CAMBRIA

October 7, 1999

Mr. Larry Seto
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Oakland , California 94502-6577

Re: **Monitoring Well Installation Report**
Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident # 98995757

Dear Mr. Seto:

In accordance with Alameda County Health Care Services Agency (ACHCSA) correspondence dated April 8, 1999, Cambria Environmental Technology, Inc. (Cambria) is submitting this *Monitoring Well Installation Report* on behalf of Equiva Services LLC (Equiva). The scope of this investigation included the installation of three groundwater monitoring wells to determine the extent of hydrocarbons in soil and groundwater at the above-referenced site. The site background, summary of previous investigations, and investigation results are presented below.

SITE BACKGROUND

The site is an active Shell-branded service station located at the intersection of Fifth Street and Oak Street in Oakland, California.

On November 27, 1996, Cambria collected soil samples beneath the seven dispenser locations prior to replacement and beneath the inactive diesel fuel piping. The station was undergoing renovations at the time of sampling. Armer, Norman & Associates of Walnut Creek, California (Armer/Norman) removed and replaced five gasoline dispensers, two diesel dispensers, and associated piping. In addition, inactive piping to a former diesel fuel dispenser was found and removed.

Soil samples were analyzed by Sequoia Analytical of Redwood City, California (Sequoia) for total purgeable petroleum hydrocarbons as gasoline (TPPH) and total extractable petroleum hydrocarbons as diesel (TEPH) by modified EPA Method 8015 and for benzene, ethylbenzene, toluene and xylenes (BTEX) and methyl tert-butyl ether (MTBE) using EPA Method 8020.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Soil samples D-3 and D-5, collected beneath the southwest dispenser area, contained the lowest petroleum hydrocarbon concentrations. Except for samples D-3 and D-5, the soil samples contained TPPH concentrations of more than 1,000 ppm. Individual BTEX constituent maximum concentrations were typically less than 100 ppm in the samples. MTBE concentrations in soil samples were less than 20 ppm, except for sample D-1, where MTBE was detected at 26 ppm. TEPH was detected in the three samples analyzed at concentrations ranging from 11 to 14,000 ppm. This results of this investigation were summarized in Cambria's *Dispenser Soil Sampling and Stockpile Disposal Report*, dated August 7, 1997.

In February 1998, Paradiso Mechanical of San Leandro, California installed secondary containment on the turbine sumps. Since secondary containment had previously been added to the dispensers, no additional dispenser upgrade activities were performed. Cambria inspected the tank pit on February 26, 1998 and no field indications of hydrocarbons, such as staining or odor, were observed.

To determine the extent of hydrocarbons in soil and groundwater beneath the site, on July 23, 1998, Cambria installed three borings in the assumed down gradient direction from existing dispensers and two borings in the assumed up gradient direction from the existing dispensers. Based on topography and the location of the nearby Oakland Inner Harbor, it was anticipated that groundwater flowed in a southeasterly to southwesterly direction (Figure 1).

The soil borings were installed to depths of 11.0 to 12.0 feet below ground surface and groundwater was encountered in the soil borings at depths ranging from approximately 6 to 9 ft bgs. The site subsurface consists of silty sand of high estimated permeability to the total explored depth of 12 ft bgs. Selected soil and groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by modified EPA Method 8015, MTBE and BTEX by EPA Method 8020.

Soil boring SB-3 contained the maximum hydrocarbon concentrations in soil with 15 ppm TPHd and 2.8 ppm TPHg at 5.0 ft bgs. Soil boring SB-5 contained the highest concentration of MTBE with 0.48 ppm at 5.0 ft bgs. No benzene was detected in the soil samples. Water samples collected from borings SB-3 and SB-4 contained the highest hydrocarbon concentrations. SB-3 contained 90,000 ppb TPHg and 1,300 ppb benzene. SB-4 contained 27,000 ppb TPHd and 4,100 ppb MTBE. The results of this investigation were summarized in Cambria's *Subsurface Investigation Report*, dated November 18, 1998.

INVESTIGATION PROCEDURES

Using a hollow stem auger drill rig, Cambria installed three 4-inch diameter monitoring wells. The procedures for this subsurface investigation are described in Cambria's *Additional Investigation Work Plan*, dated March 18, 1999. Analytical results for soil samples are summarized in Table 1. Laboratory analytical reports are presented as Attachment A. Boring logs and *Cambria's Standard Field Procedures for Monitoring Well Installation* are presented as Attachments B and C, respectively.

Permits: Monitoring well installation permits were obtained from the County of Alameda Public Works Agency for the installation of three monitoring wells (Permit #99WR167).

Drilling Date: May 14, 1999.

Drilling Company: Gregg Drilling of Martinez, California (C-57 License #485165).

Personnel Present:	***Tiltle:***	***Company:***
Troy Buggle	Sr. Staff Scientist	Cambria
Tim Akers	Driller	Gregg Drilling
Rich Nessinger	Driller	Gregg Drilling

Soil Lithology: The site is underlain primarily by sands and silty sands to a depth of 25 ft bgs, the maximum explored depth during this investigation.

Laboratory Analyses: Selected soil samples from each boring were analyzed for:

- TPHg by EPA Method 8015;
- BTEX and MTBE by EPA Method 8020;
- The highest MTBE (in soil) detected in each boring/monitoring well were confirmed using EPA Method 8260;
- Analytical results are summarized in Table 1.

Groundwater: Groundwater was encountered in MW-1 at 15.8 ft bgs, in MW-2 at 14.0 ft bgs, and in MW-3 at 12.5 ft bgs. The wells were scheduled to be developed by Blaine Technical Services, Inc., of San Jose, California (Blaine), in June, 1999. Blaine sampled the wells as part of the first quarterly monitoring well sampling event on July 23, 1999 (3rd Quarter, 1999).

Groundwater laboratory analytical results for this event were received by Cambria on September 8, 1999 and are summarized in Table 2. Laboratory analytical reports for groundwater samples are included in Attachment A. Groundwater monitoring results will be presented in future quarterly monitoring report(s), prepared by Cambria. During each sampling event Blaine will gauge and collect samples from each monitoring well and Sequoia Analytical Laboratories will analyze the samples for TPHg by modified EPA Method 8015, and BTEX and MTBE by EPA Method 8020. Well top of casing elevations were surveyed by Virgil Chavez Land Surveying on May 26, 1999. These elevations are included in Table 2 and were utilized to contour the groundwater elevation and flow direction on site based on measurements taken by Blaine on July, 23, 1999 (Figure 2). A copy of the survey report is included as Attachment D. Groundwater contour maps will also be included in the forthcoming quarterly monitoring reports.

Soil Disposal: Drill cuttings were disposed of at Forward Landfill in Manteca, California on June 16, 1999. The soil stockpile Laboratory Analytical Report is included as Attachment E and the Soil Disposal Confirmation report is included as Attachment F.

FINDINGS

Hydrocarbon Distribution in Groundwater: Petroleum hydrocarbon and MTBE contamination exists in groundwater on-site in the down-gradient direction near the UST complex. Groundwater sampled from MW-1, located in the up-gradient direction, was below detection limits for all analytes. Groundwater samples from MW-2 and MW-3, located in the down-gradient direction, indicate the presence of petroleum hydrocarbons and MTBE in groundwater. MW-2 had the highest concentrations of petroleum hydrocarbons on-site with 13,800 µg/L TPHg and 1790 µg/L benzene. The highest MTBE concentration on-site was in MW-3 at 324,000 µg/L (by EPA method 8260).

Hydrocarbon Distribution in Soil: Soil beneath the site does not appear to be impacted with the exception of MW-2 at 5.5 ft bgs. The maximum TPHg concentration detected in soil was 1700 ppm in soil sample MW-2-5.5'. The maximum benzene concentration detected in soil was 0.0369 ppm in soil sample MW-2-10.5'. The maximum MTBE concentration detected in soil was 13.2 ppm (by EPA method 8260) in soil sample MW-2-5.5'. The impacted soils are likely a result of groundwater contamination on-site as the depth to water in MW-2 was only 5.98 ft bgs on July 23, 1999. Cambria recommends quarterly monitoring well sampling and submittal of the findings in forthcoming quarterly monitoring reports.

Based on the findings, further subsurface characterization in the down-gradient direction appears warranted at this time.

CLOSING

Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Troy A. Buggle,
Senior Staff Scientist

Ailsa Le May, R.G.
Senior Geologist

REGISTERED GEOLOGIST
AILSA S. LE MAY
NO. 6717
STATE OF CALIFORNIA

Figures: 1 – Monitoring Well Location Map
2 - Groundwater Elevation Contour Map

Tables: 1 – Soil Analytical Data
2 – Groundwater Analytical Data

Attachments: A – Laboratory Analytical Report
B - Soil Boring Logs
C - Cambria's Standard Field Procedures for Monitoring Well Installation
D – Well Top of Casing Elevation Survey Report
E – Soil Stockpile Laboratory Analytical Report
F - Soil Disposal Confirmation Report

cc: Ms. Karen Petryna, Equiva Services LLC, P.O. Box 6249, Carson, CA 90749-6249

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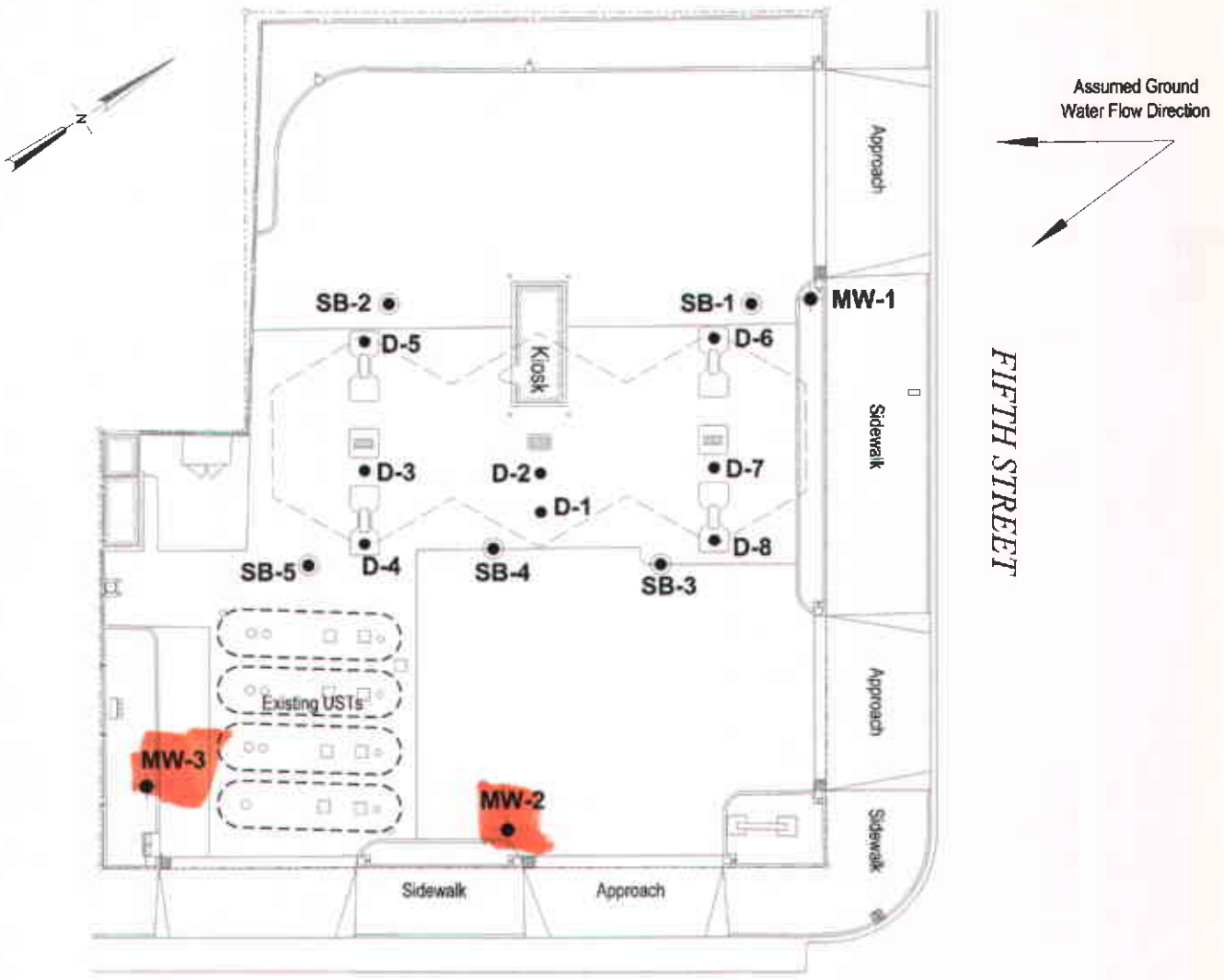


EXPLANATION

MW-1	⊕	Monitoring Well Location
D-1	●	1996 Dispenser Sample Location
SB-1	◉	Soil Boring Location

0 15 30

Scale (ft)

