1993	230	NA	260	310	27	66	NA	NA	66.91	34.82	32.09	NA
MW-2	06/22/1993	220	NA	18	3.4	3.6	5.2	NA	NA	66.91	36.64	30.27	NA
MW-2 (D)	06/22/1993	320	NA	29	4.8	4.2	6.1	NA	NA	66.91	36.64	30.27	NA
MW-2	09/09/1993	260	NA	18	4.6	16	12	NA	NA	66.91	39.24	27.67	NA
MW-2 (D)	09/09/1993	210	NA	16	3.9	14	9.1	NA	NA	66.91	39.24	27.67	NA
MW-2	12/13/1993	1,300a	NA	82	34	73	15	NA	NA	66.91	40.64	26.27	NA
MW-2 (D)	12/13/1993	1,400a	NA	110	45	72	19	NA	NA	66.91	40.64	26.27	NA
MW-2	03/03/1994	9,600	NA	1,200	600	390	710	NA	NA	66.91	38.98	27.93	NA
MW-2 (D)	03/03/1994	10,000	NA	930	500	330	590	NA	NA	66.91	38.98	27.93	NA
MW-2	07/27/1994	190	NA	<0.5	1	<0.5	<0.5	NA	NA	66.91	40.40	26.51	NA
MW-2	08/09/1994	1,500	NA	53.5	12.4	46.2	44	NA	NA	66.91	40.71	26.20	NA
MW-2	10/05/1994	<485	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	66.91	41.89	25.02	NA
MW-2	11/11/1994	NA	NA	NA	NA	NA	NA	NA	NA	66.91	41.22	25.69	NA
MW-2	12/29/1994	NA	NA	NA	NA	NA	NA	NA	NA	66.91	41.99	24.92	NA
MW-2	01/04/1995	1,300	NA	150	35	23	51	NA	NA	66.91	39.81	27.10	NA
MW-2	04/14/1995	5,000	NA	1,000	340	400	810	NA	NA	66.91	30.83	36.08	NA
MW-2	07/12/1995	4,500	NA	440	170	170	290	NA	NA	66.91	34.50	32.41	NA
MW-2 (D)	07/12/1995	4,300	NA	430	160	160	280	NA	NA	66.91	34.50	32.41	NA
MW-2	12/14/1995	37,000	NA	1,800	7,600	1,000	6,700	NA	NA	66.91	39.22	27.69	NA
MW-2 (D)	12/14/1995	34,000	NA	1,800	6,600	1,000	6,500	NA	NA	66.91	39.22	27.69	NA
MW-2	01/10/1996	69,000	NA	1,000	3,200	510	3,300	NA	NA	66.91	38.22	28.69	NA

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MW-2 (D)	01/10/1996	78,000	NA	1,100	3,500	560	3,600	NA	NA	66.91	38.22	28.69	NA
MW-2	04/25/1996	11,000	NA	820	880	210	1,400	NA	NA	66.91	31.78	35.13	NA
MW-2 (D)	04/25/1996	9,300	NA	690	710	160	1,200	NA	NA	66.91	31.78	35.13	NA
MW-2	07/09/1996	100,000	NA	15,000	24,000	1,700	9,900	70,000	NA	66.91	34.35	32.56	NA
MW-2 (D)	07/09/1996	86,000	NA	12,000	19,000	1,400	7,500	32,000	NA	66.91	34.35	32.56	NA
MW-2	10/02/1996	82,000	NA	20,000	32,000	1,800	9,100	40,000	NA	66.91	37.56	29.35	NA
MW-2 (D)	10/02/1996	89,000	NA	19,000	31,000	1,700	8,900	42,000	NA	66.91	37.56	29.35	NA
MW-2	01/09/1997	17,000	NA	710	2,300	350	2,200	4,000	NA	66.91	32.07	34.84	NA
MW-2 (D)	01/09/1997	12,000	NA	490	1,300	260	1,800	2,800	NA	66.91	32.07	34.84	NA
MW-2	04/09/1997	20,000	NA	970	3,500	330	2,000	3,200	NA	66.91	32.78	34.13	NA
MW-2	07/02/1997	28,000	NA	1,700	8,700	550	3,000	5,500	NA	66.91	36.56	30.35	NA
MW-2 (D)	07/02/1997	32,000	NA	2,000	11,000	680	3,800	6,400	NA	66.91	36.56	30.35	NA
MW-2	10/24/1997	14,000	NA	460	1,000	300	2,000	3,000	NA	66.91	39.74	27.17	3.2
MW-2 (D)	10/24/1997	14,000	NA	420	980	270	2,000	2,800	NA	66.91	39.74	27.17	3.2
MW-2	01/08/1998	180	NA	2.8	1.6	<0.50	<0.50	7.6	NA	66.91	36.13	30.78	3.6
MW-2 b	04/14/1998	12,000	NA	92	1,500	260	1,900	110	NA	66.91	26.15	40.76	4.6
MW-2	07/15/1998	36,000	NA	250	5,600	830	6,000	6,800	NA	66.91	31.14	35.77	4.8
MW-2 (D)	07/15/1998	35,000	NA	230	5,600	860	600	570	NA	66.91	31.14	35.77	4.8
MW-2	10/13/1998	100	NA	7	12	3.7	10	5.8	NA	66.91	36.14	30.77	0.8
MW-2	01/22/1999	21,000	NA	701	3,330	960	5,420	772	620	66.91	35.97	30.94	1.0
MW-2	04/16/1999	14,000	NA	200	1,600	560	3,300	330	NA	66.91	31.52	35.39	1.0
MW-2	07/22/1999	1,410	NA	28.3	91.2	50.4	256	35.3	15.2	66.91	26.14	40.77	2.1/2.5
MW-2	12/08/1999	<50.0	NA	1.45	1.34	1.15	5.31	5.08	NA	66.91	37.72	29.19	2.1/2.5
MW-2	01/07/2000	743	NA	18.6	47.0	3.06	166	30.3	NA	66.91	38.14	28.77	1.4/1.8
MW-2	04/05/2000	2,320	NA	60.9	101	115	606	62.5	NA	66.91	30.46	36.45	1.7/1.9
MW-2	07/12/2000	12,100	NA	325	555	793	3,610	260	NA	66.91	34.13	32.78	4.1/4.6

