

PROTECTION

October 29, 1999

99 NOV -2 PM 4: 01

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

Re:

Well Installation Report

Shell-branded Service Station 1285 Bancroft Avenue San Leandro, California Incident #98996067 Cambria Project #241-0504-008

9

Dear Ms. Shin:

On behalf of Equiva Services LLC (Equiva), Cambria Environmental Technology, Inc. (Cambria) is submitting the results of the well installation activities conducted on May 17, 18, and 19, 1999 at the above-referenced site. The objective of this installation was to further plume definition to the west and south of the site and to assess the potential risk to occupants of the residential area adjacent to the site. The investigation was conducted in accordance with our April 14, 1999 Work Plan Addendum, which was approved in the April 15, 1999 Alameda County Health Care Services Agency (ACHCSA) letter to Equiva. Presented below are summaries of the site background, investigation procedures, investigation results, and our conclusions and recommendations.

#### SITE BACKGROUND

Location:

The operating Shell-branded service station is located at the northwest corner of Bancroft and Estudillo Avenues in San

Leandro, California (Figures 1 and 2).

Surrounding Land Use:

The area surrounding the site is primarily residential

development.

Sonoma, CA
Portland, OR

Local Topography:

The site is approximately 65 ft above mean sea level and

slopes very gently towards San Francisco Bay to the west. San Leandro Creek is located approximately 500 feet

northwest of the site.

Cambria Environmental Technology, Inc.

Seattle, WA

Oakland, CA

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

Groundwater Depth and Flow Direction:

In July 1999, depth to water in onsite monitoring wells ranged

from 35.61 to 35.78 ft below ground surface. Groundwater

flowed in a west to southwest direction.

Groundwater Monitoring: Four onsite monitoring wells existed at the site, prior to this

installation, MW-1, MW-2, MW-3 and MW-4. During the third quarter of 1998, MW-3 reported the highest benzene concentration in groundwater at 1,100 micrograms per liter (µg/l). Maximum total petroleum hydrocarbons as gasoline (TPHg) concentration of 35,000 µg/l was detected in monitoring

well MW-3.



The procedures for this subsurface investigation, described in Cambria's approved work plan, are summarized below. Analytical results for soil and groundwater collected from the soil boring are summarized in Tables 1 and 2 and presented as Attachment A. Boring logs and Cambria's standard field procedures for soil sampling are presented in Attachments B and C, respectively.

Personnel Present: John Riggi, Cambria Geologist, under the supervision of

Registered Geologist Ailsa Le May.

Permits: Cambria obtained Alameda County Public Works Agency

Drilling Permit # 99WR186, and City of San Leandro Application to Perform Work in the Public Right of Way Permit

# 99186. Permits are included as Attachment D.

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

**Drilling Dates:** May 17, 18, 19, 1999.

Drilling Method: Monitoring wells MW-6, MW-7, and MW-8 were drilled and

sampled using a track-mounted limited access drilling rig equipped with six-inch hollow stem augers. After sampling, the

borings were reamed with eight-inch hollow stem augers and

converted to monitoring wells. MW-5 was drilled and sampled with a B-61 hollow stem auger rig equipped with a California-modified split spoon sampler using hollow stem six-inch augers. MW-5 was reamed using ten-inch hollow stem augers and converted to a monitoring well

Number of Borings:

Four borings. All borings were converted to monitoring wells, MW-5, MW-6, MW-7, and MW-8 (Figure 2).

(3)

Boring Depths:

All borings were drilled to 50 feet bgs (Attachment B)

Sediment Lithology:

The site is underlain by gravelly fill to approximately 2 feet bgs underlain by clayey sands and clayey silts. A sandy gravel lenses was encountered from approximately 37 to 42 feet bgs in all borings except MW-7. Clayey sands continue beneath the sandy gravel to an explored depth of 50 feet bgs.

Monitoring Well Specifications:

Wells MW-5, MW-6, MW-7, and MW-8 were installed to 50 feet bgs. Wells MW-6, MW-7, MW-8 were constructed of two-inch diameter scheduled 40 PVC with 0.010-inch slotted screen from 25 to 50 feet bgs (Attachment B). Well MW-5 was constructed of four-inch diameter scheduled 40 PVC with 0.010-inch slotted screen from 25 to 50 feet bgs. Monterey sand # 3 was used as a filter pack for all wells.

Monitoring Well Development:

Wells MW-5, MW-6, MW-7, MW-8 were developed by Blaine Tech Services (BTS) of San Jose, California on May 28, 1999. Well development field sheets are included in Attachment E.

Monitoring Well Sampling:

Wells MW-5, MW-6, MW-7, and MW-8 were sampled on June 14, 1999. Per RWQCB guidelines, non purged and purged samples were collected. Groundwater analytical results are summarized in Table 2 and included in Attachment A.

Well Elevation Survey:

The top of casing elevations of wells MW-5, MW-6, MW-7 and MW-8 were surveyed to mean sea level on June 21, 1999 by Virgil Chavez Land Surveying of Vallejo, California. Well elevation survey data is presented as Attachment F.

Groundwater Depth:

The groundwater table was encountered at approximately 35 feet bgs.

Chemical Analyses:

Soil and groundwater samples from each soil boring were analyzed for:

- TPHg by modified EPA Method 8015;
- Methyl tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020; and
- EPA Method 8260 confirmed the highest detection of MTBE.

In addition, selected soil samples were analyzed for fractional organic carbon, dry bulk density, moisture, and porosity.

To characterize stockpiled soil for disposal, 4 brass tubes of soil were collected from the stockpiled soil which were then composited by the analytical laboratory. The composite samples were analyzed for:

- TPHg by modified EPA Method 8015;
- BTEX by EPA Method 8020;
- CAM metals: TTLC for all metals;
- STLC for all metals detected at 10 times the TTLC maximum; and
- Organic lead for lead over 13 mg/kg,

Soil Handling:

Soil cuttings produced from the borings were disposed of at Forward Landfill in Manteca, California on April 19, 1999. Disposal confirmation is presented as Attachment G.

#### **INVESTIGATION RESULTS**

Analytical Results for Soil Samples: Soil samples analyzed from monitoring well MW-7 were reported below detection limits for all constituents. Source area well MW-5 reported maximum

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TPHg and benzene concentrations of 10.5 mg/kg at 40.5 feet bgs, and 0.0475 mg/kg at 35.5 feet bgs, respectively. Monitoring well MW-6 reported all constituents below detection limits above 35 feet bgs. TPHg and benzene concentrations of 273 mg/kg and 1.12 mg/kg were detected in MW-6 at 35.5 feet bgs, respectively. Cross-gradient offsite well MW-8 reported all analyses below detection limits with the exception of trace MTBE concentrations by EPA Method 8020 of 0.212 mg/kg and 0.0532 mg/kg at 40.5 and 45.5 feet bgs. EPA Method 8260 reported a maximum MTBE concentration of 2.25 mg/kg in soil sample MW-5 at 35.5 feet bgs.

Analytical Results for Groundwater: Groundwater samples collected on June 4, 1999 by BTS reported a maximum TPHg concentration of 80,400 µg/l in well MW-5. Monitoring well MW-6 reported the maximum benzene concentration of 6,830 µg/l and a maximum MTBE concentration reported by EPA Method 8260 of 24,300 µg/l.

Irrigation Well Sampling: While coordinating access to the properties located at at 595-599 Callan Avenue and 560-572 Estudillo Avenue, CWP Property Management notified Cambria that an active irrigation well existed within the west driveway of the apartment complex (Figure 2). On June 4,1999 BTS sampled the irrigation well after approximately 500 gallons of groundwater was purged from the irrigation well. Groundwater samples collected from the irrigation well did not contain concentrations of TPHg, BTEX, and MTBE above method detection limits.