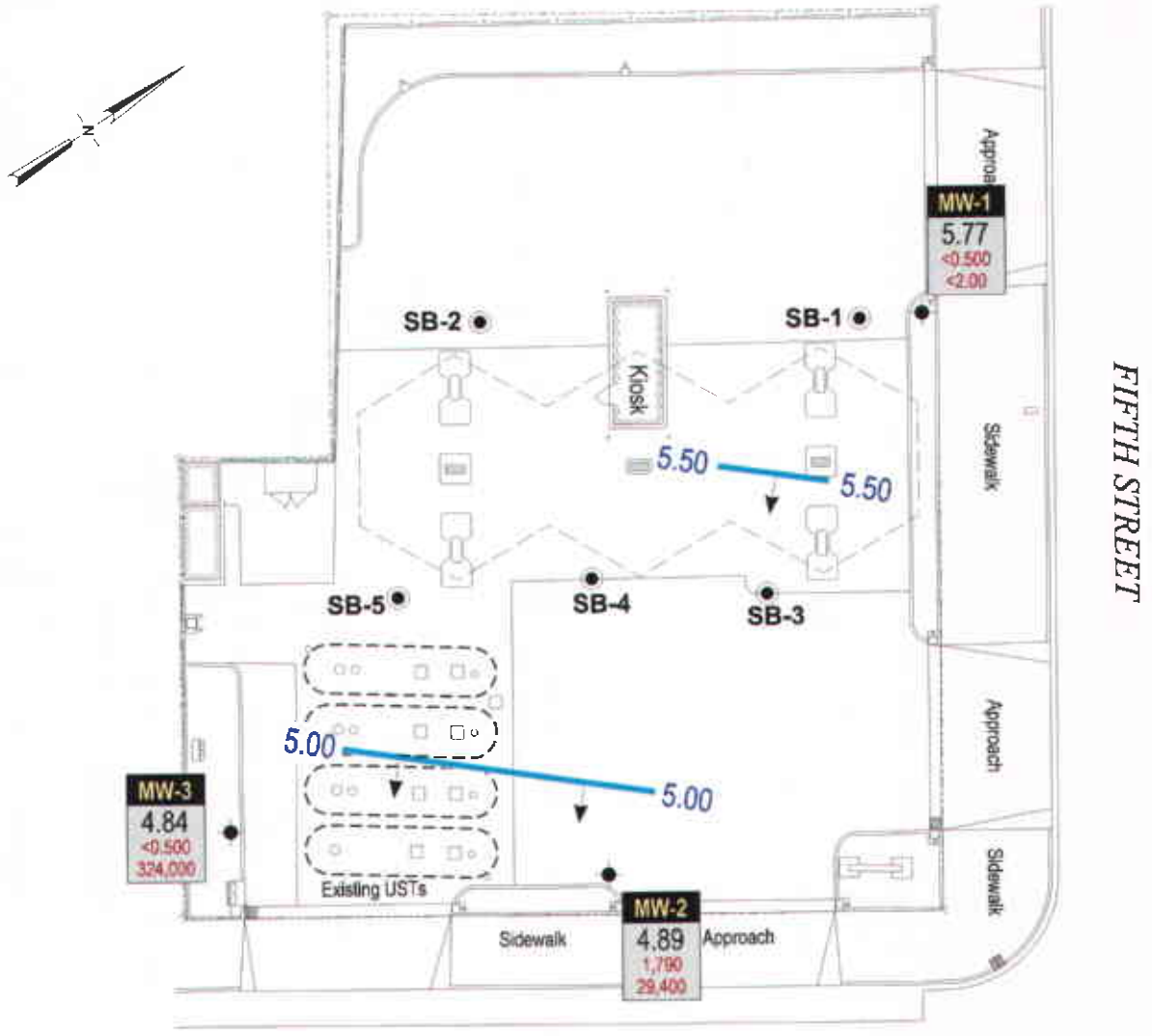
FIGURE

1

Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident #98995757

CAMBRIA

Monitoring Well Location Map



EXPLANATION

- MW-1 — Monitoring well location
- SB-1 — Soil boring location
- Ground water flow direction
- XX.XX — Ground water elevation contour, in feet above mean sea level (msl); dashed where inferred
- Well designation
- ELEV — Ground water elevation (msl)
- Benzene / MTBE — Benzene and MTBE concentrations are in parts per billion (ppb)

0 15 30

Scale (ft)

FIGURE

2

Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident #98995757

CAMBRIA

Ground Water Elevation Contour Map

July 23, 1999

Table 1. Soil Analytical Data - Shell-branded Service Station, 105 Fifth Street, Oakland, California - Incident #98995757

Sample ID	Depth (ft)	Date Sampled	TPHg	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
			(Concentrations reported in milligrams per kilogram)					
MW1-5.5'	5.5'	5/14/99	<0.400	<0.0100	<0.00200	<0.00200	<0.00200	<0.00400
MW1-10.5'	10.5'	5/14/99	<0.400	<0.0100	<0.00200	<0.00200	<0.00200	<0.00400
MW1-15.5'	15.5'	5/14/99	<0.400	<0.0100	<0.00200	<0.00200	<0.00200	<0.00400
MW1-20.5'	20.5'	5/14/99	<0.400	<0.0100	<0.00200	<0.00200	<0.00200	<0.00400
MW1-25.5'	25.5'	5/14/99	<0.400	<0.0100	<0.00200	<0.00200	<0.00200	<0.00400
MW2-5.5'	5.5'	5/14/99	1700	21.5 (13.2)	<2.0	<2.0	8.52	5.32
MW2-10.5'	10.5'	5/14/99	<2.0	2.13	0.0369	<0.0100	<0.0100	<0.0200
MW2-15.5'	15.5'	5/14/99	<0.400	0.0219	<0.00200	<0.00200	<0.00200	<0.00400
MW2-20.5'	20.5'	5/14/99	<0.400	0.0421	<0.00200	<0.00200	<0.00200	<0.00400
MW2-25.5'	25.5'	5/14/99	<0.400	0.0254	<0.00200	<0.00200	<0.00200	<0.00400
MW3-6.5'	6.5'	5/14/99	<20.0	19.2	<0.100	<0.100	<0.100	<0.200
MW3-11.5'	11.5'	5/14/99	<20.0	20.4 (8.83)	<0.100	<0.100	<0.100	<0.200
MW3-16.5'	16.5'	5/14/99	<20.0	9.14	<0.100	<0.100	<0.100	<0.200
MW3-21.5'	21.5'	5/14/99	<2.0	1.18	<0.0100	<0.0100	<0.0100	<0.0200
MW3-25'	25'	5/14/99	<0.400	0.201	<0.00200	<0.00200	<0.00200	<0.00400

Notes and Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
MTBE = Methyl tert-butyl ether by EPA Method 8020
(13.2) = MTBE concentration by EPA method 8260
Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020
<n = Below detection limit of n mg/kg

Table 2. Groundwater Analytical Data - Shell Service Station, Incident # 98995757, 105 Fifth Street, Oakland, California

Sample ID	Date Sampled	TOC Elevation	Depth to Water	TPHg	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
				← (Concentrations reported in micrograms per liter) →					
MW-1	7/23/99	12.22'	6.45'	<50.0	<2.50	<0.500	<0.500	<0.500	<0.500
MW-2	7/23/99	10.87'	5.98'	13,800	(29,400)	1790	<100	<100	682
MW-3	7/23/99	11.27'	6.43'	128	(324,000)	<0.500	<0.500	<0.500	<0.500

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 tert-butyl ether by EPA Method 8020
(MTBE) = MTBE by EPA Method 8260
µg/L = Micrograms per liter
<n = Below detection limit of n µg/L
TOC Elevation = Top of casing elevation above mean sea level (AMSL). Surveyed by Virgil Chavez Land Surveying - May 26, 1999

ATTACHMENT A

Laboratory Analytical Reports

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

June 3, 1999

Darryk Ataide
Cambria Environmental - Oakland
1144 65th St., Suite C
Oakland, CA 94608

RE: Shell Oil Co./P905601

Dear Darryk Ataide

Enclosed are the results of analyses for sample(s) received by the laboratory on May 17, 1999.

The analysis for soil physical test parameters was performed at CORE Laboratories.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Forbes
Project Manager

CA ELAP Certificate Number 2245

Sequoia Analytical

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Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

ANALYTICAL REPORT FOR P905601

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW1-5.5'	P905601-02	Soil	5/14/99
MW1-10.5'	P905601-04	Soil	5/14/99
MW1-15.5'	P905601-06	Soil	5/14/99
MW1-20.5'	P905601-08	Soil	5/14/99
MW1-25.5'	P905601-10	Soil	5/14/99
MW2-5.5'	P905601-11	Soil	5/14/99
MW2-10.5'	P905601-13	Soil	5/14/99
MW2-15.5'	P905601-15	Soil	5/14/99
MW2-20.5'	P905601-17	Soil	5/14/99
MW2-25.5'	P905601-19	Soil	5/14/99
MW3-6.5'	P905601-21	Soil	5/14/99
MW3-11.5'	P905601-23	Soil	5/14/99
MW3-16.5'	P905601-25	Soil	5/14/99
MW3-21.5'	P905601-27	Soil	5/14/99
MW3-25'	P905601-29	Soil	5/14/99

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW1-5.5'			**P905601-02**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*89.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*74.7*	"	
MW1-10.5'			**P905601-04**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*87.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*75.0*	"	
MW1-15.5'			**P905601-06**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*94.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*87.7*	"	
MW1-20.5'			**P905601-08**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*91.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*82.3*	"	
MW1-25.5'			**P905601-10**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	

Sequoia Analytical

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(707) 792-1865
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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW1-25.5' (continued)			**P905601-10**				**Soil**	
Benzene	9050750	5/26/99	5/26/99		0.00200	ND	mg/kg	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*91.7*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*81.3*	"	
MW2-5.5'			**P905601-11**				**Soil**	
Gasoline	9050595	5/26/99	5/26/99		400	**1700**	mg/kg	
Benzene	"	"	"		2.00	ND	"	
Toluene	"	"	"		2.00	ND	"	
Ethylbenzene	"	"	"		2.00	**8.52**	"	
Xylenes (total)	"	"	"		4.00	**5.32**	"	
Methyl tert-butyl ether	"	"	"		10.0	**21.5**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*102*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*127*	"	
MW2-10.5'			**P905601-13**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		2.00	ND	mg/kg	
Benzene	"	"	"		0.0100	**0.0369**	"	
Toluene	"	"	"		0.0100	ND	"	
Ethylbenzene	"	"	"		0.0100	ND	"	
Xylenes (total)	"	"	"		0.0200	ND	"	
Methyl tert-butyl ether	"	"	"		0.0500	**2.13**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*91.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*76.0*	"	
MW2-15.5'			**P905601-15**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	**0.0219**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*87.7*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*78.7*	"	
MW2-20.5'			**P905601-17**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW2-20.5' (continued)			**P905601-17**				**Soil**	
Toluene	9050750	5/26/99	5/26/99		0.00200	ND	mg/kg	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	**0.0421**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*89.7*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*78.0*	"	
MW2-25.5'			**P905601-19**				**Soil**	
Gasoline	9050750	5/26/99	5/26/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	**0.0254**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*91.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*80.7*	"	
MW3-6.5'			**P905601-21**				**Soil**	
Gasoline	9050595	5/26/99	5/26/99		20.0	ND	mg/kg	
Benzene	"	"	"		0.100	ND	"	
Toluene	"	"	"		0.100	ND	"	
Ethylbenzene	"	"	"		0.100	ND	"	
Xylenes (total)	"	"	"		0.200	ND	"	
Methyl tert-butyl ether	"	"	"		0.500	**19.2**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*96.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*96.3*	"	
MW3-11.5'			**P905601-23**				**Soil**	
Gasoline	9050595	5/26/99	5/26/99		20.0	ND	mg/kg	
Benzene	"	"	"		0.100	ND	"	
Toluene	"	"	"		0.100	ND	"	
Ethylbenzene	"	"	"		0.100	ND	"	
Xylenes (total)	"	"	"		0.200	ND	"	
Methyl tert-butyl ether	"	"	"		0.500	**20.4**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*94.3*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*93.7*	"	
MW3-16.5'			**P905601-25**				**Soil**	
Gasoline	9050595	5/26/99	5/26/99		20.0	ND	mg/kg	
Benzene	"	"	"		0.100	ND	"	
Toluene	"	"	"		0.100	ND	"	

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW3-16.5' (continued)			**P905601-25**				**Soil**	
Ethylbenzene	9050595	5/26/99	5/26/99		0.100	ND	mg/kg	
Xylenes (total)	"	"	"		0.200	ND	"	
Methyl tert-butyl ether	"	"	"		0.500	**9.14**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*94.7*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*95.3*	"	
MW3-21.5'			**P905601-27**				**Soil**	
Gasoline	9050847	5/27/99	5/28/99		2.00	ND	mg/kg	
Benzene	"	"	"		0.0100	ND	"	
Toluene	"	"	"		0.0100	ND	"	
Ethylbenzene	"	"	"		0.0100	ND	"	
Xylenes (total)	"	"	"		0.0200	ND	"	
Methyl tert-butyl ether	"	"	"		0.0500	**1.18**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*96.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*91.0*	"	
MW3-25'			**P905601-29**				**Soil**	
Gasoline	9050847	5/27/99	5/28/99		0.400	ND	mg/kg	
Benzene	"	"	"		0.00200	ND	"	
Toluene	"	"	"		0.00200	ND	"	
Ethylbenzene	"	"	"		0.00200	ND	"	
Xylenes (total)	"	"	"		0.00400	ND	"	
Methyl tert-butyl ether	"	"	"		0.0100	**0.201**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*97.0*	*%*	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*79.0*	"	