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MW-2	10/19/2000	4,840	NA	188	267	318	1,370	84.4	NA	66.91	36.50	30.41	4.8/2.6
MW-2	**01/15/2001**	**654**	**NA**	**52.3**	**9.10**	**37.8**	**93.6**	**10.9**	**NA**	**66.91**	**36.73**	**30.18**	**4.2/3.5**
MW-3	03/01/1992	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	66.31	42.00	24.31	NA
MW-3	06/03/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.31	44.30	22.01	NA
MW-3	09/01/1992	<50	NA	<0.5	<0.5	1.1	3.2	NA	NA	66.31	43.62	22.69	NA
MW-3	12/07/1992	52	NA	<0.5	<0.5	<0.5	0.5	NA	NA	66.31	44.77	21.54	NA
MW-3	03/01/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.31	35.50	30.81	NA
MW-3	06/22/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	66.31	37.30	29.01	NA
MW-3	09/09/1993	50a	NA	5	<0.5	<0.5	<0.5	NA	NA	66.31	39.90	26.41	NA
MW-3	12/13/1993	120a	NA	7.5	<0.5	1.6	6.3	NA	NA	66.31	41.30	25.01	NA
MW-3	03/03/1994	<50	NA	0.81	<0.5	<0.5	<0.5	NA	NA	66.31	38.32	27.99	NA
MW-3	07/27/1994	<50	NA	3.5	<0.5	<0.5	<0.5	NA	NA	67.52	41.07	26.45	NA
MW-3	08/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	67.52	41.37	26.15	NA
MW-3	10/05/1994	<57	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	67.52	42.55	24.97	NA
MW-3	11/11/1994	NA	NA	NA	NA	NA	NA	NA	NA	67.52	41.86	25.66	NA
MW-3	12/29/1994	NA	NA	NA	NA	NA	NA	NA	NA	67.52	42.59	24.93	NA
MW-3	01/04/1995	<50	NA	6	<0.5	<0.5	<0.5	NA	NA	67.52	40.54	26.98	NA
MW-3	04/14/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	67.52	31.50	36.02	NA
MW-3	07/12/1995	90	NA	16	<0.5	<0.5	<0.5	NA	NA	67.52	35.14	32.38	NA
MW-3	12/14/1995	4,600	NA	460	390	34	1,000	NA	NA	67.52	39.86	27.66	NA
MW-3	01/10/1996	11,000	NA	470	460	68	670	NA	NA	67.52	39.98	27.54	NA
MW-3	04/25/1996	5,500	NA	830	910	<50	460	NA	NA	67.52	32.38	35.14	NA
MW-3	07/09/1996	72,000	NA	7,600	14,000	970	5,900	59,000	NA	67.52	34.93	32.59	NA
MW-3	10/02/1996	77,000	NA	15,000	24,000	2,000	9,600	94,000	71,000	67.52	38.20	29.32	NA
MW-3	01/09/1997	130	NA	15	16	2	9.7	80	NA	67.52	32.81	34.71	NA

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MW-3	04/09/1997	24,000	NA	2,900	5,300	420	2,200	4,100	NA	67.52	33.42	34.10	NA
MW-3 (D)	04/09/1997	24,000	NA	3,000	5,600	450	2,300	4,700	NA	67.52	33.42	34.10	NA
MW-3	07/02/1997	68,000	NA	7,400	18,000	1,600	8,700	16,000	NA	67.52	37.22	30.30	NA
MW-3	10/24/1997	93,000	NA	1,800	8,500	2,300	14,000	3,100	NA	67.52	40.75	26.77	1.8
MW-3	01/08/1998	16,000	NA	140	870	22	5,000	120	NA	67.52	36.90	30.62	2.1
MW-3 (D)	01/08/1998	24,000	NA	100	840	26	5,600	<100	NA	67.52	36.90	30.62	2.1
MW-3 b	04/14/1998	100,000	NA	270	5,000	2,100	17,000	890	NA	67.52	26.92	40.60	1.8
MW-3 (D) b	04/14/1998	49,000	NA	230	3,200	1,200	8,900	790	NA	67.52	26.92	40.60	1.8
MW-3	07/15/1998	31,000	NA	1,100	3,300	300	2,800	3,700	NA	67.52	31.74	35.78	2
MW-3	10/13/1998	51,000	NA	3,100	12,000	7,630	6,800	6,200	NA	67.52	35.61	31.91	2.1
MW-3 (D)	10/13/1998	88,000	NA	5,800	21,000	1,400	12,000	9200	NA	67.52	35.61	31.91	2.1
MW-3	01/22/1999	25,100	NA	855	4,400	786	5,260	1,850	1,500	67.52	35.29	32.23	0.8
MW-3	04/16/1999	7,800	NA	150	550	160	1,100	370	NA	67.52	32.29	35.23	1.0
MW-3	07/22/1999	1,970	NA	51.2	160	43.1	286	179	109	67.52	26.67	40.85	3.1/3.0
MW-3	12/08/1999	12,500	NA	171	537	141	1,260	717	NA	67.52	38.34	29.18	3.1/2.9
MW-3	01/07/2000	6,020	NA	<10.0	929	177	1,170	217	NA	67.52	38.87	28.65	3.2/2.6
MW-3	04/05/2000	3,890	NA	120	351	67.8	576	231	NA	67.52	31.08	36.44	3.4/3.8
MW-3	07/12/2000	23,300	NA	592	4,690	672	4,620	1,340	NA	67.52	34.80	32.72	0.4/3.7
MW-3	10/19/2000	6,280	NA	124	1,280	229	1,510	311	NA	67.52	37.34	30.18	2.1/2.9
MW-3	**01/15/2001**	**4,800**	**NA**	**7.04**	**70.0**	**70.9**	**380**	**54.7**	**NA**	**67.52**	**37.65**	**29.87**	**2.7/2.5**
MW-4	07/27/1994	120	NA	3.4	3.9	0.6	4.9	NA	NA	68.08	41.78	26.30	NA
MW-4	08/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	68.08	42.09	25.99	NA
MW-4	10/05/1994	<50	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	68.08	43.25	24.83	NA
MW-4 (D)	10/05/1994	<50	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	68.08	43.25	24.83	NA
MW-4	11/11/1994	NA	NA	NA	NA	NA	NA	NA	NA	68.08	42.54	25.54	NA