#### CONCLUSIONS AND RECOMMENDATIONS

Petroleum hydrocarbon and MTBE distribution in soil appears to be limited as concentrations were detected only in the capillary fringe samples for all newly installed borings. The distribution of petroleum hydrocarbons and MTBE in groundwater is defined to the north by monitoring well MW-7 and to the south by monitoring well MW-8. Petroleum hydrocarbons and MTBE in groundwater are distributed to the west as the highest concentrations were detected in wells MW-5 and MW-6. To further evaluate hydrocarbon concentrations in groundwater and assess plume stability, Cambria will continue groundwater monitoring and sampling at the site.

Petroleum hydrocarbons and MTBE concentrations were below detection limits in the groundwater sample collected from the irrigation well down gradient of the site. Therefore, it does not appear there is an immediate human health risk associated with the operation of the irrigation well. However, the continued use of the irrigation well may have a hydraulic effect on the distribution of contaminants down gradient of the site. Cambria is currently working towards establishing city supplied water service for the apartment complex and discontinuing the use of the irrigation well.



### **CLOSING**

We appreciate your continued assistance with this project. Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

NO. 6717

Sincerely,

Cambria Environmental Technology, Inc.

Darryk Ataide, REA I

Project Manager

Ailsa LeMay, R.G. Senior Geologist

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1 - Site Vicinity Map

2 - Monitoring Well Location Map

Tables:

cc:

Figures:

1 - Soil Analytical Results

2 - Groundwater Analytical Results

Attachments:

A - Analytical Reports for Soil and Groundwater

B - Soil Boring Logs

C - Standard Field Procedures for Monitoring Well Installation

D - Drilling and Encroachment Permit

E – Well Development Field Data Sheets

F - Monitoring Well Survey Data

G - Disposal Confirmation

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

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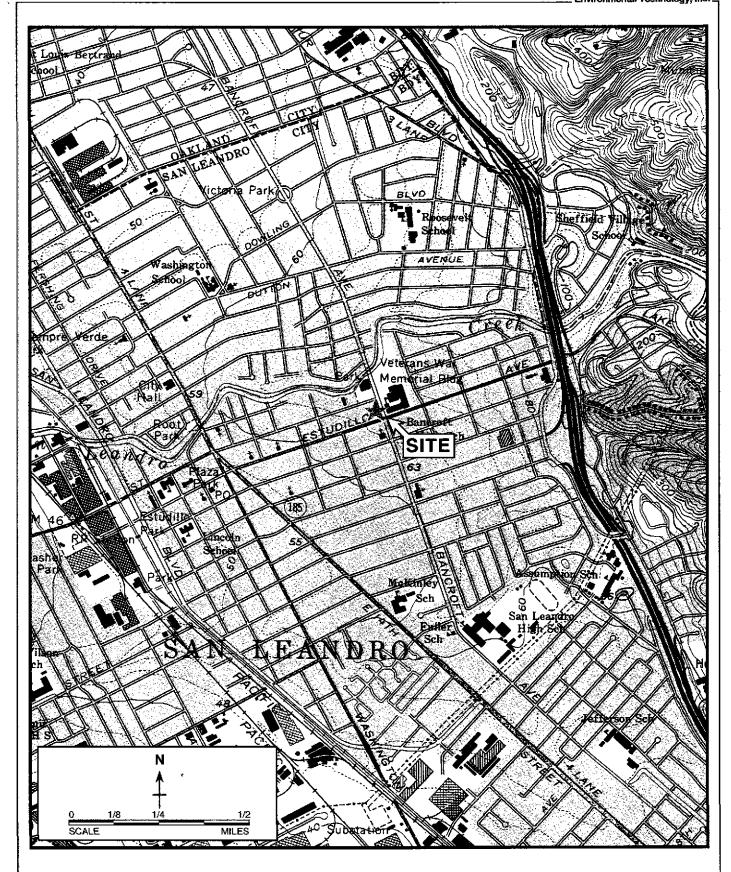


Figure 1. Vicinity Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

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

Sample	Depth	TPHG	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
ID		4		(Concentrations re	ported in mg/kg) —		
May 17, 1998 Sam	ples:						
MW-6 (5.5)	5.5'	<1.0	<0.050	< 0.0050	< 0.0050	<0.0050	<0.0050
MW-6 (10.5)	10.5	<1.0	< 0.050	< 0.0050	< 0.0050	<0.0050	<0.0050
MW-6 (15.5)	15.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-6 (20.5)	20.5'	<1.0	< 0.050	< 0.0050	<0.0050	< 0.0050	< 0.0050
MW-6 (25.5)	25.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-6 (30.5)	30.5'	<1.0	< 0.050	< 0.0050	< 0.0050	<0.0050	< 0.0050
MW-6 (35.5)	35.5'	273	2.58 (2.58)	1.12	1.31	3.1	14.2
MW-6 (40.5)	40.5'	96.1	1.31	0.665	1.07	1.25	5.51
MW-6 (45.5)	45.5'	1.83	1.47	0.0151	0.0173	0.0141	0.0875
MW-7 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	< 0.0050	<0.0050
MW-7 (10.5)	10.5'	<1.0	< 0.050	<0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (15.5)	15.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	<0.0050
MW-7 (20.5)	20.5'	0.1>	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (25.5)	25.5'	<1.0	< 0.050	<0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (30.5)	30.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (35.5)	35.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (40.5)	40.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7 (45.5)	45.5'	<1.0	< 0.050	< 0.0050	< 0.0050	<0.0050	< 0.0050
May 18, 1998 Sam	ples:						
MW-5 (5.5)	5.5'	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
MW-5 (10.5)	10.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-5 (15.5)	15.5'	<1.0	< 0.050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-5 (20.5)	20.5'	<1.0	< 0.050	<0.0050	<0.0050	< 0.0050	< 0.0050
MW-5 (30.5)	30.5	<1.0	1.08	< 0.0050	< 0.0050	< 0.0050	< 0.0050

NA SERVICE

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

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

Abbreviations/Notes:

TPPH = Total purgable petroleum hydrocarbons as gasoline by modified EPA Method 8015.

TEPH = Total extractable petroleum hydrocarbons as diesel by modified EPA Method 8015.

Benzene, ethylbenzene, toluene, xylenes by EPA Method 8020.

MTBE = Methyl tert-butyl ether by EPA Method 8020. Parenthesis indicate confirmation analysis by EPA Method 8260

<n = Below detection limits for n milligrams per kilograms

Table 2. Groundwater Non Purge & Purge Analytical Data - Shell-branded Service Station, WIC# 204-6852-0703,

1285 Bancroft Avenue, San Leandro, California

Description	Date Sampled	TPHg ◀	Benzene	Toluene (concentration	Ethylbenzene ons in µg/L) ————	Xylenes	MTBE
MW-6NP	6/4/99	36000	4240	1680	1100	4160	11300 (17500)
MW-7NP	6/4/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0
MW-8NP	6/4/99	<50	<0.50	<0.50	<0.50	<0.50	452
MW-5NP	6/4/99	159000	7190	39300	2450	16700	<5000
Irrigation Well	6/4/99	<50	<0.50	<0.50	<0.50	<0.50	<5.00
MW-5	6/4/99	80400	4400	26000	1480	11000	3660
MW-6	6/4/99	56900	6830	6050	1970	9060	17000 (24300)
<b>MW</b> -7	6/4/99	<50	0,663	<0.50	0.677	<0.50	11.7
MW-8	6/4/99	<50	<0.50	<0.50	<0.50	<0.50	186

#### 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. Result in parentheses indicates MTBE by EPA Method 8260

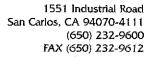
μg/L = Micrograms per liter

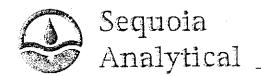
<n = Below detection limit of n  $\mu$ g/L

NP=No purge,

# Attachment A

Analytical Reports for Soil and Groundwater





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

Project:

Project Number.