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW2-5.5'			**P905601-11**				**Soil**	1
Methyl tert-butyl ether	9050872	6/1/99	6/3/99		4.00	**13.2**	mg/kg	
Surrogate: Dibromofluoromethane	"	"	"	*80.0-120*		*98.0*	%	
MW3-11.5'			**P905601-23**				**Soil**	1
Methyl tert-butyl ether	9050872	6/1/99	6/3/99		0.200	**8.83**	mg/kg	
Surrogate: Dibromofluoromethane	"	"	"	*80.0-120*		*91.5*	%	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050595	**Date Prepared: 5/21/99**					**Extraction Method: EPA 5030 soils MeOH**				
Blank	**9050595-BLK1**									
Gasoline	5/21/99			**ND**	mg/kg	**20.0**				
Benzene	"			**ND**	"	**0.100**				
Toluene	"			**ND**	"	**0.100**				
Ethylbenzene	"			**ND**	"	**0.100**				
Xylenes (total)	"			**ND**	"	**0.200**				
Methyl tert-butyl ether	"			**ND**	"	**0.500**				
Surrogate: a,a,a-Trifluorotoluene	"	*30.0*		*28.8*	"	*65.0-135*	*96.0*			
Surrogate: 4-Bromofluorobenzene	"	*30.0*		*30.0*	"	*65.0-135*	*100*			
Blank	**9050595-BLK2**									
Gasoline	5/26/99			**ND**	mg/kg	**10.0**				
Benzene	"			**ND**	"	**0.0500**				
Toluene	"			**ND**	"	**0.0500**				
Ethylbenzene	"			**ND**	"	**0.0500**				
Xylenes (total)	"			**ND**	"	**0.100**				
Methyl tert-butyl ether	"			**ND**	"	**0.250**				
Surrogate: a,a,a-Trifluorotoluene	"	*30.0*		*29.2*	"	*65.0-135*	*97.3*			
Surrogate: 4-Bromofluorobenzene	"	*30.0*		*30.2*	"	*65.0-135*	*101*			
LCS	**9050595-BS1**									
Gasoline	5/21/99	100		101	mg/kg	65.0-135	101			
Surrogate: 4-Bromofluorobenzene	"	*30.0*		*30.0*	"	*65.0-135*	*100*			
LCS	**9050595-BS2**									
Benzene	5/21/99	10.0		10.6	mg/kg	65.0-135	106			
Toluene	"	10.0		10.5	"	65.0-135	105			
Ethylbenzene	"	10.0		9.73	"	65.0-135	97.3			
Xylenes (total)	"	30.0		30.3	"	65.0-135	101			
Surrogate: a,a,a-Trifluorotoluene	"	*30.0*		*28.4*	"	*65.0-135*	*94.7*			
LCS	**9050595-BS3**									
Gasoline	5/26/99	100		106	mg/kg	65.0-135	106			
Surrogate: 4-Bromofluorobenzene	"	*30.0*		*31.0*	"	*65.0-135*	*103*			
Matrix Spike	**9050595-MS1**		**P905366-14**							
Gasoline	5/21/99	100	51.2	145	mg/kg	65.0-135	**93.8**			
Surrogate: 4-Bromofluorobenzene	"	*30.0*		*32.2*	"	*65.0-135*	*107*			
Matrix Spike Dup	**9050595-MSD1**		**P905366-14**							
Gasoline	5/21/99	100	51.2	184	mg/kg	65.0-135	**133**	20.0	**34.6**	2

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup (continued)	**9050595-MSD1**		**P905366-14**							
Surrogate: 4-Bromofluorobenzene	*5/21/99*	*30.0*		*34.7*	*mg/kg*	*65.0-135*	*116*			
Batch: 9050750	**Date Prepared: 5/25/99**					**Extraction Method: EPA 5030 soils**				
Blank	**9050750-BLK1**									
Gasoline	5/25/99			**ND**	mg/kg	**0.400**				
Benzene	"			**ND**	"	**0.00200**				
Toluene	"			**ND**	"	**0.00200**				
Ethylbenzene	"			**ND**	"	**0.00200**				
Xylenes (total)	"			**ND**	"	**0.00400**				
Methyl tert-butyl ether	"			**ND**	"	**0.0100**				
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.287*	"	*65.0-135*	*95.7*			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.275*	"	*65.0-135*	*91.7*			
Blank	**9050750-BLK2**									
Gasoline	5/26/99			**ND**	mg/kg	**0.400**				
Benzene	"			**ND**	"	**0.00200**				
Toluene	"			**ND**	"	**0.00200**				
Ethylbenzene	"			**ND**	"	**0.00200**				
Xylenes (total)	"			**ND**	"	**0.00400**				
Methyl tert-butyl ether	"			**ND**	"	**0.0100**				
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.284*	"	*65.0-135*	*94.7*			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.258*	"	*65.0-135*	*86.0*			
LCS	**9050750-BS1**									
Gasoline	5/26/99	2.00		1.90	mg/kg	65.0-135	95.0			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.278*	"	*65.0-135*	*92.7*			
LCS	**9050750-BS2**									
Gasoline	5/26/99	2.00		2.04	mg/kg	65.0-135	102			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.262*	"	*65.0-135*	*87.3*			
Matrix Spike	**9050750-MS1**		**P905554-30**							
Gasoline	5/26/99	2.00	ND	1.75	mg/kg	65.0-135	**87.5**			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.251*	"	*65.0-135*	*83.7*			
Matrix Spike Dup	**9050750-MSD1**		**P905554-30**							
Gasoline	5/26/99	2.00	ND	1.79	mg/kg	65.0-135	**89.5**	20.0	**2.26**	
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.249*	"	*65.0-135*	*83.0*			

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050847	**Date Prepared: 5/27/99**					**Extraction Method: EPA 5030 soils**				
Blank	**9050847-BLK1**									
Gasoline	5/27/99			**ND**	mg/kg	**0.400**				
Benzene	"			**ND**	"	**0.00200**				
Toluene	"			**ND**	"	**0.00200**				
Ethylbenzene	"			**ND**	"	**0.00200**				
Xylenes (total)	"			**ND**	"	**0.00400**				
Methyl tert-butyl ether	"			**ND**	"	**0.0100**				
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.295*	"	*65.0-135*	*98.3*			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.276*	"	*65.0-135*	*92.0*			
LCS	**9050847-BS1**									
Gasoline	5/27/99	2.00		2.08	mg/kg	65.0-135	104			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.280*	"	*65.0-135*	*93.3*			
Matrix Spike	**9050847-MS1**		**P905496-02**							
Gasoline	5/28/99	2.00	ND	1.41	mg/kg	65.0-135	**70.5**			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.211*	"	*65.0-135*	*70.3*			
Matrix Spike Dup	**9050847-MSD1**		**P905496-02**							
Gasoline	5/28/99	2.00	ND	1.56	mg/kg	65.0-135	**78.0**	20.0	**10.1**	
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.223*	"	*65.0-135*	*74.3*			

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Volatile Organic Compounds by EPA Method 8260B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050872	**Date Prepared: 5/28/99**					**Extraction Method: EPA 5030 soils MeOH**				
Blank	**9050872-BLK1**									
Methyl tert-butyl ether	6/1/99			**ND**	mg/kg	**1.00**				
Surrogate: Dibromofluoromethane	"	*2.00*		*2.18*	"	*80.0-120*	*109*			
Blank	**9050872-BLK2**									
Methyl tert-butyl ether	6/3/99			**ND**	mg/kg	**0.200**				
Surrogate: Dibromofluoromethane	"	*2.00*		*1.92*	"	*80.0-120*	*96.0*			
LCS	**9050872-BS1**									
Methyl tert-butyl ether	6/1/99	2.00		1.91	mg/kg	75.8-124	95.5			
Surrogate: Dibromofluoromethane	"	*2.00*		*2.13*	"	*80.0-120*	*107*			
LCS	**9050872-BS2**									
Methyl tert-butyl ether	6/3/99	2.00		1.81	mg/kg	75.8-124	90.5			
Surrogate: Dibromofluoromethane	"	*2.00*		*1.99*	"	*80.0-120*	*99.5*			
Matrix Spike	**9050872-MS1**		**P905660-03**							
Methyl tert-butyl ether	6/1/99	2.00	ND	1.85	mg/kg	75.8-124	**92.5**			
Surrogate: Dibromofluoromethane	"	*2.00*		*2.05*	"	*80.0-120*	*102*			
Matrix Spike Dup	**9050872-MSD1**		**P905660-03**							
Methyl tert-butyl ether	6/1/99	2.00	ND	1.77	mg/kg	75.8-124	**88.5**	35.0	**4.42**	
Surrogate: Dibromofluoromethane	"	*2.00*		*1.88*	"	*80.0-120*	*94.0*			

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/3/99

Notes and Definitions

#	Note
1	This sample was analyzed outside the EPA recommended holding time.
2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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
Recov.	Recovery
RPD	Relative Percent Difference

CORELAB

Sequoia Analytical
(Petaluma)
P905601

CL File No.: 57111-99113

Sample Name	Sample Date	Total Porosity %	Bulk Density Dry g/cc	Bulk Density Natural g/cc	Matrix Density g/cc	Moisture Content %	Frac. Org. Carbon	Description
P905601-01	5/14/99	31.6	1.84	2.09	2.68	14.0	0.116	Gray silty vf-fgr sand
P905601-03	5/14/99	29.0	1.91	2.20	2.69	15.1	<0.001	Gray silty vf-fgr sand
P905601-12	5/14/99	31.6	1.85	2.17	2.70	17.0	1.180	Gray silty vf-fgr sand
P905601-20	5/14/99	31.8	1.82	2.14	2.67	17.4	0.299	Gray silty vf-fgr sand
P905601-22	5/14/99	33.0	1.81	2.14	2.71	18.2	<0.001	Gray silty vf-fgr sand

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.
Moisture content was determined by ASTM D-2216.
Fractional Organic Carbon Content was determined using Walkley-Black methods.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD Pet.
Serial No: _____

Date: 5/17/99
Page 1 of 4

Site Address: 105-5th St., Oakland, CA

WIC#: Incident # 9899575 / SAP = 135700

Shell Engineer: Karen Petryna — Phone No.: 559 645-9306, Fax #: 645-5643

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

Consultant Contact: Darryk Ataide — Phone No.: 510 420-0700, Fax #: 420-9170

Comments:

Sampled by: TROY BUGGLE

Printed Name: Troy A Bugle

LAB: Sequoia - Redwood City

CHECK ONE (1) BOX ONLY — GI/DI

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

TURN AROUND TIME

24 hours ☐
48 hours ☐
96 days ☐ (normal)
Other ☒ 10 days

NOTE: Notify Lab as soon as Possible of 24/48 hr. 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) + MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	1) Fractional Organic Carbon 2) Bulk Density 3) Porosity 4) Moisture Content Physical Parameters	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
01 MW1-5.0'	5/14		X			1							X					Confirm Highest MTBE Concentration at each location (MW1, MW2, or MW3) by EPA Method 8260.	
02 MW1-5.5'	5/14		X			1	X		X										
03 MW1-10'	5/14		X			1							X						
04 MW1-10.5'	5/14		X			1	X		X										
05 MW1-15'	5/14		X			1				HOLD									
06 MW1-15.5'	5/14		X			1	X		X										
07 MW1-20'	5/14		X			1				HOLD									
08 MW1-20.5'	5/14		X			1	X		X										

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐

COOLER TEMPERATURE: 18 °C

Relinquished By (signature): Troy A Bugle	Printed Name: TROY BUGGLE	Date: 5/17/99 Time: 10:30	Received (signature): Kent Rittaler	Printed Name: Kent Rittaler	Date: 5/17/99 Time: 1330
Relinquished By (signature): Kent Rittaler	Printed Name:	Date: 5/17/99 Time: 15:45	Received (signature):	Printed Name: Paul Burton	Date: 5-18 Time: 1045
Relinquished By (signature):	Printed Name:	Date: 5-18 Time:	Received (signature):	Printed Name: Elmer Torres	Date: 5/17/99 Time: 17:00

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: 5/17/99
Page 2 of 4

Site Address: 105-5th St., Oakland, CA

WIC#: Incident # 9899575 / SAP = 135700

Shell Engineer: Karen Petryna — Phone No.: 559 645-9306, Fax #: 645-5643

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

Consultant Contact: Darryk Ataide — Phone No.: 510 420-0700, Fax #: 420-9170

Comments:

Sampled by: TROY BUGGLE

Printed Name: Troy A Bugle

LAB: Sequoia - Redwood City

CHECK ONE (1) BOX ONLY	C/D#
G.W. Monitoring	4481
Site Investigation	4441
Soil Classify/Disposal	4442
Water Classify/Disposal	4443
Soil/Air Remed. or Sys. O & M	4452
Water Remed. or Sys. O & M	4453
Other	

TURN AROUND TIME
24 hours ☐
48 hours ☐
96 days ☐ (Normal)
Other ☒ 10 days

NOTE: Notify Lab as soon as Possible of 24/48 hr. 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) + MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Physical Parameter (1) Organic Carbon 2) porosity 3) moisture 4) Bulk Density	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
09 MW1-25'	5/14		X			1					HOLD							Confirm	Highest
10 MW1-25.5'	5/14		X			1	X		X									MTBE Concentration	
11 MW2-5.5'	5/14		X			1	X		X									at each	location
12 MW2-10'	5/14		X			1							X					(MW-1, MW-2 or MW3)	
13 MW2-10.5'	5/14		X			1	X		X									by EPA Method 8260.	
14 MW2-15'	5/14		X			1					HOLD								
15 MW2-15.5'	5/14		X			1	X		X										
16 MW2-20'	5/14		X			1					HOLD								

ON ICE/CUSTODY SEALS INTACT ☐ NOT INTACT ☐
COOLER TEMPERATURE 18 °C

Relinquished By (signature):	Printed Name:	Date: 5/14/99 Time: 1830	Received (signature):	Printed Name:	Date: 5/17/99 Time: 1320
Troy A Bugle	TROY BUGGLE			Kent Rittenhouse	
Relinquished By (signature):	Printed Name:	Date: 5/14/99 Time: 1535	Received (signature):	Printed Name:	Date: 5/18 Time: 1205
Kent Rittenhouse				Paul Hunter	
Relinquished By (signature):	Printed Name:	Date: 5/14 Time:	Received (signature):	Printed Name:	Date: Time:

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: 5/17/99
Page 3 of 4

Site Address: 105-5th St., Oakland, CA

WIC#: Incident# 9899575 / SAP= 135700

Shell Engineer: Karen Petryna
Phone No.: 559 645-9306
Fax #: 645-5643

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

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

Comments:

Sampled by: TROY BUGGLE

Printed Name: Troy A Bugle

LAB: Sequoia - Redwood City

CIRCK ONE (1) BOX ONLY | C1/D1
- G.W. Monitoring ☐ 4461
- Site Investigation ☐ 4461
- Soil Classify/Disposal ☐ 4462
- Water Classify/Disposal ☐ 4463
- Soil/Air Remt. or Sys. O & M ☐ 4462
- Water Remt. or Sys. O & M ☐ 4463
- Other ☐

TURN AROUND TIME
- 24 hours ☐
- 48 hours ☐
- 96 days ☐ (Normal)
- Other ☒ 10 days

NOTE: Notify Lab as soon as Possible of 24/48 hrs. 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) + MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Physical Parameters: 1) Moisture 2) Fraction organic carb.	3) Bulk Density 4) Porosity	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
17 MW2-20.5'	5/14		X			1	X		X										Confirm Highest	
18 MW2-25'	5/14		X			1					HOLD								MTBE Concentration at	
19 MW2-25.5'	5/14		X			1	X		X										each location	
20 MW3-6'	5/14		X			1							X						(MW-1, MW-2, or MW3)	
21 MW3-6.5'	5/14		X			1	X		X										by EPA Method	
22 MW3-11'	5/14		X			1							X						8260.	
23 MW3-11.5'	5/14		X			1	X		X											
24 MW3-16'	5/14		X			1					HOLD									

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐
COOLER TEMPERATURE 18 °C

Relinquished By (signature):	Printed Name: Troy Buggle	Date: 5/17/99 Time: 1030	Received (signature):	Printed Name: Kent Rittaler	Date: 5/17/99 Time: 1530
Relinquished By (signature):	Printed Name:	Date: 5/17/99 Time: 1530	Received (signature):	Printed Name:	Date: 5/18 Time: 1200
Relinquished By (signature):	Printed Name:	Date: 5-18 Time:	Received (signature):	Printed Name:	Date: Time:

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: 5/17/99
Page 4 of 4

Site Address: 105-5th St., Oakland, CA
~~WIC#~~: Incident# 9899575 / SAP= 135700
Shell Engineer: Karen Petryna
Phone No.: 559 643-9306
Fax #: 645-5643
Consultant Name & Address: CAMBRIA ENVIRONMENTAL 1144 65th St. Suite C, Oakland, CA 94608
Consultant Contact: Darryk Ataide
Phone No.: 510 420-0700
Fax #: 420-9170
Comments:
Sampled by: TROY BUGGLE
Printed Name: [signature]

LAB: Sequoia - Redwood City

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	16 days [ ] (Normal)
Water Classify/Disposal [ ]	4443	Other [X] 10 days
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: 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; Asbestos; Container Size; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH Gas	TPH Diesel	BTEX + MTBE	Volatile Organics	Test for Disposal	Combination TPH & BTEX			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
25 mw3-16.5'	5/14		X			1	X		X										Confirm	Highest
24 mw3-21'	5/14		X			1				HOLD									MTBE	Concentration
21 mw3-21.5'	5/14		X			1	X		X										at each	location;
20 mw3-24.5'	5/14		X			1				HOLD									(mw-1, mw-2 or mw-3)	
19 mw3-25'	5/14		X			1	X		X										by EPA	Method 8260.

COOLER CUSTODY SEALS INTACT [ ] NOT INTACT [ ]
COOLER TEMPERATURE 18° °C

Relinquished By (signature):	Printed Name:	Date/Time:	Received (signature):	Printed Name:	Date/Time:
[signature]	TROY BUGGLE	Date: 5/17/99 Time: 1030	[signature]	Kent R. Hthaler	Date: 5/17/99 Time: 1330
Relinquished By (signature): [signature]	Printed Name:	Date: 5/17/99 Time: 1535	Received (signature): [signature]	Printed Name: [signature]	Date: 5/18 Time: 1015
Relinquished By (signature): [signature]	Printed Name:	Date: 5/18 Time:	Received (signature):	Printed Name:	Date: Time:

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

Sequoia Analytical

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

August 12, 1999

W.R. Jones
Blaine Tech Services
1680 Rogers Ave
San Jose, CA 95112

RE: 105 5th Street/M907957

Dear W.R. Jones

Enclosed are the results of analyses for sample(s) received by the laboratory on July 26, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kayvan Kimyai
Project Manager D.M.

CA ELAP Certificate Number 1210

Sequoia Analytical

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

Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

ANALYTICAL REPORT FOR M907957

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	M907957-01	Water	7/23/99
MW-2	M907957-02	Water	7/23/99
MW-3	M907957-03	Water	7/23/99

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-1			**M907957-01**				**Water**	
Purgeable Hydrocarbons	9080159	8/3/99	8/4/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*90.2*	*%*	
MW-2			**M907957-02**				**Water**	
Purgeable Hydrocarbons	9080150	8/3/99	8/3/99		10000	**13800**	ug/l	
Benzene	"	"	"		100	**1790**	"	
Toluene	"	"	"		100	ND	"	
Ethylbenzene	"	"	"		100	ND	"	
Xylenes (total)	"	"	"		100	**682**	"	
Methyl tert-butyl ether	"	"	8/5/99		500	**29900**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	*8/3/99*	*70.0-130*		*131*	*%*	*1*
MW-3			**M907957-03**				**Water**	
Purgeable Hydrocarbons	9080150	8/3/99	8/3/99		50.0	**128**	ug/l	2
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	8/9/99		5000	**404000**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	*8/3/99*	*70.0-130*		*ND*	*%*	*1*

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Total Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-1			**M907957-01**				**Water**	
Ferrous Iron	9071022	7/30/99	7/30/99	EPA 6010A	0.0100	**17.0**	mg/l	
MW-2			**M907957-02**				**Water**	
Ferrous Iron	9071022	7/30/99	7/30/99	EPA 6010A	0.0100	**7.20**	mg/l	
MW-3			**M907957-03**				**Water**	
Ferrous Iron	9071022	7/30/99	7/30/99	EPA 6010A	0.0100	**25.0**	mg/l	

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Conventional Chemistry Parameters by APHA/EPA Methods
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-1			**M907957-01**				**Water**	
Total Alkalinity	9070960	7/28/99	7/28/99	EPA 310.1	5.00	**150**	mg/l	
MW-2			**M907957-02**				**Water**	
Total Alkalinity	9070960	7/28/99	7/28/99	EPA 310.1	5.00	**270**	mg/l	
MW-3			**M907957-03**				**Water**	
Total Alkalinity	9070960	7/28/99	7/28/99	EPA 310.1	5.00	**530**	mg/l	

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Anions by EPA Method 300.0
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
MW-1			M907957-01				**Water**	
Nitrate as NO3	9070943	7/27/99	7/27/99	EPA 300.0	1.00	ND	mg/l	
Sulfate as SO4	9070944	"	"	EPA 300.0	1.00	**17.5**	"	
MW-2			M907957-02				**Water**	
Nitrate as NO3	9070943	7/27/99	7/27/99	EPA 300.0	1.00	ND	mg/l	
Sulfate as SO4	9070944	"	"	EPA 300.0	1.00	**9.97**	"	
MW-3			M907957-03				**Water**	
Nitrate as NO3	9070943	7/27/99	7/27/99	EPA 300.0	1.00	ND	mg/l	
Sulfate as SO4	9070944	"	"	EPA 300.0	1.00	**6.36**	"	

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9080150	**Date Prepared: 8/3/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9080150-BLK1**									
Purgeable Hydrocarbons	8/3/99			**ND**	ug/l	**50.0**				
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	"	*10.0*		*11.0*	"	*70.0-130*	*110*			
LCS	**9080150-BS1**									
Benzene	8/3/99	10.0		10.9	ug/l	70.0-130	109			
Toluene	"	10.0		10.8	"	70.0-130	108			
Ethylbenzene	"	10.0		10.6	"	70.0-130	106			
Xylenes (total)	"	30.0		32.1	"	70.0-130	107			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.1*	"	*70.0-130*	*101*			
LCS Dup	**9080150-BSD1**									
Benzene	8/3/99	10.0		10.8	ug/l	70.0-130	108	25.0	0.922	
Toluene	"	10.0		10.6	"	70.0-130	106	25.0	1.87	
Ethylbenzene	"	10.0		10.3	"	70.0-130	103	25.0	2.87	
Xylenes (total)	"	30.0		31.4	"	70.0-130	105	25.0	1.89	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.1*	"	*70.0-130*	*101*			
Batch: 9080159	**Date Prepared: 8/3/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9080159-BLK1**									
Purgeable Hydrocarbons	8/3/99			**ND**	ug/l	**50.0**				
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	"	*10.0*		*9.89*	"	*70.0-130*	*98.9*			
LCS	**9080159-BS1**									
Benzene	8/3/99	10.0		9.80	ug/l	70.0-130	98.0			
Toluene	"	10.0		10.4	"	70.0-130	104			
Ethylbenzene	"	10.0		9.52	"	70.0-130	95.2			
Xylenes (total)	"	30.0		29.0	"	70.0-130	96.7			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.6*	"	*70.0-130*	*106*			

Sequoia Analytical

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Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308

Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS Dup	**9080159-BSD1**									
Benzene	8/3/99	10.0		9.81	ug/l	70.0-130	98.1	25.0	0.102	
Toluene	"	10.0		10.3	"	70.0-130	103	25.0	0.966	
Ethylbenzene	"	10.0		9.59	"	70.0-130	95.9	25.0	0.733	
Xylenes (total)	"	30.0		28.7	"	70.0-130	95.7	25.0	1.04	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.6*	"	*70.0-130*	*106*			

Sequoia Analytical

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Morgan Hill, CA 95037
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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Total Metals by EPA 6000/7000 Series Methods/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9071022	**Date Prepared: 7/2/99**					**Extraction Method: EPA 3010A**				
Blank	**9071022-BLK1**									
Ferrous Iron	7/30/99			**ND**	mg/l	**0.0100**				
LCS	**9071022-BS1**									
Ferrous Iron	7/30/99	1.00		1.04	mg/l	80.0-120	104			
Matrix Spike	**9071022-MS1**		**M907885-01**							
Ferrous Iron	7/30/99	1.00	0.110	0.970	mg/l	80.0-120	**86.0**			
Matrix Spike Dup	**9071022-MSD1**		**M907885-01**							
Ferrous Iron	7/30/99	1.00	0.110	1.10	mg/l	80.0-120	**99.0**	20.0	**14.1**	

Sequoia Analytical

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Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Conventional Chemistry Parameters by APHA/EPA Methods/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9070960	**Date Prepared: 7/28/99**					**Extraction Method: General Preparation**				
Blank	**9070960-BLK1**									
Total Alkalinity	7/28/99			**ND**	mg/l	**5.00**				
LCS	**9070960-BS1**									
Total Alkalinity	7/28/99	100		98.0	mg/l	80.0-120	98.0			
Matrix Spike	**9070960-MS1**		**M907957-01**							
Total Alkalinity	7/28/99	100	150	240	mg/l	75.0-125	**90.0**			
Matrix Spike Dup	**9070960-MSD1**		**M907957-01**							
Total Alkalinity	7/28/99	100	150	240	mg/l	75.0-125	**90.0**	20.0	**0**	

Sequoia Analytical

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Morgan Hill, CA 95037
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FAX (408) 782-6308

Blaine Tech Services	Project:	Equiva	Sampled: 7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received: 7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 8/12/99

Anions by EPA Method 300.0/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9070943	**Date Prepared: 7/27/99**					**Extraction Method: General Preparation**				
Blank	**9070943-BLK1**									
Nitrate as NO3	7/27/99			**ND**	mg/l	**1.00**				
LCS	**9070943-BS1**									
Nitrate as NO3	7/27/99	100		92.2	mg/l	80.0-120	92.2			
Matrix Spike	**9070943-MS1**		**M907989-01**							
Nitrate as NO3	7/27/99	100	73.3	168	mg/l	75.0-125	**94.7**			
Matrix Spike Dup	**9070943-MSD1**		**M907989-01**							
Nitrate as NO3	7/27/99	100	73.3	165	mg/l	75.0-125	**91.7**	20.0	**3.22**	
Batch: 9070944	**Date Prepared: 7/27/99**					**Extraction Method: General Preparation**				
Blank	**9070944-BLK1**									
Sulfate as SO4	7/27/99			**ND**	mg/l	**1.00**				
LCS	**9070944-BS1**									
Sulfate as SO4	7/27/99	100		99.7	mg/l	80.0-120	99.7			
Matrix Spike	**9070944-MS1**		**M907957-03**							
Sulfate as SO4	7/27/99	100	6.36	94.9	mg/l	75.0-125	**88.5**			
Matrix Spike Dup	**9070944-MSD1**		**M907957-03**							
Sulfate as SO4	7/27/99	100	6.36	94.2	mg/l	75.0-125	**87.8**	20.0	**0.794**	

Sequoia Analytical

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

Blaine Tech Services	Project:	Equiva	Sampled:	7/23/99
1680 Rogers Ave	Project Number:	105 5th Street	Received:	7/26/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported:	8/12/99

Notes and Definitions

#	Note
1	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
2	Chromatogram Pattern: Weathered Gasoline C6-C12
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
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

August 2, 1999

Kayvan Kimyai
Sequoia - Morgan Hill
885 Jarvis Drive
Morgan Hill, CA 95037

RE: 1/L907273

Dear Kayvan Kimyai

Enclosed are the results of analyses for sample(s) received by the laboratory on July 29, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson
Project Manager

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
M907957-01/MW-1	L907273-01	Water	7/23/99
M907957-02/MW-2	L907273-02	Water	7/23/99
M907957-03/MW-3	L907273-03	Water	7/23/99

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

M907957-01/MW-1
[L907273-01]

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - San Carlos					
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9070118	7/29/99	7/29/99		2.00	ND	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*109*	*%*	

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

M907957-02/MW-2
[L907273-02]

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Sequoia Analytical - San Carlos								
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9070122	7/30/99	7/30/99		400	**29400**	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*95.0*	%	