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Wic #204-6852-0703

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-4	12/29/1994	NA	NA	NA	NA	NA	NA	NA	NA	68.08	43.34	24.74	NA
MW-4	01/04/1995	<50	NA	1.4	<0.5	<0.5	<0.5	NA	NA	68.08	41.57	26.51	NA
MW-4	04/14/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	68.08	32.24	35.84	NA
MW-4	07/12/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	68.08	35.88	32.20	NA
MW-4	12/14/1995	70	NA	0.6	<0.5	<0.5	<0.5	NA	NA	68.08	40.54	27.54	NA
MW-4	01/10/1996	280	NA	3.7	1	<0.5	0.8	NA	NA	68.08	39.59	28.49	NA
MW-4	04/25/1996	<500	NA	63	<5.0	<5.0	<5.0	NA	NA	68.08	33.22	34.86	NA
MW-4	07/09/1996	<2,000	NA	160	<20	<20	<20	5,300	NA	68.08	35.70	32.38	NA
MW-4	10/02/1996	<5,000	NA	480	<50	<50	<50	19,000	NA	68.08	38.95	29.13	NA
MW-4	01/09/1997	<2,000	NA	43	<20	<20	<20	7,000	NA	68.08	33.04	35.04	NA
MW-4	04/09/1997	<2,500	NA	120	<25	<25	<25	8,100	NA	68.08	34.15	33.93	NA
MW-4	07/02/1997	<2,000	NA	81	<20	<20	<20	6,600	NA	68.08	37.92	30.16	NA
MW-4	10/24/1997	<500	NA	90	<5.0	11	6.3	3,200	NA	68.08	41.00	27.08	2.1
MW-4	01/08/1998	<50	NA	3.9	<0.50	<0.50	<0.50	1,800	NA	68.08	37.54	30.54	2.2
MW-4 b	04/14/1998	920	NA	<0.50	<0.50	<0.50	<0.50	27	NA	68.08	27.75	40.33	1.2
MW-4	07/15/1998	2,100	NA	160	76	120	190	2,600	NA	68.08	32.47	35.61	1.8
MW-4	10/13/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	17	NA	68.08	36.75	31.33	1.1
MW-4	01/22/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	7	13	68.08	36.41	31.67	1.6
MW-4	04/16/1999	1,800	NA	92	35	110	200	1,800	2,750	68.08	33.00	35.08	1.2
MW-4	07/22/1999	Well Inaccessible		NA	NA	NA	NA	NA	NA	68.08	27.59	40.49	NA
MW-4	12/08/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	22.6	NA	68.08	39.04	29.04	2.5/2.6
MW-4	01/07/2000	871	NA	39.4	69.0	71.6	99.6	1,030	NA	68.08	39.35	28.73	1.2/1.2
MW-4	04/05/2000	475	NA	26.9	5.24	19.8	41.5	681	NA	68.08	31.28	36.80	1.6/1.8
MW-4	07/12/2000	1,040	NA	35.7	6.95	125	104	1,040	NA	68.08	35.52	32.56	0.5/4.9
MW-4	10/19/2000	944	NA	23.9	6.57	122	109	372	NA	68.08	38.08	30.00	2.3/1.4
MW-4	**01/15/2001**	**1,170**	**NA**	**21.6**	**1.51**	**123**	**52.8**	**592**	**NA**	**68.08**	**38.31**	**29.77**	**1.7/1.9**

WELL CONCENTRATIONS
Shell-branded Service Station
1285 Bancroft Avenue
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Wic #204-6852-0703

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-5*	06/04/1999	159,000	NA	7,190	39,300	2,450	16,700	<5,000	NA	66.50	33.48	33.02	1.7
MW-5	06/04/1999	80,400	NA	4,400	26,000	1,480	11,000	3,660	NA	66.50	33.48	33.02	1.9
MW-5	07/22/1999	97,200	NA	4,580	25,600	1,580	10,100	<5,000	4,330	66.50	33.29	33.21	1.7/1.8
MW-5	12/08/1999	72,000	NA	3,360	16,600	1,560	8,320	3,460	NA	66.50	37.80	28.70	1.7/1.9
MW-5	01/07/2000	104,000	NA	5,370	30,400	2,500	13,900	3,330	NA	66.50	38.40	28.10	1.6/1.2
MW-5	04/05/2000	99,700	NA	5,710	37,000	2,410	14,200	10,800	NA	66.50	30.72	35.78	1.7/1.5
MW-5	07/12/2000	106,000	NA	3,840	38,200	2,980	18,100	3,280	NA	66.50	34.42	32.08	0.2/1.8
MW-5	10/19/2000	72,400	NA	3,010	32,200	2,440	15,400	2,840	NA	66.50	36.89	29.61	1.0/2.7
MW-5	**01/15/2001**	**78,300**	**NA**	**2,220**	**21,400**	**1,960**	**12,200**	**3,420**	**1,370**	**66.50**	**37.10**	**29.40**	**1.2/1.0**
MW-6*	06/04/1999	36,000	NA	4,240	1,680	1,100	4,160	11,300	17,500	64.98	32.13	32.85	1.3
MW-6	06/04/1999	56,900	NA	6,830	6,050	1,970	9,060	17,000	24,300	64.98	32.13	32.85	1.3
MW-6	07/22/1999	42,800	NA	4,660	740	1,210	4,980	15,600	20,100	64.98	32.09	32.89	2.9/2.1
MW-6	12/08/1999	9,520	NA	1,760	58.0	142	384	9,320	7,310c	64.98	36.62	28.36	2.9/2.2
MW-6	01/07/2000	20,000	NA	3,650	367	949	1,700	13,600	13,100	64.98	37.03	27.95	1.2/1.4
MW-6	04/05/2000	20,500e	NA	4,190e	1,250e	1,200e	2,750e	18,600e	12,700c	64.98	29.37	35.61	1.2/1.2
MW-6	07/12/2000	27,300	NA	4,000	3,170	1,470	4,570	12,900	10,800c	64.98	33.04	31.94	0.8/0.4
MW-6	10/19/2000	39,600	NA	4,050	6,250	1,920	7,800	14,200	14,600c	64.98	35.62	29.36	1.4/1.7
MW-6	**01/15/2001**	**64,800**	**NA**	**2,090**	**20,400**	**1,860**	**11,100**	**<1,250**	**NA**	**64.98**	**35.91**	**29.07**	**1.2/1.5**
MW-7*	06/04/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	65.83	33.03	32.80	1.4
MW-7	06/04/1999	<50.0	NA	0.663	<0.500	0.677	<0.500	11.7	NA	65.83	33.03	32.80	1.4
MW-7	07/22/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	<2.00	65.83	33.09	32.74	2.7/2.4
MW-7	12/08/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	65.83	37.68	28.15	2.7/2.4
MW-7	01/07/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	65.83	37.87	27.96	2.8/2.6