Project Manager:

Shell(1)

Shell 1285 Bancroft, San Leandro

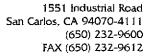
Darryk Ataide

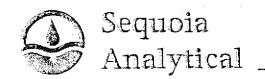
Sampled: 5/18/99 Received: 5/19/99

Reported: 6/21/99

## **ANALYTICAL REPORT FOR L905400**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-5-5.5	L905400-01	Soil	5/18/99
MW-5-10.5	L905400-02	Soil	5/18/99
MW-5-15.5	L905400-03	Soil	5/18/99
MW-5-20.5	L905400-04	Soil	5/18/99
MW-5-25.5	L905400-05	Soil	5/18/99
MW-5-30.5	L905400-06	Soil	5/18/99
MW-5-35.5	L905400-07	Soil	5/18/99
MW-5-40.5	L905400-08	Soil	5/18/99
MW-5-45.5	L905400-09	Soil	5/18/99
comp 1	L905400-10	Soil	5/18/99
comp 2	L905400-11	Soil	5/18/99
comp 3	L905400-12	Soil	5/18/99
comp 4	L905400-13	Soil	5/18/99
comp (1-4)	L905400-14	Soil	5/18/99





Cambria Environmental Project: Shell(1)
1144 65th St., Suite C. Project Number: Shell 1285 Bancroft, San Leandro
Oakland, CA 94608 Project Manager: Darryk Ataide

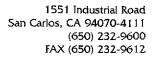
Received: 5/19/99 Reported: 6/21/99

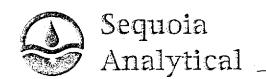
5/18/99

Sampled:

Sample Description: Laboratory Sample Number: MW-5-5.5 L905400-01

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytical	- San Carlos				/
Total Purgeable Hydrocarbons (C6-C	12), BTEX an	id MTBE by	DHS LUFT	•				
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	n	**	n	•	0.00500	ND	11	
Toluene	#1	•			0.00500	ND	17	
Ethylbenzene	11	H	Ħ		0.00500	ND	**	
Xylenes (total)	79	rr	n		0.00500	ND	"	
Methyl tert-butyl ether	**	19	**		0.0500	ND	**	
Surrogate: a,a,a-Trifluorotoluene	n	"	n	70.0-130		103	%	

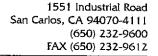


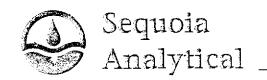


Cambria EnvironmentalProject:Shell(1)Sampled:5/18/991144 65th St., Suite C.Project Number.Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaideReported:6/21/99

Sample Description: Laboratory Sample Number: MW-5-10.5 L905400-02

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seauc	is Analytics	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar			r - Buil Cullog				
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	11	t <del>t</del>	n		0.00500	ND	Ħ	e ger
Toluene	11	t <del>†</del>	Ir		0.00500	ND	#	
Ethylbenzene	*1	í <del>v</del>	ır		0.00500	ND	77	/
Xylenes (total)	н	I <del>†</del>	IF		0.00500	ND	17	V
Methyl tert-butyl ether	11	IP .	IF		0.0500	ND	rt .	
Surrogate: a,a,a-Trifluorotoluene	"	n	11	70.0-130		94.0	%	

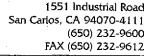


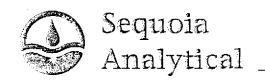


Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

MW-5-15.5 L905400-03

	Batch	Date	Date	Specific Method/	Reporting			·
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	ıd MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	11	н	If		0.00500	ND	ll .	
Toluene	11	н	IF		0.00500	ND	It	
Ethylbenzene	<b>t</b> 1	17	If	44	0.00500	ND	11	. 🗸
Xylenes (total)	и	19	91	•	0.00500	ND	**	•
Methyl tert-butyl ether	н	II	11		0.0500	ND	н	
Surrogate: a,a,a-Trifluorotoluene	H	" .	"	70.0-130		95.5	%	





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

Project: Shell(1)

Project Number: Shell 1285 Bancroft, San Leandro

Sampled: 5/18/99 Received: 5/19/99

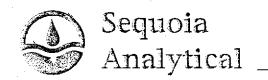
Project Manager: Darryk Ataide Reported: 6/21/99

Sample Description:

**Laboratory Sample Number:** 

MW-5-20.5 L905400-04

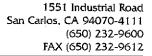
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units_	Notes*
		Seque	oia Analytical	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C)	12), BTEX ar	id MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	/
Benzene	. 11	17	n		0.00500	ND	ţ <b>F</b>	/
Toluene	77	Ħ	**		0.00500	ND	n	$\vee$
Ethylbenzene	17	Ħ	**		0.00500	ND	II	
Xylenes (total)	n .	n	rr .		0.00500	ND	11	
Methyl tert-butyl ether	II.	н	n		0.0500	ND	*1	
Surrogate: a,a,a-Trifluorotoluene	n	"	11	70.0-130		90.5	%	

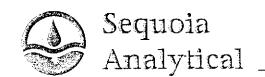


Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99	
1 144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99	
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99	

MW-5-25.5 L905400-05

A 1. 4.	Batch	Date	Date	Specific Method/	Reporting	D16	T1	31 , #
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	ia Analytical	- San Carlos	-			
Total Purgeable Hydrocarbons (C6-C)	12), BTEX an	d MTBE by	DHS LUFT					1
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	í
Benzene	n	**	**		0.00500	ND	11	
Toluene	17		17		0.00500	ND	Ħ	
Ethylbenzene	n	11	10		0.00500	ND	"	. •
Xylenes (total)	Ħ	11	н		0.00500	ND	#1	
Methyl tert-butyl ether	n	n	rı .		0.0500	ND	1f	
Surrogate: a,a,a-Trifluorotoluene	#	"	'n	70.0-130		97.5	%	·





Cambria Environmental 1144 65th St., Suite C. Oakland, CA 94608 Project: Shell(1)

Shell 1285 Bancroft, San Leandro

Sampled: 5/18/99 Received: 5/19/99

Project Number: Project Manager:

Darryk Ataide

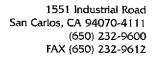
Reported: 6/21/99

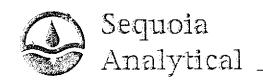
Sample Description:

Laboratory Sample Number:

MW-5-30.5 L905400-06

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	I - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX an	id MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	,
Benzene	11	Jt .	II		0.00500	ND	#	
Toluene	17	17	11		0.00500	ND	π	
Ethylbenzene	17	19	If		0.00500	ND	17	
Xylenes (total)	11	11	It		0.00500	ND	**	
Methyl tert-butyl ether	11	17	11		0.0500	1.08	**	
Surrogate: a,a,a-Trifluorotoluene	n	н	"	70.0-130		86.0	%	

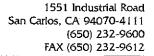


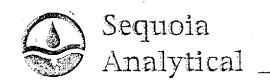


Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

MW-5-35.5 L905400-07

Laboratory Sample Number.								
	Batch	Date	Date	Specific Method/	Reporting			<del></del>
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		C		l Can Caulas				
				l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ar	<u>id MTBE by</u>	DHS LUFT	•				
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	6/1/99		1.00	1.91	mg/kg	2
Benzene	11	t <del>e</del>	**		0.00500	0.0475	n	,
Toluene	77	11	Ħ		0.00500	ND	n	
Ethylbenzene	***	lt.	29		0.00500	0.0172	19	· V
Xylenes (total)	**	II.	<b>11</b>		0.00500	0.0159	71	
Methyl tert-butyl ether	Ħ	II	Ħ		0.0500	4.68	11	
Surrogate: a,a,a-Trifluorotoluene	"	n	"	70.0-130		93.0	%	
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9060099	6/17/99	6/17/99		0.100	2.25	mg/kg	
Surrogate: 1,2-Dichloroethane-d4	"	n	"	70.0-121		102	%	

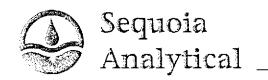




Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

MW-5-40.5 L905400-08

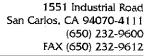
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ap							
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	6/2/99		1.00	10.5	mg/kg	2
Benzene	It	31 <sub>,</sub>	*1		0.00500	0.0279	11	<i>f</i>
Toluene	H	17	11		0.00500	0.486	tt	/
Ethylbenzene	n	17	**		0.00500	0.179	11	· /
Xylenes (total)	D	*1	79		0.00500	1.02	IF	$\cup$
Methyl tert-butyl ether	Iř	Ú	n		0.0500	0.0930	t†	
Surrogate: a,a,a-Trifluorotoluene	n	п	13	70.0-130		62.0	%	