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

M907957-03/MW-3
[L907273-03]

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			Sequoia Analytical - San Carlos					
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9070122	7/30/99	7/30/99		10000	**324000**	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*94.0*	%	

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project: 1	Sampled: 7/23/99
885 Jarvis Drive	Project Number: M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager: Kayvan Kimyai	Reported: 8/2/99 12:00

MTBE by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9070118	**Date Prepared: 7/23/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9070118-BLK1**									
Methyl tert-butyl ether	7/23/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.2*	"	*76.0-114*	*108*			
Blank	**9070118-BLK2**									
Methyl tert-butyl ether	7/29/99			**ND**	ug/l	**0.500**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*52.2*	"	*76.0-114*	*104*			
LCS	**9070118-BS1**									
Methyl tert-butyl ether	7/23/99	50.0		50.2	ug/l	70.0-130	100			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.4*	"	*76.0-114*	*109*			
LCS	**9070118-BS2**									
Methyl tert-butyl ether	7/29/99	50.0		56.8	ug/l	70.0-130	114			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*53.5*	"	*76.0-114*	*107*			
Matrix Spike	**9070118-MS1**		**L907212-01**							
Methyl tert-butyl ether	7/23/99	50.0	11.0	60.1	ug/l	60.0-140	**98.2**			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*55.1*	"	*76.0-114*	*110*			
Matrix Spike Dup	**9070118-MSD1**		**L907212-01**							
Methyl tert-butyl ether	7/23/99	50.0	11.0	59.6	ug/l	60.0-140	**97.2**	25.0	**1.02**	
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.8*	"	*76.0-114*	*110*			
Batch: 9070122	**Date Prepared: 7/26/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9070122-BLK1**									
Methyl tert-butyl ether	7/26/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*46.0*	"	*76.0-114*	*92.0*			
Blank	**9070122-BLK2**									
Methyl tert-butyl ether	7/27/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.8*	"	*76.0-114*	*91.6*			
Blank	**9070122-BLK3**									
Methyl tert-butyl ether	7/28/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.6*	"	*76.0-114*	*91.2*			
Blank	**9070122-BLK4**									
Methyl tert-butyl ether	7/29/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.6*	"	*76.0-114*	*91.2*			

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

MTBE by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Blank	**9070122-BLK5**									
Methyl tert-butyl ether	7/30/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*46.0*	"	*76.0-114*	*92.0*			
LCS	**9070122-BS1**									
Methyl tert-butyl ether	7/26/99	50.0		40.1	ug/l	70.0-130	80.2			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*44.7*	"	*76.0-114*	*89.4*			
LCS	**9070122-BS2**									
Methyl tert-butyl ether	7/27/99	50.0		37.7	ug/l	70.0-130	75.4			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*43.8*	"	*76.0-114*	*87.6*			
LCS	**9070122-BS3**									
Methyl tert-butyl ether	7/28/99	50.0		38.8	ug/l	70.0-130	77.6			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.9*	"	*76.0-114*	*91.8*			
LCS	**9070122-BS4**									
Methyl tert-butyl ether	7/29/99	50.0		41.8	ug/l	70.0-130	83.6			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*48.0*	"	*76.0-114*	*96.0*			
LCS	**9070122-BS5**									
Methyl tert-butyl ether	7/30/99	50.0		40.9	ug/l	70.0-130	81.8			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*47.6*	"	*76.0-114*	*95.2*			
Matrix Spike	**9070122-MS1**		**L907232-01**							
Methyl tert-butyl ether	7/26/99	50.0	ND	41.8	ug/l	60.0-140	**83.6**			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*44.8*	"	*76.0-114*	*89.6*			
Matrix Spike Dup	**9070122-MSD1**		**L907232-01**							
Methyl tert-butyl ether	7/26/99	50.0	ND	40.6	ug/l	60.0-140	**81.2**	25.0	**2.91**	
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*47.0*	"	*76.0-114*	*94.0*			

Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
FAX (650) 232-9612

Sequoia - Morgan Hill	Project:	1	Sampled: 7/23/99
885 Jarvis Drive	Project Number:	M907957	Received: 7/29/99
Morgan Hill, CA 95037	Project Manager:	Kayvan Kimyai	Reported: 8/2/99 12:00

Notes and Definitions

#	Note
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
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical - Morgan Hill Subcontract Order

M907957 L907273

Sending Laboratory	Receiving Laboratory
Sequoia Analytical - Morgan Hill 885 Jarvis Drive Morgan Hill, CA 95037 Phone: 408-776-9600 Fax: 408-782-6308 Project Manager: Kayvan Kimyai	Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070 Phone: 650-232-9600 Fax: 650-232-9612

Subcontract Order Comments

7/26/99 11:19

Sample/Analysis Information

Sample Name	Matrix	Sampled/ Expires	Analysis Requested	Due	Lab Number	Container	Comments
M907957-01	Water	7/23/99				C	
		8/6/99	8260A MTBE H	8/9/99			San Carlos
M907957-02	Water	7/23/99				C	
		8/6/99	8260A MTBE H	8/9/99			San Carlos
M907957-03	Water	7/23/99				C	
		8/6/99	8260A MTBE H	8/9/99			San Carlos

Released By _____ Date 7/27/99 Received By _____ Date 7/29/99 0800

Released By _____ Date _____ Received By _____ Date _____

BLAINE TECH SERVICES INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY 990723-P3

CLIENT: Equiva - Karen Petryna

SITE: 105 5th Street

Oakland, CA

LAB: SEQUOIA

DHS #:

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

☐ EPA ☐ RWQCB REGION ____
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Send invoice to Equiva

Incident # 98995757

Send report to Blaine Tech Services

Attn: Ann Pember

SAMPLE I.D.			MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT: TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Alkalinity (EPA 310.1) Sulfate Oxygenates by 8260 EPA 300.0	1,2-DCA & EDB by 8010	Nitrate (300.0) EPA	Ferrous Iron EPA 200.7	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	7/23	12:10	W	6		X	X	X		X		X	X				M907957
MW-2	↓	12:35	↓	↓		↓	↓	↓		↓		↓	↓				
MW-3	↓	13:02	↓	↓		↓	↓	↓		↓		↓	↓				

SAMPLING COMPLETED: DATE 7/23/99 TIME 13:00

SAMPLING PERFORMED BY: Paul Sarna

RESULTS NEEDED NO LATER THAN

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	7-26-99	9:44		7-26-99	944
				7/26/99	1119

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

ATTACHMENT B

Soil 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**	MW-1
JOB/SITE NAME	oak105	**DRILLING STARTED**	14-May-99
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	14-May-99
PROJECT NUMBER	240-0472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	12.22' ft above msl
BORING DIAMETER	10"	**SCREENED INTERVAL**	4 to 24 ft bgs
LOGGED BY	T. Buggle	**DEPTH TO WATER (First Encountered)**	15.8 ftNA
REVIEWED BY	Darryk Ataide	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							SAND; (SAND); brown; soft; 5% silt, 90% sand, 5% gravel; low plasticity; high estimated permeability.		Portland Type I/II
									Bentonite Seal
									Monterey Sand #3
	2 3 6						2 4' - 5% silt, 95% sand.		
<0.400		MW-1@5.5		5					
							2 4' - 5% clay, 5% silt, 90% sand.		
	13 15 20								
<0.400		MW-1 @10.5		10					
					SP				
	N/A N/A						@ 14' - color brown, orange, rust		
	N/A			15					4"-diam., 0.010" Slotted Schedule 40 PVC
<0.400		MW-1 @15.5							
	7 10 20								
<0.400		MW-1 @20.5		20					
	3/18								
<0.400		MW-1 @25.5		25				25.5	Bottom of Boring @ 25.5 ft

WELL LOG (TPH-G): G:\OAK105\GINT\OAK105.GPJ DEFAULT.GDT 9/9/99

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**	MW-2
JOB/SITE NAME	oak105	**DRILLING STARTED**	14-May-99
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	14-May-99
PROJECT NUMBER	240-0472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	10.87' ft above msl
BORING DIAMETER	10"	**SCREENED INTERVAL**	4 to 24 ft bgs
LOGGED BY	T. Buggle	**DEPTH TO WATER (First Encountered)**	14.0 ftNA
REVIEWED BY	Darryk Ataide	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	DEPTH (ft bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
					ASPHLAT	0.8
					Sandy SILT; (ML); black; soft; 60% silt, 40% sand; low plasiticity; high estimated permeability.	
1700	4 4 6	MW-2 @5.5	5	ML		
					Silty SAND; (SP); grey-black; soft; moist, 30% silt, 70% sand; high plasiticity; high estimated permeability.	7.5
<2.0	10 15 26	MW-2 @10.5	10	SP		
					SAND; (SP); brown, rust, grey; soft; wet; 5% silt, 95% sand; low plasiticity; high estimated permeability.	12.5
<0.400	17 30 50	MW-2 @15.5	15	SP		
<0.400	8 8 10	MW-2 @20.5	20			
					Silty SAND; (ML); brown, rust; soft; wet; 5% clay, 15% silt, 80% sand; low plasiticity; high estimated permeability.	22.5
<0.400	2 2 3	MW-2 @25.5	25	GM		25.5

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Sand #3
- 4"-diam., 0.010" Slotted Schedule 40 PVC
- Bottom of Boring @ 25.5 ft

WELL LOG (TPH-G) G:\OAK105\GINT\OAK105.GPJ DEFAULT.GDT 9/9/99

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**	MW-3
JOB/SITE NAME	oak105	**DRILLING STARTED**	14-May-99
LOCATION	105 Fifth Street, Oakland, California	**DRILLING COMPLETED**	14-May-99
PROJECT NUMBER	240-0472	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger (Limited Access Rig)	**TOP OF CASING ELEVATION**	11.27' ft above msl
BORING DIAMETER	10"	**SCREENED INTERVAL**	5 to 25 ft bgs
LOGGED BY	T. Buggle	**DEPTH TO WATER (First Encountered)**	12 5 ftNA ▽
REVIEWED BY	Darryk Ataide	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
	N/A						**ASHPALT**	0.8	Portland Type I/II
							Silty SAND; (SM); black; soft; moist; 30% silt, 70% sand; low plasiticity; high estimated permeability.		Bentonite Seal
					SP				
	N/A			5					Monterey Sand #3
	N/A								
<20.0	N/A	MW-3 @6.5							
								7.5	
							SAND; (SP); brown rust; soft; moist; 5% silt, 95% sand; low plasiticity; high estimated permeability.		
	N/A			10					
	N/A								
<20.0	N/A	MW-3 @11.5							
							▽		
	N/A			15					4"-diam., 0.010" Slotted Schedule 40 PVC
	N/A						@ 15' - brown, grey, rust; soft-medium; wet.		
<20.0	N/A	MW-3 @16.5			SP				
							@ 17.5 - brown, grey, rust; medium; wet; 10% clay,10% silt, 80% sand; medium-high estimated permeability.		
	N/A			20					
	N/A								
<2.0	N/A	MW-3 @21.5							
	N/A								
	N/A								
<0.400	N/A	MW-3 @25.0		25				25.0	Bottom of Boring @ 25 ft

WELL LOG (TPH-G) G:\OAK105\GINT\OAK105.GPJ DEFAULT.GDT 9/9/99

ATTACHMENT C

Cambria's Standard Field Procedures for Monitoring Well Installation

STANDARD FIELD PROCEDURES FOR MONITORING WELL INSTALLATION

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

Well Construction and Surveying

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

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

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

Well Development

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

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

Groundwater Sampling

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

ATTACHMENT D

Well Top of Casing Elevation Survey Report

Virgil Chavez Land Surveying
312 Georgia Street, Suite 200
Vallejo, California 94590-5907
(707) 553-2476 • Fax (707) 553-8698

June 9, 1999
Project No. 1703-18

Troy Bugle
Cambria Environmental
1144 65th Street, Suite C
Oakland, Ca. 94608

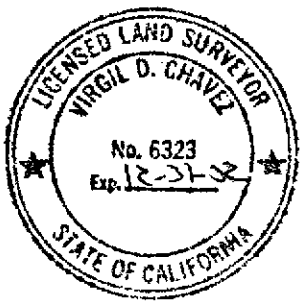
Subject: Monitoring Well Survey
Shell Service Station
105 Fifth Street
Oakland, Ca.

Dear Mr. Bugle:

This is to confirm that we have proceeded at your request to survey the monitoring wells located at the above referenced location. The survey was performed on May 26, 1999. The benchmark for the survey was a cut square in the top of curb, in mid-return at a over a curb inlet, at the northwest corner of 7th Fallon Street. Measurement locations were marked at approximate north side of top of box and top of casings. The stations and offsets are referenced to the back of sidewalk on Oak Street (BSW), looking southerly, beginning at the intersection (Intx.) with Fifth Street.
Benchmark Elevation = 19.29 MSL.

Monitoring Well No.	Rim Elevation	TOC Elevation
MW - 1	12.82′	12.22′
MW - 2	11.22′	10.87′
MW - 3	11.78′	11.27′

Well No.	Station	Offset
MW - 1	0+01.56	98.05(Rt.)
MW - 2	0+54.15	10.33(Rt.)
MW - 3	1+16.59	13.04(Rt.)
BSW Intx.	0+00.00	0.00
BSW Oak St.	---	0.00



Sincerely,

Virgil D. Chavez

Virgil D. Chavez, PLS 6323

Virgil Chavez Land Surveying
312 Georgia Street, Suite 200
Vallejo, California 94590-5907
(707) 553-2476 • Fax (707) 553-8698

June 10, 1999
Project No. 1703-18

Troy Bugle
Cambria Environmental
1144 65th Street, Suite C
Oakland, Ca. 94608

Re: Progress Billing

Monitoring Well Survey
105 Fifth Street
Oakland, Ca.