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MW-7	04/05/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	65.83	30.30	35.53	2.8/3.1
MW-7	07/12/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	65.83	33.92	31.91	0.9/0.7
MW-7	10/19/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	65.83	36.51	29.32	1.5/1.8
MW-7	**01/15/2001**	**<50.0**	**NA**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**<2.50**	**NA**	**65.83**	**36.73**	**29.10**	**4.7/4.3**
MW-8*	06/04/1999	<50	NA	<0.500	<0.500	<0.500	<0.500	452	NA	65.07	32.19	32.88	2.1
MW-8	06/04/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	186	NA	65.07	32.19	32.88	1.8
MW-8	07/22/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	286	443	65.07	32.14	32.93	2.9/2.7
MW-8	12/08/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	65.07	36.75	28.32	2.9/2.7
MW-8	01/07/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	255	NA	65.07	37.15	27.92	1.8/2.0
MW-8	04/05/2000	<50.0e	NA	<0.500e	<0.500e	<0.500e	<0.500e	247e	NA	65.07	29.45	35.62	2.1/2.5
MW-8	07/12/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	123	NA	65.07	33.13	31.94	0.5/0.5
MW-8	10/19/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	123	NA	65.07	35.72	29.35	1.2/1.8
MW-8	**01/15/2001**	**<50.0**	**NA**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**173**	**NA**	**65.07**	**36.00**	**29.07**	**0.5/1.0**
Irrigation Well	06/04/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	<2.00	NA	NA	NA	NA
Irrigation Well	07/22/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	<2.00	NA	NA	NA	NA
Irrigation Well	12/08/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA
Irrigation Well	01/07/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA
Irrigation Well	04/05/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	27.85	NA	NA
Irrigation Well	07/12/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA
Irrigation Well	10/19/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	1.7/1.8
Irrigation Well	**01/15/2001**	**<50.0**	**NA**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**<2.50**	**NA**	**NA**	**34.35**	**NA**	**1.0/1.2**

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Abbreviations:
TPPH= Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether
TOC = Top of Casing Elevation
SPH = Separate-Phase Hydrocarbons
GW = Groundwater
DO = Dissolved Oxygen
ug/L = parts per billion
ppm = parts per million
msl = Mean sea level
ft = Feet
<n = Below detection limit
D = Duplicate sample
n/n = Pre-purge/post-purge DO reading.
NA = Not applicable

WELL CONCENTRATIONS
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)

Notes:

a = Chromatogram pattern indicated an unidentified hydrocarbon.

b = Equipment blank contained 80 ug/L TPH-G, 1.2 ug/L benzene, 17 ug/L toluene, 3.2 ug/L ethylbenzene, 16 ug/L xylenes, and 15 ug/L MTBE

c = Sample was analyzed outside the EPA recommended holding time.

d = DO Reading not taken.

e = Result was generated out of hold time.

* Pre-purge samples

TOC elevation of wells MW-1, MW-2, and MW-3 resurveyed March 29, 1994

Survey of wells was performed on June 21, 1999 by Virgil Chavez land surveying, Vallejo, CA.

ATTACHMENT H

Risk Analysis Output

TABLE A-1
ESTIMATION OF SOIL GAS CONCENTRATION (VS-1)
IN mg/m^3 FROM ppm/v

Chemical	Soil Gas ppm/v	Molecular Weight (MW)	Soil Gas (a) mg/m^3
Benzene	1.1	78.1	3.51
Toluene	0.190	92	0.71
Ethylbenzene	0.1	106.2	0.43
Xylenes	0.13	106.2	0.56

Notes:
(a) Soil gas (mg/m^3) = [Soil gas (ppm/v) x MW x 1,000 L/m^3] / 24,450

TABLE B-1

TIER 2 RBCA - AMBIENT AIR CONCENTRATIONS OF BTEX FROM SOIL GAS - ONSITE RESIDENTIAL SCENARIO

CHEMICAL	C_{soil} mg/kg	$C_{soilgas}$ mg/m^3	H (3) cm^3/cm^3	k_{oc} cm^3/g	k_s cm^3/g	D^{air} cm^2/s	D^{water} cm^2/s	D_s^{eff} (4) cm^2/s	AA/SG Factor (1) Unitless	$C_{outdoor}$ (2) mg/m^3
Benzene	NA	3.51	2.20E-01	3.80E+01	6E+00	9.30E-02	1.10E-05	5.6E-04	6.1E-08	2.1E-07
Toluene	NA	0.71	2.60E-01	1.35E+02	2E+01	8.50E-02	9.40E-06	5.1E-04	5.6E-08	4.0E-08
Ethylbenzene	NA	0.43	3.20E-01	1.29E+03	2E+02	7.60E-02	8.50E-06	4.5E-04	5.0E-08	2.2E-08
Xylenes	NA	0.56	2.90E-01	2.40E+02	4E+01	7.20E-02	8.50E-06	4.3E-04	4.7E-08	2.7E-08

Notes:

VF_{samb} = ASTM Volatilization factor from subsurface soil to ambient air (mg/m^3)/(mg/kg), using soil concentration (mg/kg) to estimate ambient air concentration (mg/m^3).