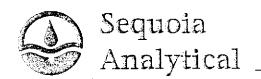


Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99	
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99	
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99	

MW-5-45.5 L905400-09

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number _	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
				•				
		<u>Seque</u>	ia Analytical	<ul> <li>San Carlos</li> </ul>				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX an	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	6.67	mg/kg	1
Benzene	19	и,	n		0.00500	0.0264	"	
Tołuene	10	11	m .		0.00500	0.0346	IT	
Ethylbenzene	11	11	п		0.00500	0.0298	tř	$\checkmark$
Xylenes (total)	17	н	11		0.00500	77.0	H	•
Methyl tert-butyl ether	57	*1	п		0.0500	ND	II.	
Surrogate: a,a,a-Trifluorotoluene	F1	)1	r	70.0-130		81.0	%	





Cambria Environmental 1144 65th St., Suite C. Project: She

Shell(1)

Shell 1285 Bancroft, San Leandro

Sampled: 5/18/99 Received: 5/19/99

Oakland, CA 94608

Project Number: Project Manager:

Darryk Ataide

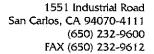
Reported: 6/21/99

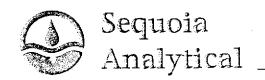
Sample Description:

Laboratory Sample Number:

comp 1 L905400-10

A - 1 to	Batch	Date	Date	Specific Method/	Reporting	D	FT-14-	<b>N</b> T
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Samu	da Amalertiaa	I San Cardaa				
				l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	(2) and BTE	X by DHS L	<u>UFT</u>					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	Ħ	n	If		0.00500	ND	**	
Toluene	11	*1	IP .		0.00500	ND	tt	
Ethylbenzene	Ħ	n	11		0.00500	ND	tt .	
Xylenes (total)	T)	H	If		0.00500	0.0119	tt	
Surrogate: a,a,a-Trifluorotoluene	H	n	п	60.0-140		83.5	%	



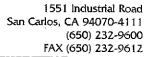


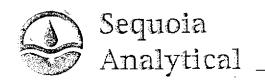
Cambria EnvironmentalProject:Shell(1)1144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroOakland, CA 94608Project Manager:Darryk Ataide

Sampled: 5/18/99
Received: 5/19/99
Reported: 6/21/99

Sample Description: Laboratory Sample Number: comp 2 L905400-11

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12) and BTE	X by DHS L	<u>UFT</u>		•			
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	"	t#	lt.		0.00500	ND	н	
Toluene	Ħ	19	If		0.00500	ND	-11	
Ethylbenzene	Ħ	IF.	11		0.00500	ND	π .	
Xylenes (total)	71	II.	Ħ		0.00500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	tt	п	11	60.0-140		83.5	%	

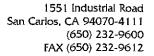


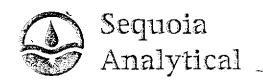


Cambria EnvironmentalProject:Shell(1)Sampled:5/18/991144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaideReported:6/21/99

Sample Description: Laboratory Sample Number: comp 3 L905400-12

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	I - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12) and BTE	X by DHS L	UFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	11	78	11		0.00500	ND	11	
Toluene	11	Ħ	*1		0.00500	ND	IT	
Ethylbenzene	n	"	99		0.00500	ND	It	
Xylenes (total)	n	**	77		0.00500	ND	Ш	
Surrogate: a,a,a-Trifluorotoluene	#	"	"	60.0-140		85.5	%	





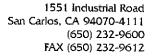
Cambria EnvironmentalProject:Shell(t)Sampled:5/18/991144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaideReported:6/21/99

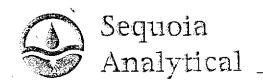
Sample Description:

**Laboratory Sample Number:** 

comp 4 L905400-13

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				÷
Total Purgeable Hydrocarbons (C6-C1	2) and BTE	X by DHS L	UFT					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	1.14	mg/kg	1
Benzene	17	tr	II .		0.00500	ND	. #	
Toluene	11	D	II		0.00500	ND	#1	
Ethylbenzene	"	19	н		0.00500	ND	**	
Xylenes (total)	Н	IP	Ш		0.00500	ND	"	
Surrogate: a,a,a-Trifluorotoluene	n	п	n .	60.0-140		85.0	%	





Cambria EnvironmentalProject:Shell(1)Sampled:5/18/991144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaideReported:6/21/99

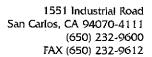
Sample Description:

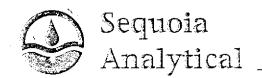
Laboratory Sample Number:

Sequoia Analytical - San Carlos

comp (1-4) L905400-14

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Segue	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12) and BTE	X by DHS L	<u>UFT</u>					
Purgeable Hydrocarbons as Gasoline	9060008	5/28/99	5/28/99		1.00	ND	mg/kg	
Benzene	**	n ·	If		0.00500	ND	11	
Toluene	79	18	1f		0.00500	ND	11	
Ethylbenzene	et	11	lr		0.00500	ND	ıı .	
Xylenes (total)	n	11	1f		0.00500	0.00840	n	
Surrogate: a,a,a-Trifluorotoluene	H	Ħ	IF	60.0-140	<del></del>	84.5	%	

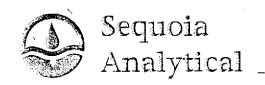




Cambria EnvironmentalProject:Shell(1)Sampled:5/18/991144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaideReported:6/21/99

# Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

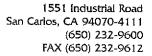
	Date	Spike	Sample	QC	<del></del>	Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyze <u>d</u>	Level	Result	Result	Units	Recov. Limits	%	Limit	% N	Votes*
Batch: 9060008	Date Prepa	red: 5/28/9	99		Extract	ion Method: EP	A 5030B	[ <b>P</b> /T]		
Blank	9060008-BI		<del></del>					<del></del>		
Purgeable Hydrocarbons as Gasoline	5/28/99			ND	mg/kg	1.00				
Benzene	11			ND	11	0.00500				
Toluene	11			ND	rr .	0.00500				
Ethylbenzene	**			ND	11	0.00500				
Xylenes (total)	n			ND	11	0.00500				
Surrogate: a,a,a-Trifluorotoluene	n	0.200		0.192	n	60.0-140	96.0			
LCS	9060008-BS	S1								
Benzene	5/28/99	0.200		0.200	mg/kg	70.0-130	100			
Toluene	**	0.200		0.197	"	70.0-130	98.5			
Ethylbenzene	**	0.200	•	0.205	n	70.0-130	102			
Xylenes (total)	rt .	0.600		0.583	71	70.0-130	97.2			
Surrogate: a,a,a-Trifluorotoluene	rr	0.200		0.186	#	60.0-140	93.0			
Matrix Spike	9060008-M	<u>sı L</u>	905366-01							
Benzene	5/28/99	0.200		0.212	mg/kg	60.0-140	106			
Toluene	H	0.200		0.210	п.	60.0-140	105			
Ethylbenzene	II	0.200		0.221	, m	60,0-140	111			
Xylenes (total)	II .	0.600		0.626	н	60.0-140	105			
Surrogate: a,a,a-Trifluorotoluene	п	0.200		0.198	"	60.0-140	99.0			
Matrix Spike Dup	9060008-M	SD1 L	905366-01							
Benzene	5/28/99	0.200	<u> </u>	0.212	mg/kg	60.0-140	106	25.0	0	
Toluene	**	0.200		0.212	11	60.0-140	106	25.0	0.948	
Ethylbenzene	"	0.200		0.225	11	60.0-140	113	25.0	1.79	
Xylenes (total)		0.600		0.631	11	60.0-140	105	25.0	0	
Surrogate: a,a,a-Trifluorotoluene	"	0.200		0.202	n	60.0-140	101			