Description of Work

1. Perform Monitoring Well survey at the above referenced location, at the direction of Troy Bugle.

2. Prepare tables based on a field survey item referred to in (1.) above.

Total Amount Due $ 280.00
========

ATTACHMENT E

Soil Stockpile Laboratory Analytical Report

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

May 27, 1999

Troy Buggle
Cambria Environmental - Oakland
1144 65th St., Suite C
Oakland, CA 94608

RE: Shell Oil Co./P905412

Dear Troy Buggle

Enclosed are the results of analyses for sample(s) received by the laboratory on May 17, 1999.

The analysis for organic lead was performed in our Sequoia Redwood City Laboratory.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott Forbes

Scott Forbes
Project Manager

CA ELAP Certificate Number 2245

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled:	5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received:	5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported:	5/27/99

ANALYTICAL REPORT FOR P905412

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
SP-1	P905412-01	Soil	5/14/99
SP-2	P905412-02	Soil	5/14/99
SP-3	P905412-03	Soil	5/14/99
SP-4	P905412-04	Soil	5/14/99
Comp of SP-(1-4)	P905412-05	Soil	5/14/99

Sequoia Analytical

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FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

Total Petroleum Hydrocarbons as Gasoline by EPA 8015M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
SP-1			**P905412-01**				**Soil**	
Gasoline	9050598	5/21/99	5/21/99		0.400	**6.21**	mg/kg	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*102*	*%*	
SP-2			**P905412-02**				**Soil**	
Gasoline	9050598	5/21/99	5/21/99		0.400	ND	mg/kg	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*86.3*	*%*	
SP-3			**P905412-03**				**Soil**	
Gasoline	9050598	5/21/99	5/21/99		0.400	ND	mg/kg	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*73.7*	*%*	
SP-4			**P905412-04**				**Soil**	
Gasoline	9050598	5/21/99	5/21/99		2.00	ND	mg/kg	
Surrogate: 4-Bromofluorobenzene	"	"	"	*65.0-135*		*89.7*	*%*	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

BTEX by 8020M
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
Benzene	9050545	5/20/99	5/20/99		0.00500	ND	mg/kg	
Toluene	"	"	"		0.00500	ND	"	
Ethylbenzene	"	"	"		0.00500	**0.0457**	"	
Xylenes (total)	"	"	"		0.0100	**0.213**	"	
Methyl tert-butyl ether	"	"	"		0.0250	**0.436**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*65.0-135*		*92.7*	*%*	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

Total Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
Antimony	9050556	5/20/99	5/20/99	EPA 6010A	6.00	ND	mg/kg	
Arsenic	"	"	"	EPA 6010A	10.0	ND	"	
Barium	"	"	"	EPA 6010A	0.400	**47.2**	"	
Beryllium	"	"	"	EPA 6010A	0.100	**0.263**	"	
Cadmium	"	"	"	EPA 6010A	1.00	ND	"	
Chromium	"	"	"	EPA 6010A	1.00	**35.6**	"	
Cobalt	"	"	"	EPA 6010A	0.700	**4.59**	"	
Copper	"	"	"	EPA 6010A	1.00	**11.5**	"	
Lead	"	"	"	EPA 6010A	7.50	**17.3**	"	
Molybdenum	"	"	"	EPA 6010A	2.00	ND	"	
Nickel	"	"	"	EPA 6010A	3.00	**25.2**	"	
Selenium	"	"	"	EPA 6010A	10.0	ND	"	
Silver	"	"	"	EPA 6010A	0.700	ND	"	
Thallium	"	"	"	EPA 6010A	10.0	ND	"	
Vanadium	"	"	"	EPA 6010A	1.00	**25.8**	"	
Zinc	"	"	"	EPA 6010A	2.00	**27.6**	"	
Mercury	9050557	"	5/21/99	EPA 7471A	0.0500	ND	"	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

STLC CAM Metals by EPA 6000/7000 Series Methods
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
Antimony	9050552	5/22/99	5/25/99	EPA 6010A	300	ND	ug/l	
Arsenic	"	"	"	EPA 6010A	500	ND	"	
Barium	"	"	"	EPA 6010A	20.0	**2250**	"	AF-B
Beryllium	"	"	"	EPA 6010A	5.00	ND	"	
Cadmium	"	"	"	EPA 6010A	50.0	ND	"	
Chromium	"	"	"	EPA 6010A	50.0	**190**	"	
Cobalt	"	"	"	EPA 6010A	35.0	**194**	"	
Copper	"	"	"	EPA 6010A	50.0	**245**	"	
Lead	"	"	"	EPA 6010A	375	ND	"	
Molybdenum	"	"	"	EPA 6010A	100	ND	"	
Nickel	"	"	"	EPA 6010A	150	**238**	"	
Selenium	"	"	"	EPA 6010A	500	ND	"	
Silver	"	"	"	EPA 6010A	35.0	ND	"	
Thallium	"	"	"	EPA 6010A	500	ND	"	
Vanadium	"	"	"	EPA 6010A	50.0	**382**	"	
Zinc	"	"	"	EPA 6010A	100	**562**	"	AF-B
Mercury	9050561	5/26/99	5/26/99	EPA 7470A	2.00	ND	"	

Sequoia Analytical

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FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Metals by EPA 1311/6000/7000 Series Methods
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
Antimony	9050550	5/21/99	5/25/99	EPA 6010A	60.0	ND	ug/l	
Arsenic	"	"	"	EPA 6010A	100	ND	"	
Barium	"	"	"	EPA 6010A	4.00	**382**	"	AF-B
Beryllium	"	"	"	EPA 6010A	1.00	ND	"	
Cadmium	"	"	"	EPA 6010A	10.0	ND	"	
Chromium	"	"	"	EPA 6010A	10.0	ND	"	
Cobalt	"	"	"	EPA 6010A	7.00	**42.4**	"	
Copper	"	"	"	EPA 6010A	10.0	ND	"	
Lead	"	"	"	EPA 6010A	75.0	ND	"	
Molybdenum	"	"	"	EPA 6010A	20.0	ND	"	
Nickel	"	"	"	EPA 6010A	30.0	**35.4**	"	
Selenium	"	"	"	EPA 6010A	100	ND	"	
Silver	"	"	"	EPA 6010A	7.00	ND	"	
Thallium	"	"	"	EPA 6010A	100	ND	"	
Vanadium	"	"	"	EPA 6010A	10.0	ND	"	
Zinc	"	"	"	EPA 6010A	20.0	**80.0**	"	AF-B
Mercury	9050560	"	5/21/99	EPA 7470A	2.00	ND	"	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Volatile Organic Compounds by EPA Method 1311/8260B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
Benzene	9050635	5/20/99	5/24/99		10.0	ND	ug/l	
2-Butanone	"	"	"		100	ND	"	
Carbon tetrachloride	"	"	"		10.0	ND	"	
Chlorobenzene	"	"	"		10.0	ND	"	
Chloroform	"	"	"		10.0	ND	"	
1,2-Dichloroethane	"	"	"		10.0	ND	"	
1,1-Dichloroethene	"	"	"		10.0	ND	"	
Tetrachloroethene	"	"	"		10.0	**26.7**	"	
Trichloroethene	"	"	"		10.0	ND	"	
Vinyl chloride	"	"	"		10.0	ND	"	
Surrogate: Dibromofluoromethane	"	"	"	*86.0-118*		*98.0*	*%*	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*80.0-120*		*99.4*	"	
Surrogate: Toluene-d8	"	"	"	*88.0-110*		*97.4*	"	
Surrogate: 4-Bromofluorobenzene	"	"	"	*86.0-115*		*96.8*	"	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Semivolatiles by EPA Method 1311/8270B
Sequoia Analytical - Petaluma

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
Comp of SP-(1-4)			**P905412-05**				**Soil**	
1,4-Dichlorobenzene	9050529	5/19/99	5/25/99		40.0	ND	ug/l	
2,4-Dinitrotoluene	"	"	"		40.0	ND	"	
Hexachlorobenzene	"	"	"		40.0	ND	"	
Hexachlorobutadiene	"	"	"		40.0	ND	"	
Hexachloroethane	"	"	"		40.0	ND	"	
2-Methylphenol	"	"	"		40.0	ND	"	
4-Methylphenol	"	"	"		40.0	ND	"	
Nitrobenzene	"	"	"		40.0	ND	"	
Pentachlorophenol	"	"	"		200	ND	"	
Pyridine	"	"	"		40.0	ND	"	
2,4,5-Trichlorophenol	"	"	"		40.0	ND	"	
2,4,6-Trichlorophenol	"	"	"		40.0	ND	"	
Surrogate: 2-Fluorophenol	"	"	"	-		*60.2*	%	
Surrogate: Phenol-d6	"	"	"	-		*66.2*	"	
Surrogate: Nitrobenzene-d5	"	"	"	-		*62.8*	"	
Surrogate: 2-Fluorobiphenyl	"	"	"	-		*70.5*	"	
Surrogate: 2,4,6-Tribromophenol	"	"	"	-		*62.3*	"	
Surrogate: Terphenyl-d14	"	"	"	-		*87.3*	"	

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

Total Petroleum Hydrocarbons as Gasoline by EPA 8015M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050598	**Date Prepared: 5/21/99**					**Extraction Method: EPA 5030 soils**				
Blank	**9050598-BLK1**									
Gasoline	5/21/99			**ND**	mg/kg	**0.400**				
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.247*	"	*65.0-135*	*82.3*			
Matrix Spike	**9050598-MS1**		**P905339-01**							
Gasoline	5/21/99	2.00	ND	1.42	mg/kg	65.0-135	**71.0**			
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.201*	"	*65.0-135*	*67.0*			
Matrix Spike Dup	**9050598-MSD1**		**P905339-01**							
Gasoline	5/21/99	2.00	ND	1.42	mg/kg	65.0-135	**71.0**	20.0	**0**	
Surrogate: 4-Bromofluorobenzene	"	*0.300*		*0.200*	"	*65.0-135*	*66.7*			

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

BTEX by 8020M/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050545	**Date Prepared: 5/20/99**					**Extraction Method: EPA 5030 soils**				
Blank	**9050545-BLK1**									
Benzene	5/20/99			**ND**	mg/kg	**0.00200**				
Toluene	"			**ND**	"	**0.00200**				
Ethylbenzene	"			**ND**	"	**0.00200**				
Xylenes (total)	"			**ND**	"	**0.00400**				
Methyl tert-butyl ether	"			**ND**	"	**0.0100**				
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.279*	"	*65.0-135*	*93.0*			
LCS	**9050545-BS1**									
Benzene	5/20/99	0.200		0.199	mg/kg	65.0-135	99.5			
Toluene	"	0.200		0.193	"	65.0-135	96.5			
Ethylbenzene	"	0.200		0.190	"	65.0-135	95.0			
Xylenes (total)	"	0.600		0.573	"	65.0-135	95.5			
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.308*	"	*65.0-135*	*103*			
Matrix Spike	**9050545-MS1**		**P905336-01**							
Benzene	5/20/99	0.200	ND	0.220	mg/kg	65.0-135	**110**			
Toluene	"	0.200	ND	0.207	"	65.0-135	**103**			
Ethylbenzene	"	0.200	ND	0.196	"	65.0-135	**98.0**			
Xylenes (total)	"	0.600	ND	0.605	"	65.0-135	**101**			
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.333*	"	*65.0-135*	*111*			
Matrix Spike Dup	**9050545-MSD1**		**P905336-01**							
Benzene	5/20/99	0.200	ND	0.211	mg/kg	65.0-135	**105**	20.0	**4.65**	
Toluene	"	0.200	ND	0.199	"	65.0-135	**99.5**	20.0	**3.46**	
Ethylbenzene	"	0.200	ND	0.192	"	65.0-135	**96.0**	20.0	**2.06**	
Xylenes (total)	"	0.600	ND	0.585	"	65.0-135	**97.5**	20.0	**3.53**	
Methyl tert-butyl ether	"	0.200	ND	0.240	"	65.0-135	**120**	20.0		
Surrogate: a,a,a-Trifluorotoluene	"	*0.300*		*0.323*	"	*65.0-135*	*108*			

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050556	**Date Prepared: 5/20/99**					**Extraction Method: EPA 3050B**				
Blank	**9050556-BLK1**									
Antimony	5/20/99			**ND**	mg/kg	**6.00**				
Arsenic	"			**ND**	"	**10.0**				
Barium	"			**ND**	"	**0.400**				
Beryllium	"			**ND**	"	**0.100**				
Cadmium	"			**ND**	"	**1.00**				
Chromium	"			**ND**	"	**1.00**				
Cobalt	"			**ND**	"	**0.700**				
Copper	"			**ND**	"	**1.00**				
Lead	"			**ND**	"	**7.50**				
Molybdenum	"			**ND**	"	**2.00**				
Nickel	"			**ND**	"	**3.00**				
Selenium	"			**ND**	"	**10.0**				
Silver	"			**ND**	"	**0.700**				
Thallium	"			**ND**	"	**10.0**				
Vanadium	"			**ND**	"	**1.00**				
Zinc	"			**ND**	"	**2.00**				
LCS	**9050556-BS1**									
Antimony	5/20/99	50.0		46.6	mg/kg	80.0-120	93.2			
Arsenic	"	50.0		46.5	"	80.0-120	93.0			
Barium	"	50.0		46.3	"	80.0-120	92.6			
Beryllium	"	5.00		4.81	"	80.0-120	96.2			
Cadmium	"	5.00		5.13	"	80.0-120	103			
Chromium	"	50.0		45.9	"	80.0-120	91.8			
Cobalt	"	50.0		47.5	"	80.0-120	95.0			
Copper	"	50.0		47.5	"	80.0-120	95.0			
Lead	"	50.0		46.4	"	80.0-120	92.8			
Molybdenum	"	50.0		48.5	"	80.0-120	97.0			
Nickel	"	50.0		47.7	"	80.0-120	95.4			
Selenium	"	50.0		45.5	"	80.0-120	91.0			
Silver	"	5.00		4.44	"	80.0-120	88.8			
Thallium	"	50.0		46.2	"	80.0-120	92.4			
Vanadium	"	50.0		47.3	"	80.0-120	94.6			
Zinc	"	50.0		46.6	"	80.0-120	93.2			
Matrix Spike	**9050556-MS1**		**P905412-05**							
Antimony	5/20/99	44.6	ND	29.6	mg/kg	75.0-125	**66.4**			1
Arsenic	"	44.6	ND	42.6	"	75.0-125	**95.5**			
Barium	"	44.6	47.2	86.3	"	75.0-125	**87.7**			
Beryllium	"	4.46	0.263	4.34	"	75.0-125	**91.4**			