$VF_{samb} = \{(H \times \rho_s) / (\theta_{ws} + [k_s \times \rho_s] + [H \times \theta_{as}])\} \times 1E+03\ (cm^3\text{-}kg/m^3\text{-}g) \times 1 / \{1 + ([U_{air} \times \delta_{air} \times L_S] / [D_s^{eff} \times W])\}$

The VF_{samb} has 2 factors:

a) The factor "$\{(H \times \rho_s) / (\theta_{ws} + [k_s \times \rho_s] + [H \times \theta_{as}]\}\ (g/cm^3) \times 10^3\ (cm^3\text{-}kg/m^3\text{-}g)$" (in unit of kg/m^3) multiplied by C_{soil} (mg/kg) will give soil gas concentration (mg/m^3) at source;

b) The rest of the VP_{samb} equation is the attenuation factor between ambient air concentration and soil gas concentration (AA/SG Factor) (unitless), equivalent to for ASTM default scenario.

(1) AA/SG Factor = $1 / \{1 + ([U_{air} \times \delta_{air} \times L_S] / [D_s^{eff} \times W])\}$

The product of Factor (a) and soil concentration can be replaced with the actually measured soil gas concentration at source.

(2) $C_{Ambient}$ $C_{soilgas}$ x AA/SG Factor

(3) H = Henry's law constant (cm^3/cm^3) = Chemical-specific

ρ_s = Soil bulk density (g/cm^3) = 2.09

θ_{as} = Volumetric air content in vadose zone soil (cm^3/cm^3) = 0.12

θ_{ws} = Volumetric water content in vadose zone soil (cm^3/cm^3) = 0.26

k_s = Soil-water sorption coefficient (cm^3/g) = $k_{oc} \times f_{oc}$ = Chemical-specific

k_{oc} = Carbon-water sorption coefficient (cm^3/g) = Chemical-specific

f_{oc} = Fraction of organic carbon in soil (g/g) = **0.164**

(4) D_s^{eff} = Effective diffusion in soil - vapor concentration (cm^2/s) = Chemical-specific

$D_s^{eff} = D^{air} \times (\theta_{as}^{3.33} / \theta_T^{2}) + [D^{water} \times (1/H) \times (\theta_{ws}^{3.33} / \theta_T^{2})$

D^{air} = Diffusion coefficient in air (cm^2/s) = Chemical-specific

D^{water} = Diffusion coefficient in water (cm^2/s) = Chemical-specific

θ_T = Total soil porosity (cm^3/cm^3) = 0.38

U_{air} = Wind speed in the mixing zone (cm/s) = 225

δ_{air} = Ambient air mixing zone height (cm) = 200

L_s = Depth to soil vapor sample (cm) **305** **10.0 ft below ground surface**

W = Width of source area perpendicular to wind direction (cm) 1500

TABLE B-2
POTENTIAL HEALTH RISKS VIA INHALATION OF AMBIENT BTEX FROM SOIL GAS
ONSITE RESIDENTIAL SCENARIO

VOC Inhalation Equation: CDI (mg/kg-day) = C_a x IR x FC x EF x ED) / (BW x AT)

	RME		RME
CDI = Chronic Daily Intake (mg/kg-day)		BW_c = Body Weight (Carcinogenic Effects) (kg) =	70
C_a = Chemical Concentration in Air (mg/m^3)		BW_{nc} = Body Weight (Noncarcinogenic Effects) (kg) =	70
IR = Inhalation Rate (m^3/day) =	20	AT_c = Averaging Time (Carcinogenic Effects) (days) =	25,550
FC = Fraction from Contaminated Source =	1	AT_{nc} = Averaging Time (Noncarcinogenic Effects) (days) =	10,950
EF = Exposure Frequency (days/year) =	350	TR = Target Excess Cancer Risk =	1E-06
ED = Exposure Duration (years) =	30	THI = Target Hazard Index =	1

Chemical	Concentration (mg/m^3)	Carcinogenic CDI (mg/kg-day)	Noncarcinogenic CDI (mg/kg-day)	Cal-EPA Slope Factor (mg/kg-day)$^{-1}$	Reference Dose mg/kg-day	Excess Cancer Risk	Hazard Quotient	RME - % Risk Contribution		1.00E-06 RBSL* mg/m^3	HI = 1 RBSL* mg/m^3
								Cancer	Hazard		
Benzene	2.1E-07	2.5E-08	5.9E-08	1.0E-01	1.7E-03	3E-09	3.4E-05	100%		1.40E+03	1.02E+05
Toluene	4.0E-08	4.7E-09	1.1E-08		1.1E-01		9.9E-08		0%		1.12E+05
Ethylbenzene	2.2E-08	2.5E-09	5.9E-09		2.9E-01		2.0E-08		0%		1.25E+05
Xylenes	2.7E-08	3.1E-09	7.3E-09		2.0E-01		3.6E-08		0%		1.32E+05
TOTAL						**3E-09**	**3.5E-05**	**100%**	**0%**		

Notes:
Commercial exposure parameters are the USEPA standard default values.
* RBSL for soil gas

TABLE C-1

TIER 2 RBCA - INDOOR AIR CONCENTRATIONS OF BTEX MIGRATED INTO A RESIDENTIAL BUILDING VIA FOUNDATION CRACKS ESTIMATED FROM MEASURED SOIL GAS LEVELS

CHEMICAL	C_{soil} mg/kg	$C_{soilgas}$ mg/m^3	H (3) cm^3/cm^3	k_{oc} cm^3/g	k_s cm^3/g	D^{air} cm^2/s	D^{water} cm^2/s	D_s^{eff} (4) cm^2/s	D_{crack}^{eff} (5) cm^2/s	IA/SG Factor (1) Unitless	C_{indoor} (2) mg/m^3
Benzene	NA	3.51	2.20E-01	3.80E+01	6E+00	9.30E-02	1.10E-05	5.6E-04	5.6E-04	1.1E-05	3.9E-05
Toluene	NA	0.71	2.60E-01	1.35E+02	2E+01	8.50E-02	9.40E-06	5.1E-04	5.1E-04	1.0E-05	7.2E-06
Ethylbenzene	NA	0.43	3.20E-01	1.29E+03	2E+02	7.60E-02	8.50E-06	4.5E-04	4.5E-04	9.0E-06	3.9E-06
Xylenes	NA	0.56	2.90E-01	2.40E+02	4E+01	7.20E-02	8.50E-06	4.3E-04	4.3E-04	8.5E-06	4.8E-06

Notes:

VF_{sesp} = ASTM Volatilization factor from subsurface soil to enclosed space vapor (mg/m^3)/(mg/kg), using soil concentration (mg/kg) to estimate indoor air concentration (mg/m^3).