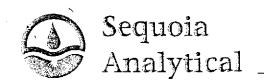


Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9060008	Date Prepa	red: 5/28/9	99		Extraction Method: EPA 5030B [P/T]					
Blank	9060008-Bl	L <b>K</b> 1	_							
Purgeable Hydrocarbons as Gasoline	5/28/99	•		ND	mg/kg	1.00				
Benzene	· n			ND	н	0.00500				
Toluene	Ħ			ND	11	0.00500				
Ethylbenzene	Ħ			ND	м	0.00500				
Xylenes (total)	ŧt			ND	11	0.00500				
Methyl tert-butyl ether	"			NĐ	er .	0.0500				
Surrogate: a,a,a-Trifluorotoluene	n	0.200		0.192	"	70.0-130	96.0			-
LCS	9060008-BS	S1								
Benzene	5/28/99	0.200		0.200	mg/kg	70.0-130	100			
Toluene	u	0.200		0.197	# ************************************	70.0-130	98.5			
Ethylbenzene	н	0.200		0.205	er .	70.0-130	102			
Xylenes (total)	п	0.600		0.583	11	70.0-130	97.2			
Surrogate: a,a,a-Trifluorotoluene	II .	0.200		0.186	rt	70.0-130	93.0			
Matrix Spike	9060008-M	S1 L9	905366-0 <u>1</u>							
Benzene	5/28/99	0.200	ND	0.212	mg/kg	60.0-140	106			
Toluene	11	0.200	ND	0.210	"	60.0-140	105			
Ethylbenzene	11	0.200	ND	0.221	11 .	60.0-140	110			
Xylenes (total)	11	0.600	ND	0.626	11	60.0-140	104			
Surrogate: a,a,a-Trifluorotoluene	y	0.200		0.198	п	70.0-130	99.0			
Matrix Spike Dup	9060008-M	SD1 L9	905366-01							
Benzene	5/28/99	0.200	ND	0.212	mg/kg	60.0-140	106	25.0	0	
Toluene	#	0.200	ND	0.212	11	60.0-140	106	25.0	0.948	
Ethylbenzene	u .	0.200	ND	0.225	41	60.0-140	112	25.0	1.80	
Xylenes (total)	#	0.600	ND	0.631	<b>9</b> 1	60.0-140	105	25.0	0.957	
Surrogate: a,a,a-Trifluorotoluene	"	0.200		0.202	n	70.0-130	101			



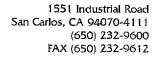


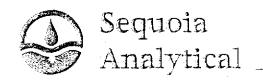
Cambria Environmental	Project:	Shell(1)	Sampled:	5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9060099	Date Prepa	red: 6/17/9	<u>99</u>		Extract	tion Method: EPA	A 5030B	<u>[P/T]</u>		
Blank	9060099-BI	<u>LK1</u>								
Methyl tert-butyl ether	6/17/99			ND	mg/kg	0.100				
Surrogate: 1,2-Dichloroethane-d4	· · ·	2.50		2.66	"	70.0-121	106			
LCS	9060099-BS	<u>51</u>								
Methyl tert-butyl ether	6/17/99	2.50		2.23	mg/kg	70.0-130	89.2			
Surrogate: 1,2-Dichloroethane-d4	"	2.50		2.68	"	70.0-121	107			
Matrix Spike	9060099-M	<u>S1 L9</u>	906233-01							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.10	mg/kg	60.0-140	84.0			
Surrogate: 1,2-Dichloroethane-d4	"	2.50		2.43	st	70.0-121	97.2			
Matrix Spike Dup	9060099-M	SD1 L9	906233-01							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.05	mg/kg	60.0-140	82.0	25.0	2.41	
Surrogate: 1,2-Dichloroethane-d4	n n	2.50		2.39	п	70.0-121	95.6			

Sequoia Analytical - San Carlos





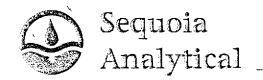
Cambria Environmental	Project:	Shell(1)	Sampled: 5/18/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received: 5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/21/99

## **Notes and Definitions**

#	Note
1	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
2	Chromatogram Pattern: 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

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MW-10.5.		-	84	8		·	2	X		X				X			*********			* Co	<u>C</u> ;	1	shest MTB
MW-5-15,5.			834	X		ļ.	2	X		X		-	į							from		· ]	A CONTRACTOR OF THE PERSON OF
MW-5-20.5			839	X		···	Z	X		X		•		***								-	1214 0,040
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MW-5-30.5			852	1			2	$\checkmark$	-	X	<u></u>			X	[					, , , , , , , , , , , , , , , , , , ,	<del></del> ,	· -	***************************************
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Cambria Environmental 1144 65th St., Suite C. Oakland, CA 94608

Project: Shell(1)

Project Number: Shell 1285 Bancroft, San Leandro

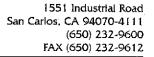
Sampled: 5/17/99 Received: 5/19/99

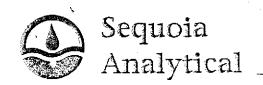
Project Manager: Darryk Ataid

Reported: 6/21/99

## **ANALYTICAL REPORT FOR L905412**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-7-5.5	L905412-01	Soil	5/17/99
MW-7-10.5	L905412-02	Soil	5/17/99
MW-7-15.5	L905412-03	Soil	5/17/99
MW-7-20.5	L905412-04	Soil	5/17/99
MW-7-25.5	L905412-05	Soil	5/17/99
MW-7-30.5	L905412-06	Soil	5/17/99
MW-7-35.5	L905412-07	Soil	5/17/99
MW-7-40.5	L905412-08	Soil	5/17/99
MW-7-45.5	L905412-09	Soil	5/17/99
MW-6-5.5	L905412-10	Soil	5/17/99
MW-6-10.5	L905412-11	Soil	5/17/99
MW-6-15.5	L905412-12	Soil	5/17/99
MW-6-20.5	L905412-13	Soil	5/17/99
MW-6-25.5	L905412-14	Soil	5/17/99
MW-6-30.5	L905412-15	Soil	5/17/99
MW-6-35.5	L905412-16	Soil	5/17/99
MW-6-40.5	L905412-17	Soil	5/17/99
MW-6-45.5	L905412-18	Soil	5/17/99

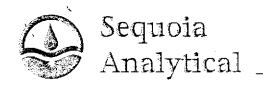




Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

MW-7-5.5 L905412-01

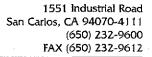
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
				<u> </u>				
		<u>Sequ</u>	oia Analytical	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX an	id MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	1
Benzene	н .	44	n		0.00500	ND	11	
Toluene	Ħ	t#	11		0.00500	ND	11	
Ethylbenzene	11	D	11		0.00500	ND	11	
Xylenes (total)	11	IF.	11		0.00500	ND	IT	
Methyl tert-butyl ether	71	II.	11		0.0500	ND	H	
Surrogate: a,a,a-Trifluorotoluene	"	11	II .	70.0-130		82.0	%	

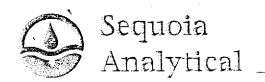


Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

MW-7-10.5 L905412-02

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	id MTBE by	DHS LUFT					. /
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	
Benzene	IF.	и	IF		0.00500	ND	n	. /
Toluene	18	11	Ir		0.00500	ND	11	$\cup$
Ethylbenzene	17	19	11		0.00500	ND	17	
Xylenes (total)	11	19	11		0.00500	ND	Ħ	
Methyl tert-butyl ether	<b>51</b>	11	11		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	n	"	<i>II</i>	70.0-130		84.0	%	





Cambria EnvironmentalProject:Shell(1)Sampled:5/17/991144 65th St., Suite C.Project Number:Shell 1285 Bancroft, San LeandroReceived:5/19/99Oakland, CA 94608Project Manager:Darryk AtaidReported:6/21/99

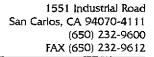
Sample Description:

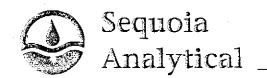
**Laboratory Sample Number:** 

MW-7-15.5 L905412-03

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Segue	ia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C)	l2), BTEX an							/
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	
Benzene	ft	Ħ	**		0.00500	ND	11t .	. /
Toluene	**	n	**		0.00500	ND	11	
Ethylbenzene	n	**	tr		0.00500	ND	11	
Xylenes (total)	H	17	н		0.00500	ND	11	
Methyl tert-butyl ether	Ħ	11	n ·		0.0500	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	п	70.0-130		80.5	%	

Sequoia Analytical - San Carlos



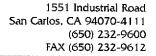


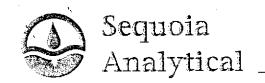
Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

Sample Description: Laboratory Sample Number:

MW-7-20.5 L905412-04

	Batch	Date	Date	Specific Method/	Reporting			· · · · · · · · · · · · · · · · · · ·
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Saam	ala Amaludiaa	I Sam Cardas				
m + 1 m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IAN DEEDE	-		<u>l - San Carlos</u>				
Total Purgeable Hydrocarbons (C6-C	12), BIEX at	<u>ia MTBE by</u>	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	. /
Benzene		" .	IF		0.00500	ND	11	<i>//</i>
Toluene	n	**	lr .		0.00500	ND	***	
Ethylbenzene	*	it	11		0.00500	ND	**	
Xylenes (total)	"	н	11		0.00500	ND	H	
Methyl tert-butyl ether	TF.	и	Ħ		0.0500	ND	IF	
Surrogate: a,a,a-Trifluorotoluene	rr	Ŋ	n.	70.0-130		82.5	%	

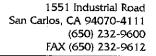


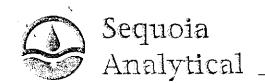


Sample Description: Laboratory Sample Number: MW-7-25.5 L905412-05

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	nd MTBE by	<b>DHS LUFT</b>					
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	
Benzene	IF.	11	11		0.00500	ND	11	a de la compansión de l
Toluene	II .	11	TT.		0.00500	ND	11	J. Part
Ethylbenzene	11	11	**		0.00500	ND	11	$\mathcal{V}$
Xylenes (total)	11	н	"		0.00500	ND	*1	
Methyl tert-butyl ether	11	.11	t <del>t</del>		0.0500	ND	Ħ	
Surrogate: a,a,a-Trifluorotoluene	n	n	W	70.0-130		83.0	%	

Sequoia Analytical - San Carlos





Cambria Environmental 1144 65th St., Suite C. Oakland, CA 94608 Project:

Shell(1)

Shell 1285 Bancroft, San Leandro

Sampled: 5/17/99

Project Number: Project Manager:

Darryk Ataid

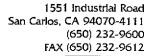
Received: 5/19/99 Reported: 6/21/99

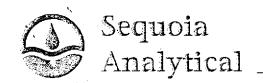
Sample Description:

Laboratory Sample Number:

MW-7-30.5 L905412-06

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Segue	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	nd MTBE by	DHS LUFT					Market Park
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	person
Benzene	"	17	II .		0.00500	ND	11	
Toluene	**	t <del>1</del>	п		0.00500	ND	H	
Ethylbenzene	н	t#	11		0.00500	ND	#	0
Xylenes (total)	11	Ħ	н		0.00500	ND	Ħ	
Methyl tert-butyl ether	71	II.	11		0.0500	ND	<b>!!</b> .	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		79.0	%	



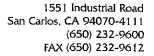


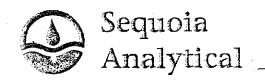
Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

Sample Description: Laboratory Sample Number:

L905412-07

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		<u>Seque</u>	oia Analytical	- San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	id MTBE by	DHS LUFT	<del></del>				/
Purgeable Hydrocarbons as Gasoline	9050120	5/26/99	5/26/99		1.00	ND	mg/kg	Market Ref.
Benzene	•17	31	II.		0.00500	ND	tt .	. /
Toluene	11	0	11		0.00500	ND	II.	
Ethylbenzene	. 17	ч	11		0.00500	ND	n	
Xylenes (total)	n	н	11		0.00500	ND	11	
Methyl tert-butyl ether	It	Ħ	H		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	rt	"	"	70.0-130	•	84.0	%	

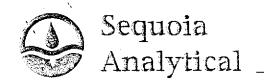




Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

Sample Description: Laboratory Sample Number: MW-7-40.5 L905412-08

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Sean	nia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX as			- Bad Carros				
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	
Benzene	н .	If	r <b>r</b>		0.00500	ND	#	<b>J</b>
Toluene	. #	D.	ir		0.00500	ND	15	. /
Ethylbenzene	tt	11	ır		0.00500	ND	**	
Xylenes (total)	н	91	IP		0.00500	ND	Ħ	
Methyl tert-butyl ether	11	н	15		0.0500	ND	II	
Surrogate: a,a,a-Trifluorotoluene	n	н	"	70.0-130		85.5	%	

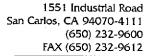


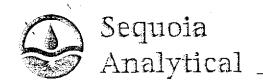
**Sample Description:** 

Laboratory Sample Number:

MW-7-45.5 L905412-09

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C)	12), BTEX ar	id MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	<i>;</i>
Benzene		**	n		0.00500	ND	n	
Toluene	**	н	n		0.00500	ND	It	
Ethylbenzene	n	н .	ia.		0.00500	ND	11	<del>-</del>
Xylenes (total)	н	н	n		0.00500	ND	II	
Methyl tert-butyl ether	н	н	n '		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	n	rr .	rr .	70.0-130		90.5	%	



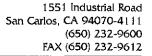


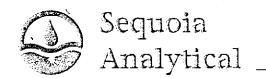
Sample Description:

Laboratory Sample Number:

MW-6-5.5 L905412-10

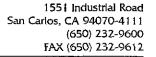
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C)	12), BTEX ar	nd MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	.*
Benzene	n ,	н	n		0.00500	ND	н	/
Toluene	H	et ·	III.		0.00500	ND	ri,	1/
Ethylbenzene	II.	91	t#		0.00500	ND	**	
Xylenes (total)	Iŧ.	19	n		0.00500	ND	17	
Methyl tert-butyl ether	11	11	17		0.0500	ND	17	
Surrogate: a,a,a-Trifluorotoluene	11	#	j†	70.0-130		101	%	

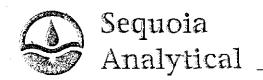




Sample Description: Laboratory Sample Number: MW-6-10.5 L905412-11

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Segue	oia Analytica	l - San Carlos	*			
Total Purgeable Hydrocarbons (C6-C	12), BTEX at	ıd MTBE by	DHS LUFT					/
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	
Benzene	If	н	11		0.00500	ND	Ħ	
Toluene	11	n	"		0.00500	ND	71	
Ethylbenzene	11	11	H		0.00500	ND	19	
Xylenes (total)	n	**	n		0.00500	ND	11	
Methyl tert-butyl ether	*1	"	TI		0.0500	ND	17	
Surrogate: a,a,a-Trifluorotoluene	н		"	70.0-130		92.0	%	



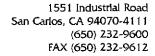


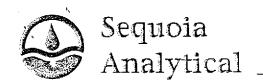
Sample Description: Laboratory Sample Number:

Sequoia Analytical - San Carlos

MW-6-15.5 L905412-12

				<u> </u>		_		
	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		<u>Seque</u>	<u>oia Analytica</u>	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX aı	nd MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	and the second
Benzene	n	11	11		0.00500	ND	17	
Toluene	Ħ	**	**		0.00500	ND	<b>f</b> †	1/
Ethylbenzene	11	Ħ	**		0.00500	ND	11	•
Xylenes (total)	11	н	17		0.00500	ND	tr	
Methyl tert-butyl ether	**	11	tt		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	"	н	"	70.0-130		92.0	%	





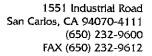
Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

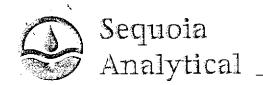
Sample Description:

Laboratory Sample Number:

MW-6-20.5 L905412-13

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	d MTBE by	DHS LUFT					ممير
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	menters to the contract of the
Benzene	ft .	1f	11		0.00500	ND	H	
Toluene	H	11	11		0.00500	ND	tř	$\checkmark$
Ethylbenzene	r <del>y</del>	91	11		0.00500	ND	II .	
Xylenes (total)	н	11	it.		0.00500	ND	IP .	
Methyl tert-butyl ether	IF	н	11		0.0500	ND	II	
Surrogate: a,a,a-Trifluorotoluene	77	n	"	70.0-130		101	%	





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

Project:

Shell(1)

Shell 1285 Bancroft, San Leandro

Sampled: 5/17/99 Received: 5/19/99

Project Number: Project Manager:

Darryk Ataid

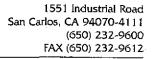
Reported: 6/21/99

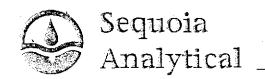
Sample Description:

Laboratory Sample Number:

MW-6-25.5 L905412-14

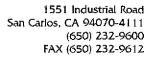
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	id MTBE by	DHS LUFT			•		
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	
Benzene	**	18	II.		0.00500	ND	11	
Toluene	11	D.	II .		0.00500	ND	II	$\mathcal{V}$
Ethylbenzene	77	1E	n		0.00500	ND	н	
Xylenes (total)	'n	19	11		0.00500	ND	11	
Methyl tert-butyl ether	**	11	11		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	Ħ	π	"	70.0-130		97.5	%	

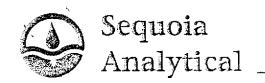




Sample Description: Laboratory Sample Number: MW-6-30.5 L905412-15

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytical	- San Carlos				,
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ar	d MTBE by	DHS LUFT	<del></del>				and the second
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	ND	mg/kg	
Benzene	Ħ	n	rt		0.00500	ND	II	
Toluene	FF .	H	If .		0.00500	ND	11	$\checkmark$
Ethylbenzene	**	f <del>*</del>	II .		0.00500	ND	11	
Xylenes (total)	If	19	JT		0.00500	ND	**	
Methyl tert-butyl ether	11	IP	Ħ		0.0500	ND		
Surrogate: a,a,a-Trifluorotoluene	п	n .	n	70.0-130		90.0	%	



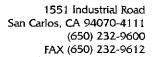


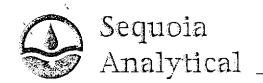
Sample Description:

Laboratory Sample Number:

MW-6-35.5 L905412-16

	Batch	Date	Date	Specific Method/	Reporting	<del> </del>		
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		0.						-
				l - San Carlos				/
Total Purgeable Hydrocarbons (C6-C1	<u>2), BTEX an</u>	<u>id MTBE by</u>	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		25.0	273	mg/kg	1 /
Benzene	It	lf .	11		0.125	1.12	n	
Toluene	18	11	It		0.125	1.31	Ħ	1
Ethylbenzene	17	11	11		0.125	3.10	II	. •
Xylenes (total)	11	n	*1		0.125	14.2	П	
Methyl tert-butyl ether	11	n	**		1.25	2.58	11	
Surrogate: a,a,a-Trifluorotoluene	n	n .	II .	70.0-130		9.35	%	2
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9060099	6/17/99	6/18/99		0.500	1.31	mg/kg	3
Surrogate: 1,2-Dichloroethane-d4	H	"	#	70.0-121		94.0	%	



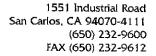


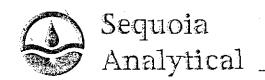
Sample Description:

Laboratory Sample Number:

MW-6-40.5 L905412-17

	Batch	Date	Date	Specific Method/			** 1.	
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Seque	ia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ar							
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		10.0	96.1	mg/kg	1 /
Benzene	11	11	н		0.0500	0.665	11	
Toluene	11	17	11		0.0500	1.07	11	
Ethylbenzene	<del>1</del> 1	#	*1		0.0500	1.25	11	
Xylenes (total)	*1	Ħ	11		0.0500	5.51	"	
Methyl tert-butyl ether	H ·	н	**		0.500	1.31	n	_
Surrogate: a,a,a-Trifluorotoluene	п	n .	"	70.0-130		15.2	%	2





Cambria Environmental 1144 65th St., Suite C. Oakland, CA 94608 Project: Shell(1)

Project Number: Shell 1285 Bancroft, San Leandro

Sampled: 5/17/99 Received: 5/19/99

Project Manager:

ger: Darryk Ataid

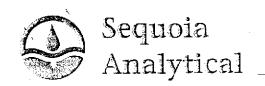
Reported: 6/21/99

Sample Description:

Laboratory Sample Number:

MW-6-45.5 L905412-18

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
•		Seque	ia Analytical	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ar	id MTBE by	DHS LUFT	<del></del>				
Purgeable Hydrocarbons as Gasoline	9050128	5/27/99	5/28/99		1.00	1.83	mg/kg	1,4
Benzene	l <del>t</del>	Ħ	er .		0.00500	0.0151	11	
Toluene	tt	79	"		0.00500	0.0173	**	
Ethylbenzene	tt	31	91		0.00500	0.0141	FT	•
Xylenes (total)	18 .	11	и		0.00500	0.0875	Ħ	
Methyl tert-butyl ether	11	19	**		0.0500	1.47	ri .	
Surrogate: a,a,a-Trifluorotoluene	и	"	"	70.0-130		87.5	%	



Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

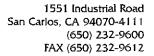
# Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequola Analytical - San Carlos

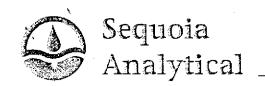
	Date	Spike	Sample	QC	. 3	Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
						•				
Batch: 9050120	Date Prepa		<u>99</u>		Extracti	on Method: EP.	A 5030B	P/T		
<u>Blank</u>	9050120-BI	<u> K1</u>								
Purgeable Hydrocarbons as Gasoline	5/26/99			ND	mg/kg	1.00				
Benzene	• • • • • • • • • • • • • • • • • • • •			ND	Ħ	0.00500				
Toluene	H.			ND	11	0.00500				
Ethylbenzene	н			NĐ	17	0.00500				
Xylenes (total)	H			ND	tt.	0.00500				
Methyl tert-butyl ether	H			ND	11	0.0500				
Surrogate: a,a,a-Trifluorotoluene	"	0.200		0.197	n	70.0-130	98.5			
LCS	9050120-BS	<u>51</u>								
Benzene	5/26/99	0.200		0.200	mg/kg	70.0-130	100			
Toluene	п	0.200		0.197	11	70.0-130	98.5			
Ethylbenzene	11	0.200		0.206	#1	70.0-130	103			
Xylenes (total)	H	0.600		0.591	Ħ	70.0-130	98.5			
Surrogate: a,a,a-Trifluorotoluene	п	0.200		0.181	п	70.0-130	90.5			
Matrix Spike	9050120-M	<u>S1 L9</u>	005298-01							
Benzene	5/26/99	0.200	ND	0.199	mg/kg	60.0-140	99.5			
Toluene	71	0.200	ND	0.205	#	60.0-140	102			
Ethylbenzene	**	0.200	ND	0.211	71	60.0-140	105			
Xylenes (total)	77	0.600	ND	0.603	Ħ	60.0-140	100			
Surrogate: a,a,a-Trifluorotoluene	"	0.200		0.196	H	70.0-130	98.0			
Matrix Spike Dup	9050120-M	SD1 L9	005298-01							
Benzene	5/26/99	0.200	ND	0.189	mg/kg	60.0-140	94.5	25.0	5.15	
Toluene	n	0.200	ND	0.190	11	60.0-140	95.0	25.0	7.11	
Ethylbenzene		0.200	ND	0.196	17	60.0-140	98.0	25.0	6.90	
Xylenes (total)	17	0.600	ND	0.563	H	60.0-140	93.8	25.0	6.40	
Surrogate: a,a,a-Trifluorotoluene	p	0.200		0.159	"	70.0-130	79.5			
Batch: 9050128	Date Prepar	red: 5/27/9	<u>19</u>		Extracti	on Method: EP	A 5030B	[P/T]		
Blank	9050128-BI									
Purgeable Hydrocarbons as Gasoline	5/28/99	_		ND	mg/kg	1.00				
Benzene	11			ND	н ,	0.00500				
Toluene	н .			ND	11	0.00500				
Ethylbenzene	n .			ND	11	0.00500				
Xylenes (total)	U			ND	m	0.00500				
Methyl tert-butyl ether	tt.			ND	111	0.0500				
Surrogate: a,a,a-Trifluorotoluene	ff	0.200		0.179	n	70.0-130	89.5			

Sequoia Analytical - San Carlos

\*Refer to end of report for text of notes and definitions.