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**9050556-MS1**		**P905412-05**							
Cadmium	5/20/99	4.46	ND	4.00	mg/kg	75.0-125	**89.7**			
Chromium	"	44.6	35.6	76.3	"	75.0-125	**91.3**			
Cobalt	"	44.6	4.59	44.0	"	75.0-125	**88.4**			
Copper	"	44.6	11.5	50.4	"	75.0-125	**87.2**			
Lead	"	44.6	17.3	47.0	"	75.0-125	**66.6**			1
Molybdenum	"	44.6	ND	39.6	"	75.0-125	**88.8**			
Nickel	"	44.6	25.2	64.9	"	75.0-125	**89.0**			
Selenium	"	44.6	ND	39.9	"	75.0-125	**89.5**			
Silver	"	4.46	ND	3.59	"	75.0-125	**80.5**			
Thallium	"	44.6	ND	37.2	"	75.0-125	**83.4**			
Vanadium	"	44.6	25.8	66.7	"	75.0-125	**91.7**			
Zinc	"	44.6	27.6	64.8	"	75.0-125	**83.4**			
Matrix Spike Dup	**9050556-MSD1**		**P905412-05**							
Antimony	5/20/99	47.2	ND	28.3	mg/kg	75.0-125	**60.0**	20.0	**10.1**	1
Arsenic	"	47.2	ND	40.1	"	75.0-125	**85.0**	20.0	**11.6**	
Barium	"	47.2	47.2	80.7	"	75.0-125	**71.0**	20.0	**21.0**	1
Beryllium	"	4.72	0.263	4.37	"	75.0-125	**87.0**	20.0	**4.93**	
Cadmium	"	4.72	ND	4.41	"	75.0-125	**93.4**	20.0	**4.04**	
Chromium	"	47.2	35.6	71.7	"	75.0-125	**76.5**	20.0	**17.6**	
Cobalt	"	47.2	4.59	44.4	"	75.0-125	**84.3**	20.0	**4.75**	
Copper	"	47.2	11.5	50.4	"	75.0-125	**82.4**	20.0	**5.66**	
Lead	"	47.2	17.3	47.0	"	75.0-125	**62.9**	20.0	**5.71**	1
Molybdenum	"	47.2	ND	40.3	"	75.0-125	**85.4**	20.0	**3.90**	
Nickel	"	47.2	25.2	63.3	"	75.0-125	**80.7**	20.0	**9.78**	
Selenium	"	47.2	ND	38.3	"	75.0-125	**81.1**	20.0	**9.85**	
Silver	"	4.72	ND	3.52	"	75.0-125	**74.6**	20.0	**7.61**	1
Thallium	"	47.2	ND	36.8	"	75.0-125	**78.0**	20.0	**6.69**	
Vanadium	"	47.2	25.8	64.3	"	75.0-125	**81.6**	20.0	**11.7**	
Zinc	"	47.2	27.6	61.6	"	75.0-125	**72.0**	20.0	**14.7**	1
Batch: 9050557	**Date Prepared: 5/20/99**					**Extraction Method: EPA 7471A**				
Blank	**9050557-BLK1**									
Mercury	5/21/99			**ND**	mg/kg	**0.0500**				
LCS	**9050557-BS1**									
Mercury	5/21/99	0.133		0.123	mg/kg	80.0-120	92.5			
Matrix Spike	**9050557-MS1**		**P905412-05**							
Mercury	5/21/99	0.119	ND	0.137	mg/kg	75.0-125	**115**			

Sequoia Analytical

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup	**9050557-MSD1**		**P905412-05**							
Mercury	5/21/99	0.129	ND	0.157	mg/kg	75.0-125	**122**	20.0	**5.91**	

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050552	**Date Prepared: 5/22/99**					**Extraction Method: EPA 3010A**				
Blank	**9050552-BLK1**									
Antimony	5/25/99			**ND**	ug/l	**300**				
Arsenic	"			**ND**	"	**500**				
Barium	"			**47.3**	"	**20.0**				
Beryllium	"			**ND**	"	**5.00**				
Cadmium	"			**ND**	"	**50.0**				
Chromium	"			**ND**	"	**50.0**				
Cobalt	"			**ND**	"	**35.0**				
Copper	"			**ND**	"	**50.0**				
Lead	"			**ND**	"	**375**				
Molybdenum	"			**ND**	"	**100**				
Nickel	"			**ND**	"	**150**				
Selenium	"			**ND**	"	**500**				
Silver	"			**ND**	"	**35.0**				
Thallium	"			**ND**	"	**500**				
Vanadium	"			**ND**	"	**50.0**				
Zinc	"			**105**	"	**100**				
LCS	**9050552-BS1**									
Antimony	5/25/99	2500		2490	ug/l	80.0-120	99.6			
Arsenic	"	2500		2590	"	80.0-120	104			
Barium	"	2500		2320	"	80.0-120	92.8			
Beryllium	"	250		238	"	80.0-120	95.2			
Cadmium	"	250		229	"	80.0-120	91.6			
Chromium	"	2500		2310	"	80.0-120	92.4			
Cobalt	"	2500		2350	"	80.0-120	94.0			
Copper	"	2500		2340	"	80.0-120	93.6			
Lead	"	2500		2370	"	80.0-120	94.8			
Molybdenum	"	2500		2490	"	80.0-120	99.6			
Nickel	"	2500		2370	"	80.0-120	94.8			
Selenium	"	2500		2990	"	80.0-120	120			
Silver	"	250		229	"	80.0-120	91.6			
Thallium	"	2500		2390	"	80.0-120	95.6			
Vanadium	"	2500		2360	"	80.0-120	94.4			
Zinc	"	2500		2430	"	80.0-120	97.2			
Matrix Spike	**9050552-MS1**		**P905063-02**							
Antimony	5/25/99	2500	ND	2430	ug/l	75.0-125	**97.2**			
Arsenic	"	2500	ND	2590	"	75.0-125	**104**			
Barium	"	2500	2850	4610	"	75.0-125	**70.4**			1
Beryllium	"	250	ND	245	"	75.0-125	**98.0**			

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**9050552-MS1**		**P905063-02**							
Cadmium	5/25/99	250	ND	236	ug/l	75.0-125	**94.4**			
Chromium	"	2500	700	2850	"	75.0-125	**86.0**			
Cobalt	"	2500	134	2420	"	75.0-125	**91.4**			
Copper	"	2500	ND	2310	"	75.0-125	**92.4**			
Lead	"	2500	ND	2260	"	75.0-125	**90.4**			
Molybdenum	"	2500	ND	2410	"	75.0-125	**96.4**			
Nickel	"	2500	504	2700	"	75.0-125	**87.8**			
Selenium	"	2500	ND	1720	"	75.0-125	**68.8**			1
Silver	"	250	ND	213	"	75.0-125	**85.2**			
Thallium	"	2500	ND	1940	"	75.0-125	**77.6**			
Vanadium	"	2500	399	2670	"	75.0-125	**90.8**			
Zinc	"	2500	ND	2350	"	75.0-125	**94.0**			
Matrix Spike Dup	**9050552-MSD1**		**P905063-02**							
Antimony	5/25/99	2500	ND	2500	ug/l	75.0-125	**100**	20.0	**2.84**	
Arsenic	"	2500	ND	2660	"	75.0-125	**106**	20.0	**1.90**	
Barium	"	2500	2850	5030	"	75.0-125	**87.2**	20.0	**21.3**	1
Beryllium	"	250	ND	247	"	75.0-125	**98.8**	20.0	**0.813**	
Cadmium	"	250	ND	236	"	75.0-125	**94.4**	20.0	**0**	
Chromium	"	2500	700	2930	"	75.0-125	**89.2**	20.0	**3.65**	
Cobalt	"	2500	134	2440	"	75.0-125	**92.2**	20.0	**0.871**	
Copper	"	2500	ND	2240	"	75.0-125	**89.6**	20.0	**3.08**	
Lead	"	2500	ND	2290	"	75.0-125	**91.6**	20.0	**1.32**	
Molybdenum	"	2500	ND	2330	"	75.0-125	**93.2**	20.0	**3.38**	
Nickel	"	2500	504	2780	"	75.0-125	**91.0**	20.0	**3.58**	
Selenium	"	2500	ND	1820	"	75.0-125	**72.8**	20.0	**5.65**	1
Silver	"	250	ND	206	"	75.0-125	**82.4**	20.0	**3.34**	
Thallium	"	2500	ND	2100	"	75.0-125	**84.0**	20.0	**7.92**	
Vanadium	"	2500	399	2740	"	75.0-125	**93.6**	20.0	**3.04**	
Zinc	"	2500	ND	2360	"	75.0-125	**94.4**	20.0	**0.425**	
Batch: 9050561	**Date Prepared: 5/26/99**					**Extraction Method: EPA 7470A**				
Blank	**9050561-BLK1**									
Mercury	5/26/99			**ND**	ug/l	**2.00**				
LCS	**9050561-BS1**									
Mercury	5/26/99	16.0		16.5	ug/l	80.0-120	103			
Matrix Spike	**9050561-MS1**		**P905412-05**							
Mercury	5/26/99	16.0	ND	18.1	ug/l	75.0-125	**113**			

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup	**9050561-MSD1**		**P905412-05**							
Mercury	5/26/99	16.0	ND	18.9	ug/l	75.0-125	**118**	20.0	**4.33**	

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050550	**Date Prepared: 5/21/99**					**Extraction Method: EPA 3010A TCLP**				
Blank	**9050550-BLK1**									
Antimony	5/25/99			**ND**	ug/l	**60.0**				
Arsenic	"			**ND**	"	**100**				
Barium	"			**8.79**	"	**4.00**				
Beryllium	"			**ND**	"	**1.00**				
Cadmium	"			**ND**	"	**10.0**				
Chromium	"			**ND**	"	**10.0**				
Cobalt	"			**ND**	"	**7.00**				
Copper	"			**ND**	"	**10.0**				
Lead	"			**ND**	"	**75.0**				
Molybdenum	"			**ND**	"	**20.0**				
Nickel	"			**ND**	"	**30.0**				
Selenium	"			**ND**	"	**100**				
Silver	"			**ND**	"	**7.00**				
Thallium	"			**ND**	"	**100**				
Vanadium	"			**ND**	"	**10.0**				
Zinc	"			**42.4**	"	**20.0**				
LCS	**9050550-BS1**									
Antimony	5/25/99	500		516	ug/l	80.0-120	103			
Arsenic	"	500		529	"	80.0-120	106			
Barium	"	500		495	"	80.0-120	99.0			
Beryllium	"	50.0		51.3	"	80.0-120	103			
Cadmium	"	50.0		47.8	"	80.0-120	95.6			
Chromium	"	500		482	"	80.0-120	96.4			
Cobalt	"	500		494	"	80.0-120	98.8			
Copper	"	500		502	"	80.0-120	100			
Lead	"	500		499	"	80.0-120	99.8			
Molybdenum	"	500		518	"	80.0-120	104			
Nickel	"	500		505	"	80.0-120	101			
Selenium	"	500		564	"	80.0-120	113			
Silver	"	50.0		47.0	"	80.0-120	94.0			
Thallium	"	500		493	"	80.0-120	98.6			
Vanadium	"	500		495	"	80.0-120	99.0			
Zinc	"	500		554	"	80.0-120	111			
Matrix Spike	**9050550-MS1**		**P905412-05**							
Antimony	5/25/99	500	ND	524	ug/l	75.0-125	**105**			
Arsenic	"	500	ND	523	"	75.0-125	**105**			
Barium	"	500	382	855	"	75.0-125	**94.6**			
Beryllium	"	50.0	ND	50.3	"	75.0-125	**101**			