$VF_{sesp} = \{((H \times \rho_s) / \theta_{ws} + (k_s \times \rho_s) + (H \times \theta_{as})) \times 1E{+}03\ (cm^3\text{-}kg/m^3\text{-}g) \times [(D_s^{eff} / L_s) / (ER \times L_B)]\} / \{1 + [(D_s^{eff} / L_s) / (ER \times L_B)] \times [(D_s^{eff} / L_s) / (D_{crack}^{eff} / L_{crack})\ \eta)]\}$

The VF_{sesp} has 2 factors:

1) The factor "$[(H \times \rho s) / \theta ws + (k_s \times \rho_s) + (H \times \theta_{as})]\ (g/cm^3) \times 10^3\ (cm^3\text{-}kg/m^3\text{-}g)$" (in unit of kg/m^3) multiplied by C_{soil} (mg/kg) will give soil gas concentration (mg/m^3) at source;

2) The rest of the VP_{sesp} equation is the attenuation factor between indoor air concentration and soil gas concentration (IA/SG Factor) (unitless), equivalent to for ASTM default scenario.

(1) IA/SG Factor = $\{[(D_s^{eff} / L_s) / (ER \times L_B)]\} / \{1 + [(D_s^{eff} / L_s) / (ER \times L_B)] \times [(D_s^{eff} / L_s) / (D_{crack}^{eff} / L_{crack})\ \eta)]\}$

The product of Factor (1) and soil concentration can be replaced with the actually measured soil gas concentration at source.

(2) C_{indoor} $C_{soilgas}$ x IA/SG Factor

(3) H = Henry's law constant (cm^3/cm^3) = Chemical-specific

ρ_s = Soil bulk density (g/cm^3) = 2.09

θ_{as} = Volumetric air content in vadose zone soil (cm^3/cm^3) = 0.12

θ_{ws} = Volumetric water content in vadose zone soil (cm^3/cm^3) = 0.26

k_s = Soil-water sorption coefficient (cm^3/g) = $k_{oc} \times f_{oc}$ = Chemical-specific

k_{oc} = Carbon-water sorption coefficient (cm^3/g) = Chemical-specific

f_{oc} = Fraction of organic carbon in soil (g/g) = **0.164**

(4) D_s^{eff} = Effective diffusion in soil - vapor concentration (cm^2/s) = Chemical-specific

$D_s^{eff} = D^{air} \times (\theta_{as}^{3.33} / \theta_T^{2}) + [D^{water} \times (1/H) \times (\theta_{ws}^{3.33} / \theta_T^{2})$

D^{air} = Diffusion coefficient in air (cm^2/s) = Chemical-specific

D^{water} = Diffusion coefficient in water (cm^2/s) = Chemical-specific

θ_T = Total soil porosity (cm^3/cm^3) = 0.38

L_s = Depth to soil vapor sample (cm) = **305** **10.0 ft below ground surface**

ER = Enclosed space air exchange rate (1/s) = 1.4E-04 residential

L_B = Height of room at foundation level (cm) = 200 residential

(5) D_{crack}^{eff} = Effective diffusion coefficient through cracks (cm^2/s) = D^{eff}

$D_{crack}^{eff} = D^{air} \times (\theta_{acrack}^{3.33} / \theta_T^{2}) + [D^{water} \times (1/H) \times (\theta_{wcrack}^{3.33} / \theta_T^{2})$

θ_{acrack} = Volumetric air content in foundation crack (cm^3/cm^3) = 0.12

θ_{wcrack} = Volumetric water content in foundation crack (cm^3/cm^3) = 0.26

L_{crack} = Thickness of foundation/wall (cm) = 15

η = Area fraction of cracks in foundation/wall (cm^2/cm^2) = 0.01

TABLE C-2

POTENTIAL HEALTH RISKS VIA INHALATION OF BTEX MIGRATED INTO A RESIDENTIAL BUILDING VIA FOUNDATION CRACKS ESTIMATED FROM MEASURED SOIL GAS LEVELS

VOC Inhalation Equation: CDI (mg/kg-day) = C_a x IR x FC x EF x ED) / (BW x AT)

	RME		RME
CDI = Chronic Daily Intake (mg/kg-day)		BW_c = Body Weight (Carcinogenic Effects) (kg) =	70
C_a = Chemical Concentration in Air (mg/m^3)		BW_{nc} = Body Weight (Noncarcinogenic Effects) (kg) =	70
IR = Inhalation Rate (m^3/day) =	20	AT_c = Averaging Time (Carcinogenic Effects) (days) =	25,550
FC = Fraction from Contaminated Source =	1	AT_{nc} = Averaging Time (Noncarcinogenic Effects) (days) =	10,950
EF = Exposure Frequency (days/year) =	350	TR = Target Excess Cancer Risk =	1E-06
ED = Exposure Duration (years) =	30	THI = Target Hazard Index =	1

Chemical	Concentration (mg/m^3)	Carcinogenic CDI (mg/kg-day)	Noncarcinogenic CDI (mg/kg-day)	Cal-EPA Slope Factor (mg/kg-day)$^{-1}$	Reference Dose mg/kg-day	Excess Cancer Risk	Hazard Quotient	RME - % Risk Contribution		1.00E-06 RBSL* mg/m^3	HI = 1 RBSL* mg/m^3
								Cancer	Hazard		
Benzene	1.6E-05	1.8E-06	4.3E-06	1.0E-01	1.7E-03	2E-07	2.5E-03	100%	100%	1.91E+01	1.39E+03
Toluene	4.0E-08	4.7E-09	1.1E-08		1.1E-01		9.9E-08		0%		9.84E+04
Ethylbenzene	2.2E-08	2.5E-09	5.9E-09		2.9E-01		2.0E-08		0%		2.90E+05
Xylenes	2.7E-08	3.1E-09	7.3E-09		2.0E-01		3.6E-08		0%		2.11E+05
TOTAL						**2E-07**	**2.5E-03**	**100%**	**100%**		

Notes: Blank means no data available or not determined.