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**9050550-MS1**		**P905412-05**							
Cadmium	5/25/99	50.0	ND	48.6	ug/l	75.0-125	**97.2**			
Chromium	"	500	ND	473	"	75.0-125	**94.6**			
Cobalt	"	500	42.4	520	"	75.0-125	**95.5**			
Copper	"	500	ND	492	"	75.0-125	**98.4**			
Lead	"	500	ND	491	"	75.0-125	**98.2**			
Molybdenum	"	500	ND	496	"	75.0-125	**99.2**			
Nickel	"	500	35.4	506	"	75.0-125	**94.1**			
Selenium	"	500	ND	534	"	75.0-125	**107**			
Silver	"	50.0	ND	45.6	"	75.0-125	**91.2**			
Thallium	"	500	ND	438	"	75.0-125	**87.6**			
Vanadium	"	500	ND	490	"	75.0-125	**98.0**			
Zinc	"	500	80.0	563	"	75.0-125	**96.6**			
Matrix Spike Dup	**9050550-MSD1**		**P905412-05**							
Antimony	5/25/99	500	ND	517	ug/l	75.0-125	**103**	20.0	**1.92**	
Arsenic	"	500	ND	530	"	75.0-125	**106**	20.0	**0.948**	
Barium	"	500	382	881	"	75.0-125	**99.8**	20.0	**5.35**	
Beryllium	"	50.0	ND	51.1	"	75.0-125	**102**	20.0	**0.985**	
Cadmium	"	50.0	ND	47.8	"	75.0-125	**95.6**	20.0	**1.66**	
Chromium	"	500	ND	485	"	75.0-125	**97.0**	20.0	**2.51**	
Cobalt	"	500	42.4	530	"	75.0-125	**97.5**	20.0	**2.07**	
Copper	"	500	ND	506	"	75.0-125	**101**	20.0	**2.61**	
Lead	"	500	ND	491	"	75.0-125	**98.2**	20.0	**0**	
Molybdenum	"	500	ND	507	"	75.0-125	**101**	20.0	**1.80**	
Nickel	"	500	35.4	505	"	75.0-125	**93.9**	20.0	**0.213**	
Selenium	"	500	ND	564	"	75.0-125	**113**	20.0	**5.45**	
Silver	"	50.0	ND	47.6	"	75.0-125	**95.2**	20.0	**4.29**	
Thallium	"	500	ND	476	"	75.0-125	**95.2**	20.0	**8.32**	
Vanadium	"	500	ND	500	"	75.0-125	**100**	20.0	**2.02**	
Zinc	"	500	80.0	579	"	75.0-125	**99.8**	20.0	**3.26**	
Batch: 9050560	**Date Prepared: 5/21/99**					**Extraction Method: EPA 7470A**				
Blank	**9050560-BLK1**									
Mercury	5/21/99			**ND**	ug/l	**2.00**				
LCS	**9050560-BS1**									
Mercury	5/21/99	16.0		17.1	ug/l	80.0-120	107			
Matrix Spike	**9050560-MS1**		**P905357-01**							
Mercury	5/21/99	16.0	ND	17.0	ug/l	75.0-125	**106**			

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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled:	5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received:	5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported:	5/27/99

TCLP Metals by EPA 1311/6000/7000 Series Methods/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike Dup	**9050560-MSD1**		**P905357-01**							
Mercury	5/21/99	16.0	ND	16.5	ug/l	75.0-125	**103**	20.0	**2.87**	

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FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Volatile Organic Compounds by EPA Method 1311/8260B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050635	**Date Prepared: 5/20/99**					**Extraction Method: EPA 1311/ZHE**				
Blank	**9050635-BLK1**									
Benzene	5/24/99			**ND**	ug/l	**10.0**				
2-Butanone	"			**ND**	"	**100**				
Carbon tetrachloride	"			**ND**	"	**10.0**				
Chlorobenzene	"			**ND**	"	**10.0**				
Chloroform	"			**ND**	"	**10.0**				
1,2-Dichloroethane	"			**ND**	"	**10.0**				
1,1-Dichloroethene	"			**ND**	"	**10.0**				
Tetrachloroethene	"			**ND**	"	**10.0**				
Trichloroethene	"			**ND**	"	**10.0**				
Vinyl chloride	"			**ND**	"	**10.0**				
Surrogate: Dibromofluoromethane	"	*50.0*		*48.4*	"	*86.0-118*	*96.8*			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*49.3*	"	*80.0-120*	*98.6*			
Surrogate: Toluene-d8	"	*50.0*		*47.9*	"	*88.0-110*	*95.8*			
Surrogate: 4-Bromofluorobenzene	"	*50.0*		*50.5*	"	*86.0-115*	*101*			
Matrix Spike	**9050635-MS1**		**P905412-05**							
Benzene	5/24/99	125	ND	128	ug/l	70.0-130	**102**			
2-Butanone	"	250	ND	271	"	70.0-130	**108**			
Carbon tetrachloride	"	125	ND	124	"	70.0-130	**99.2**			
Chlorobenzene	"	125	ND	127	"	70.0-130	**102**			
Chloroform	"	125	ND	129	"	70.0-130	**103**			
1,2-Dichloroethane	"	125	ND	124	"	70.0-130	**99.2**			
1,1-Dichloroethene	"	125	ND	128	"	70.0-130	**102**			
Tetrachloroethene	"	125	26.7	150	"	70.0-130	**98.6**			
Trichloroethene	"	125	ND	125	"	70.0-130	**100**			
Vinyl chloride	"	125	ND	120	"	70.0-130	**96.0**			
Surrogate: Dibromofluoromethane	"	*50.0*		*49.1*	"	*86.0-118*	*98.2*			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*48.7*	"	*80.0-120*	*97.4*			
Surrogate: Toluene-d8	"	*50.0*		*48.1*	"	*88.0-110*	*96.2*			
Surrogate: 4-Bromofluorobenzene	"	*50.0*		*48.6*	"	*86.0-115*	*97.2*			

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Semivolatiles by EPA Method 1311/8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9050529	**Date Prepared: 5/19/99**				**Extraction Method: EPA 3520B/Leachates**					
Blank	**9050529-BLK1**									
1,4-Dichlorobenzene	5/25/99			**ND**	ug/l	**40.0**				
2,4-Dinitrotoluene	"			**ND**	"	**40.0**				
Hexachlorobenzene	"			**ND**	"	**40.0**				
Hexachlorobutadiene	"			**ND**	"	**40.0**				
Hexachloroethane	"			**ND**	"	**40.0**				
2-Methylphenol	"			**ND**	"	**40.0**				
4-Methylphenol	"			**ND**	"	**40.0**				
Nitrobenzene	"			**ND**	"	**40.0**				
Pentachlorophenol	"			**ND**	"	**200**				
Pyridine	"			**ND**	"	**40.0**				
2,4,5-Trichlorophenol	"			**ND**	"	**40.0**				
2,4,6-Trichlorophenol	"			**ND**	"	**40.0**				
Surrogate: 2-Fluorophenol	"	*150*		*76.5*	"		*51.0*			
Surrogate: Phenol-d6	"	*150*		*87.7*	"		*58.5*			
Surrogate: Nitrobenzene-d5	"	*100*		*55.1*	"		*55.1*			
Surrogate: 2-Fluorobiphenyl	"	*100*		*64.6*	"		*64.6*			
Surrogate: 2,4,6-Tribromophenol	"	*150*		*94.1*	"		*62.7*			
Surrogate: Terphenyl-d14	"	*100*		*95.3*	"		*95.3*			
LCS	**9050529-BS1**									
1,4-Dichlorobenzene	5/25/99	100		76.6	ug/l		76.6			
2,4-Dinitrotoluene	"	100		80.5	"		80.5			
Hexachlorobenzene	"	100		102	"		102			
Hexachlorobutadiene	"	100		79.3	"		79.3			
Hexachloroethane	"	100		73.2	"		73.2			
2-Methylphenol	"			78.8	"					
4-Methylphenol	"			118	"					
Nitrobenzene	"	100		78.6	"		78.6			
Pentachlorophenol	"	100		78.6	"		78.6			
Pyridine	"	100		72.2	"		72.2			
2,4,5-Trichlorophenol	"	100		80.5	"		80.5			
2,4,6-Trichlorophenol	"	100		83.6	"		83.6			
Surrogate: 2-Fluorophenol	"	*150*		*98.7*	"		*65.8*			
Surrogate: Phenol-d6	"	*150*		*106*	"		*70.7*			
Surrogate: Nitrobenzene-d5	"	*100*		*61.7*	"		*61.7*			
Surrogate: 2-Fluorobiphenyl	"	*100*		*66.6*	"		*66.6*			
Surrogate: 2,4,6-Tribromophenol	"	*150*		*96.5*	"		*64.3*			
Surrogate: Terphenyl-d14	"	*100*		*91.3*	"		*91.3*			

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Petaluma, CA 94954
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Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled: 5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received: 5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported: 5/27/99

TCLP Semivolatiles by EPA Method 1311/8270B/Quality Control
Sequoia Analytical - Petaluma

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS Dup	**9050529-BSD1**									
1,4-Dichlorobenzene	5/25/99	100		84.0	ug/l		84.0		9.22	
2,4-Dinitrotoluene	"	100		90.7	"		90.7		11.9	
Hexachlorobenzene	"	100		102	"		102		0	
Hexachlorobutadiene	"	100		89.9	"		89.9		12.5	
Hexachloroethane	"	100		82.4	"		82.4		11.8	
2-Methylphenol	"			86.4	"					
4-Methylphenol	"			128	"					
Nitrobenzene	"	100		84.2	"		84.2		6.88	
Pentachlorophenol	"	100		82.5	"		82.5		4.84	
Pyridine	"	100		81.0	"		81.0		11.5	
2,4,5-Trichlorophenol	"	100		94.0	"		94.0		15.5	
2,4,6-Trichlorophenol	"	100		96.5	"		96.5		14.3	
Surrogate: 2-Fluorophenol	"	*150*		*112*	"		*74.7*			
Surrogate: Phenol-d6	"	*150*		*124*	"		*82.7*			
Surrogate: Nitrobenzene-d5	"	*100*		*67.7*	"		*67.7*			
Surrogate: 2-Fluorobiphenyl	"	*100*		*72.0*	"		*72.0*			
Surrogate: 2,4,6-Tribromophenol	"	*150*		*106*	"		*70.7*			
Surrogate: Terphenyl-d14	"	*100*		*91.5*	"		*91.5*			

Sequoia Analytical

1455 McDowell Blvd. North, Ste. D
Petaluma, CA 94954
(707) 792-1865
FAX (707) 792-0342

Cambria Environmental - Oakland	Project:	Shell Oil Co.	Sampled:	5/14/99
1144 65th St., Suite C	Project Number:	105 5th St., Oakland	Received:	5/17/99
Oakland, CA 94608	Project Manager:	Troy Buggle	Reported:	5/27/99

Notes and Definitions

#	Note
AF-B	The analyte was found in an associated blank as well as in the sample.
1	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
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
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Sequoia Analytical, Petaluma
1455 N. McDowell Blvd., Ste. D
Petaluma, CA 94954
Attention: Scott Forbes

Client Project ID: P905412
Sample Descript: Soil
Analysis for: Organic Lead
First Sample #: 906-0734

Sampled: May 14, 1999
Received: Jun 8, 1999
Extracted: Jun 8, 1999
Analyzed: Jun 8, 1999
Reported: Jun 9, 1999

LABORATORY ANALYSIS FOR: Organic Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg	QC Batch Number	Instrument ID
906-0734	SP-(1-4)	2.5	N.D.	ME060899LUFTMDA	MV-1

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Dimple Sharma
Project Manager

Use for SP1 - SP4

105 5th St, Oakland, CA.

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

MATERIAL: SOIL CONTAMINATED WITH GASOLINE, DIESEL OR CRUDE (NOT FROM A LEAKING UNDERGROUND STORAGE TANK)

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

MINIMUM REQUIRED TESTING

TPH = TOTAL PETROLEUM HYDROCARBONS, DHS GC-FID MOD 8015
GASOLINE OR DIESEL AS REQUIRED.
BTXE = EPA 8020
CAM METALS = TTLC ALL:
STLC ON ALL TTLC METALS 10 X STLC MAXIMUM:
TTLC LEAD => 13 MG/KG REQUIRES ORGANIC ANALYSIS
TCLP EXTRACTION = EPA 1311 **AND**
VOC ON EXTRACT = EPA 8240
SVOC ON EXTRACT = EPA 8270
METALS ON EXTRACT = EPA 6010, (USE 7470 FOR Hg)

NOTE: IF PESTICIDES = EPA 8080 (ON EXTRACT)
IF HERBICIDES = EPA 8150 (ON EXTRACT)

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)

- 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 INFO. WITH ALL ANALYTICAL REPORTS.
- MAIL OR FAX ALL ANALYSIS TO PERSON REQUESTING ANALYSIS.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ____

Date: 5/17/99
Page 1 of 1

Site Address: 105-5th St., Oakland CA

~~WIC#~~: Incident # 9899575 / SAP = 135700

Shell Engineer: Karen Petryna
Phone No.: 559 643-9306
Fax #: 645-5643

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

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

Comments:

Sampled by: TROY BUGGLE

Printed Name: [signature]

LAB: Sequoia - Redwood City

Analysis Required: P905412

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring ☐	4461	24 hours ☐
Site Investigation ☐	4441	48 hours ☒ (48 hours.)
Soil Classify/Disposal ☐	4442	16 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: ____

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		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-1	5/14		X			1		P905412-01										Analyze	per the
SP-2	5/14		X			1						02						Attached	Shell
SP-3	5/14		X			1						03						Waste	Management
SP-4	5/14		X			1						04						Procedures.	
												-05 Comp							

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐

COOLER TEMPERATURE ____ °C

Relinquished By (signature):	Printed Name:	Date/Time:	Received (signature):	Printed Name:	Date/Time:
[signature]	Troy Buggle	Date: 5/17/99 Time: 10:30	[signature]	Kent Ritthaler	Date: 5/17/99 Time: 1330
[signature]		Date: 5/17/99 Time: 1535	[signature]	Phil Baxter	Date: 5-18 Time: 720
[signature]		Date: 5-18 Time:	[signature]	Elmer Torres	Date: 5/18/99 Time: 1700

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

ATTACHMENT F

Soil Disposal Confirmation Report

DISPOSAL CONFIRMATION

Consultant:	CAMBRIA ENVIRONMENTAL
Contact:	TROY BUGGLE
Phone/Fax:	(510) 420-3333 FAX (510) 420-9170
Client:	EQUIVA SERVICES - KAREN PETRYNA
Station #/Wic #:	204-5511-0402 SAP 135700 INCIDENT 98995757
Site Address:	105 5TH STREET @ OAK
City/State:	OAKLAND, CA
Estimated YD/Ton:	5-7 YARDS
Actual YD/Ton:	2.79 TONS
Disposal Facility:	FORWARD LANDFILL
Disposal Date:	JUNE 16, 1999
Contact:	BRAD BONNER
Phone #:	(800) 204-4242
Hauler:	MANLEY & SONS TRUCKING, INC.
Contact:	TIM A. MANLEY
Phone #:	(916) 381-6864
Fax #:	(916) 381-1573

Date & Time Faxed

9019