Excess cancer risk = Carcinogenic CDI x Slope factor.

Hazard quotient = Noncarcinogenic CDI / Reference dose.

* RBSL for soil gas

RBCA TIER 1/TIER 2 EVALUATION

Output Table 1

Site Name: Shell-branded Service Stationlob Identification:
Site Location: 1285 Bancroft Avenue Date Completed: 5/24/2001
Completed By: Cambria Environmental Tech. Inc

Software: GSI RBCA Spreadsheet
Version: 1.0.1

NOTE: values which differ from Tier 1 default values are shown in bold italics and underlined.

Exposure Parameter	Definition (Units)	Residential Adult	Residential (1-6yrs)	Residential (1-16 yrs)	Commercial/Industrial Chronic	Commercial/Industrial Constrctn
ATc	Averaging time for carcinogens (yr)	70				
ATn	Averaging time for non-carcinogens (yr)	30	6	16	25	1
BW	Body Weight (kg)	70	15	35	70	
ED	Exposure Duration (yr)	30	6	16	25	1
t	Averaging time for vapor flux (yr)	30			25	1
EF	Exposure Frequency (days/yr)	350			250	180
EF.Derm	Exposure Frequency for dermal exposure	350			250	
IRgw	Ingestion Rate of Water (L/day)	2			1	
IRs	Ingestion Rate of Soil (mg/day)	100	200		50	100
IRadj	Adjusted soil ing. rate (mg-yr/kg-d)	1.1E+02			9.4E+01	
IRa.in	Inhalation rate indoor (m^3/day)	15			20	
IRa.out	Inhalation rate outdoor (m^3/day)	20			20	10
SA	Skin surface area (dermal) (cm^2)	5.8E+03		2.0E+03	5.8E+03	5.8E+03
SAadj	Adjusted dermal area (cm^2-yr/kg)	2.1E+03			1.7E+03	
M	Soil to Skin adherence factor	1				
AAFs	Age adjustment on soil ingestion	FALSE			FALSE	
AAFd	Age adjustment on skin surface area	FALSE			FALSE	
tox	Use EPA tox data for air (or PEL based)?	TRUE				
gwMCL?	Use MCL as exposure limit in groundwater?	FALSE				

Matrix of Exposed Persons to Complete Exposure Pathways		Residential	Commercial/Industrial Chronic	Commercial/Industrial Constrctn
Outdoor Air Pathways:				
SS.v	Volatiles and Particulates from Surface Soils	FALSE	FALSE	FALSE
S.v	Volatilization from Subsurface Soils	TRUE	FALSE	
GW.v	Volatilization from Groundwater	TRUE	FALSE	
Indoor Air Pathways:				
S.b	Vapors from Subsurface Soils	TRUE	FALSE	
GW.b	Vapors from Groundwater	TRUE	FALSE	
Soil Pathways:				
SS.d	Direct Ingestion and Dermal Contact	FALSE	FALSE	FALSE
Groundwater Pathways:				
GW.I	Groundwater Ingestion	FALSE	FALSE	
S.I	Leaching to Groundwater from all Soils	FALSE	FALSE	

Matrix of Receptor Distance and Location On- or Off-Site		Residential Distance	Residential On-Site	Commercial/Industrial Distance	Commercial/Industrial On-Site
GW	Groundwater receptor (cm)		FALSE		FALSE
S	Inhalation receptor (cm)		TRUE		FALSE

Matrix of Target Risks		Individual	Cumulative
TRab	Target Risk (class A&B carcinogens)	1.0E-06	
TRc	Target Risk (class C carcinogens)	1.0E-05	
THQ	Target Hazard Quotient	1.0E+00	
Opt	Calculation Option (1, 2, or 3)	2	
Tier	RBCA Tier	2	

Surface Parameters	Definition (Units)	Residential	Constrctn
A	Contaminated soil area (cm^2)	2.2E+06	1.0E+06
W	Length of affect. soil parallel to wind (cm)	1.5E+03	1.0E+03
W.gw	Length of affect. soil parallel to groundwater (cm	1.5E+03	
Uair	Ambient air velocity in mixing zone (cm/s)	2.3E+02	
delta	Air mixing zone height (cm)	2.0E+02	
Lss	Thickness of affected surface soils (cm)	1.0E+02	
Pe	Particulate areal emission rate (g/cm^2/s)	6.9E-14	

Groundwater	Definition (Units)	Value
delta.gw	Groundwater mixing zone depth (cm)	2.0E+02
I	Groundwater infiltration rate (cm/yr)	3.0E+01
Ugw	Groundwater Darcy velocity (cm/yr)	2.5E+03
Ugw.tr	Groundwater seepage velocity (cm/yr)	6.6E+03
Ks	Saturated hydraulic conductivity(cm/s)	
grad	Groundwater gradient (cm/cm)	
Sw	Width of groundwater source zone (cm)	
Sd	Depth of groundwater source zone (cm)	
phi.eff	Effective porosity in water-bearing unit	3.8E-01
foc.sat	Fraction organic carbon in water-bearing unit	1.0E-03
BIO?	Is bioattenuation considered?	FALSE
BC	Biodegradation Capacity (mg/L)	

Soil	Definition (Units)	Value	capillary	vadose	foundation
hc	Capillary zone thickness (cm)	5.0E+00			
hv	Vadose zone thickness (cm)	***1.1E+03***			
rho	Soil density (g/cm^3)	1.7			
foc	Fraction of organic carbon in vadose zone	***0.164***			
phi	Soil porosity in vadose zone	0.38			
Lgw	Depth to groundwater (cm)	***1.1E+03***			
Ls	Depth to top of affected subsurface soil (cm)	1.0E+02			
Lsubs	Thickness of affected subsurface soils (cm)	2.0E+02			
pH	Soil/groundwater pH	6.5			
phi.w	Volumetric water content		0.342	0.12	0.12
phi.a	Volumetric air content		0.038	0.26	0.26

Building	Definition (Units)	Residential	Commercial
Lb	Building volume/area ratio (cm)	2.0E+02	3.0E+02
ER	Building air exchange rate (s^-1)	1.4E-04	2.3E-04
Lcrk	Foundation crack thickness (cm)	1.5E+01	
eta	Foundation crack fraction	0.01	

Transport Parameters	Definition (Units)	Residential	Commercial
Groundwater			
ax	Longitudinal dispersivity (cm)		
ay	Transverse dispersivity (cm)		
az	Vertical dispersivity (cm)		
Vapor			
dcy	Transverse dispersion coefficient (cm)		
dcz	Vertical dispersion coefficient (cm)		

Site Name: Shell-branded Service Station
Site Location: 1285 Bancroft Avenue

Completed By: Cambria Environmental Tech. Inc
Date Completed: 5/24/2001

SUBSURFACE SOIL SSTL VALUES (> 3.3 FT BGS)

Target Risk (Class A & B) 1.0E-6
Target Risk (Class C) 1.0E-5
Target Hazard Quotient 1.0E+0

☐ MCL exposure limit?
☐ PEL exposure limit?

Calculation Option: 2

SSTL Results For Complete Exposure Pathways ("x" if Complete)

CONSTITUENTS OF CONCERN		Representative Concentration		Soil Leaching to Groundwater			X	Soil Volatilization to Indoor Air		X	Soil Volatilization to Outdoor Air		Applicable SSTL	SSTL Exceeded ?	Required CRF
CAS No.	Name	(mg/kg)	Residential: (on-site)	Commercial: (on-site)	Regulatory(MCL): (on-site)		Residential: (on-site)	Commercial: (on-site)		Residential: (on-site)	Commercial: (on-site)	(mg/kg)	"■" If yes	Only if "yes" left
1634-04-4	Methyl t-Butyl Ether	2.6E+0	NA	NA	NA		2.6E+3	NA		>Res	NA	2.6E+3	☐	<1

>Res indicates risk-based target concentration greater than constituent residual saturation value

Software: GSI RBCA Spreadsheet
Version: 1.0.1
Serial: G-273-IBX-894

RBCA SITE ASSESSMENT

Tier 2 Worksheet 9.3

Site Name: Shell-branded Service Station

Site Location: 1285 Bancroft Avenue

Completed By: Cambria Environmental Tech. Inc

Date Completed: 5/24/2001

GROUNDWATER SSTL VALUES

Target Risk (Class A & B) 1.0E-6

Target Risk (Class C) 1.0E-5

Target Hazard Quotient 1.0E+0

☐ MCL exposure limit?

☐ PEL exposure limit?

Calculation Option: 2

SSTL Results For Complete Exposure Pathways ("x" if Complete)

CONSTITUENTS OF CONCERN		Representative Concentration		Groundwater Ingestion			X Groundwater Volatilization to Indoor Air		X Groundwater Volatilization to Outdoor Air		Applicable SSTL	SSTL Exceeded ?	Required CRF
CAS No.	Name	(mg/L)	Residential: (on-site)	Commercial: (on-site)	Regulatory(MCL): (on-site)	Residential: (on-site)	Commercial: (on-site)	Residential (on-site)	Commercial: (on-site)	(mg/L	"■" If yes	Only if "yes" left
1634-04-4	Methyl t-Butyl Ether	1.9E+1	NA	NA	NA	2.0E+3	NA	>Sol	NA	2.0E+3	☐	<1

>Sol indicates risk-based target concentration greater than constituent solubility

Software: GSI RBCA Spreadsheet Serial: G-273-IBX-894

Version: 1.0.1

RBCA SITE ASSESSMENT	Tier 2 Worksheet 8.3

Site Name: Shell-branded Service Station
Site Location: 1285 Bancroft Avenue

Completed By: Cambria Environmental Tech. Inc
Date Completed: 5/24/2001

TIER 2 BASELINE RISK SUMMARY TABLE

	BASELINE CARCINOGENIC RISK					BASELINE TOXIC EFFECTS				
	Individual COC Risk		Cumulative COC Risk		Risk Limit(s) Exceeded?	Hazard Quotient		Hazard Index		Toxicity Limit(s) Exceeded?
EXPOSURE PATHWAY	Maximum Value	Target Risk	Total Value	Target Risk		Maximum Value	Applicable Limit	Total Value	Applicable Limit	
OUTDOOR AIR EXPOSURE PATHWAYS										
Complete:	NC	1.0E-6	NC	N/A	■	3.7E-5	1.0E+0	3.7E-5	N/A	☐
INDOOR AIR EXPOSURE PATHWAYS										
Complete:	NC	1.0E-6	NC	N/A	■	1.0E-2	1.0E+0	1.0E-2	N/A	☐
SOIL EXPOSURE PATHWAYS										
Complete:	NC	1.0E-6	NC	N/A	■	NC	1.0E+0	NC	N/A	■
GROUNDWATER EXPOSURE PATHWAYS										
Complete:	NC	1.0E-6	NC	N/A	■	NC	1.0E+0	NC	N/A	■
CRITICAL EXPOSURE PATHWAY (Select Maximum Values From Complete Pathways)										
	0.0E+0	1.0E-6	0.0E+0	N/A	☐	1.0E-2	1.0E+0	1.0E-2	N/A	☐

Software: GSI RBCA Spreadsheet
Version: 1.0.1

Serial: G-273-IBX-894

Soil Gas Unit Conversion

Shell-branded Service Station, Incident # 98996017 - 1285 Bancroft Avenue, San Leandro, CA

Soil gas ppmv/mg/m^3 conversion:

	ppmv	mg/m^3	Molecular Weight
Benzene	438.28	1400	78.1
Toluene	0.19	0.71	92
Ethylbenzene	0.10	0.43	106.2
Xylenes	0.13	0.56	106.2

	ppmv	mg/m3	Molecular Weight
Benzene	5.98	19.1	78.1
Toluene	0.19	0.71	92
Ethylbenzene	0.10	0.43	106.2
Xylenes	0.13	0.56	106.2

Soil gas (mg/m^3) = [Soil gas (ppm/v) x MW x 1,000 L/m^3] / 24,450