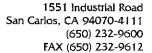


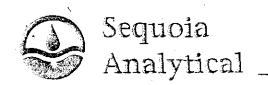


Cambria Environmental	Project:	Shell(1)	Sampled:	5/17/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported:	6/21/99

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

	Date	Spike	Sample	QC	<del></del>	Reporting Limit	Recov.	RPD	RPD	-
Analyte	Analyzed_	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
LCS	9050128-B	<u>S1</u>								
Purgeable Hydrocarbons as Gasoline	5/28/99	5.00		5.42	mg/kg	70.0-130	108			
Surrogate: a,a,a-Trifluorotoluene	п	0.200		0.202	"	70.0-130	101			-
Matrix Spike	9050128-M	<u>S1 L9</u>	905412-08							
Purgeable Hydrocarbons as Gasoline	5/28/99	5.00	ND	5.94	mg/kg	60.0-140	119			
Surrogate: a,a,a-Trifluorotoluene	н	0.200		0.227	n	70.0-130	113			
Matrix Spike Dup	9050128-M	SD1 L	905412-08							
Purgeable Hydrocarbons as Gasoline	5/28/99	5.00	ND	5.59	mg/kg	60.0-140	112	25.0	6.06	
Surrogate: a,a,a-Trifluorotoluene	"	0.200		0.202	п	70.0-130	101			

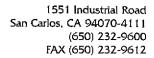


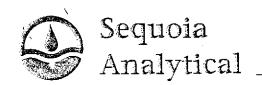


### MTBE by EPA Method 8260A/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9060099	Date Prepai	ed: 6/17/9	<u>99</u>		Extract	tion Method: EP	A 5030B	[P/T]		
Blank	9060099-BI	<u>K1</u>								
Methyl tert-butyl ether	6/17/99			ND	mg/kg	0.100				
Surrogate: 1,2-Dichloroethane-d4	Ħ	2.50		2.66	"	70.0-121	106			
LCS	9060099-BS	<u>1</u>								
Methyl tert-butyl ether	6/17/99	2.50		2.23	mg/kg	70.0-130	89.2			
Surrogate: 1,2-Dichloroethane-d4	н	2,50		2.68	st	70.0-121	107			
Matrix Spike	9060099-MS	<u> </u>	906233-01							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.10	mg/kg	60.0-140	84.0			
Surrogate: 1,2-Dichloroethane-d4	"	2.50		2.43	n	70.0-121	97.2			
Matrix Spike Dup	9060099-M	<u>SD1 L9</u>	906233-01							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.05	mg/kg	60.0-140	82.0	25.0	2.41	
Surrogate: 1,2-Dichloroethane-d4	tt .	2.50		2.39	"	70.0-121	95.6			



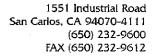


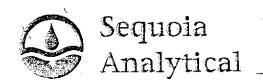


Cambria Environmental	Project:	Shell(1)	S	ampled:	5/17/99
I 144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Re	ceived:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataid	_Re	ported:	6/21/99

#### **Notes and Definitions**

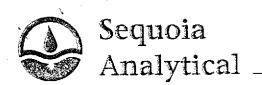
#	Note
1	Chromatogram Pattern: Gasoline C6-C12
2	The surrogate recovery was below established control limits due to dilution.
3	The 8260A MTBE confirmation was analyzed past the EPA recommended holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference





Cambria Environmental	Project:	Shell(1)	Sampled: 5/17/99	$\neg$
1144 65th St., Suite C.	Project Number:	Shell 1285 Bancroft, San Leandro	Received: 5/19/99	
Oakland, CA 94608	Project Manager:	Darryk Ataid	Reported: 6/21/99	

Page 23 of 23



June 10, 1999

Tim Costello Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

RE: Cambria (Shell)/M905319

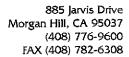
Dear Tim Costello

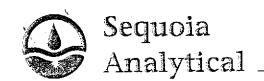
Enclosed are the results of analyses for sample(s) received by the laboratory on May 24, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lea-Ann Torres Project Manager

CA ELAP Certificate Number 1210

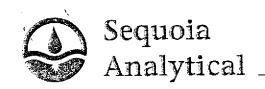




Sequoia Analytical - San CarlosProject:Cambria (Shell)Sampled:5/17/991551 Industrial RoadProject Number:L905412 (1285 Bancroft, San Leandro)Received:5/24/99San Carlos, CA 94070Project Manager:Tim CostelloReported:6/10/99

#### **ANALYTICAL REPORT FOR M905319**

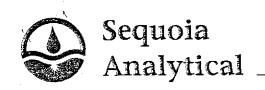
Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
L905412-02 (MW-7-10.5)	M905319-01	Soil	5/17/99
L905412-06 (MW-7-30.5)	M905319-02	Soil	5/17/99
L905412-11 (MW-6-10.5)	M905319-03	Soil	5/17/99
L905412-15 (MW-6-30.5)	M905319-04	Soil	5/17/99



Sequoia Analytical - San Carlos	Project:	Cambria (Shell)	Sampled:	5/17/99
1551 Industrial Road	Project Number:	L905412 (1285 Bancroft, San Leandro)	Received:	5/24/99
San Carlos, CA 94070	Project Manager:	Tim Costello	Reported:	6/13/99

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

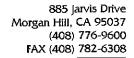
Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
	1.03110.01	1100000	1 11 11 1 1 1 1	memou		100011		110103
L905412-02 (MW-7-10.5)			M9053	<u>19-01</u>			Soil	
Total Solids	9050495	5/24/99	5/24/99	EPA 160.3	1.00	83.0	% by Weight	
Fractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.350	%	
L905412-06 (MW-7-30.5)			M9053	19-02			<u>Soil</u>	
Total Solids	9050495	5/24/99	5/24/99	EPA 160.3	1.00	83.0	% by Weight	
Fractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.0950	%	
L905412-11 (MW-6-10.5)			M9053	19-03	*		<u>Soil</u>	
Total Solids	9050495	5/24/99	5/24/99	EPA 160.3	1.00	85.0	% by Weight	
Fractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.0840	%	
L905412-15 (MW-6-30.5)			M9053	19-04			Soil	
Total Solids	9050495	5/24/99	5/24/99	EPA 160.3	1.00	82.0	% by Weight	
otal Solids ractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.150	%	

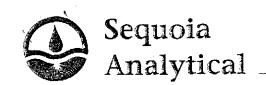


ſ	Sequoia Analytical - San Carlos	Project:	Cambria (Shell)	Sampled: 5/17/99
١	1551 Industrial Road	Project Number:	L905412 (1285 Bancroft, San Leandro)	Received: 5/24/99
	San Carlos, CA 94070	Project Manager:	Tim Costello	Reported: 6/13/99

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

	Date	Spike	Sample	QC.		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	<u>%</u>	Limit	%	Notes*
Batch: 9050495	Date Prepare		<u>9</u>		Extrac	tion Method: Go	eneral Pre	paration		
Blank Total Solids	<u>9050495-BL.</u> 5/24/99	<u>K1</u>		ND	% by W	eight 1.00	•			
<u>Duplicate</u> Total Solids	<u>9050495-DU</u> 5/24/99	<u>P1 M9</u>	9 <mark>05322-02</mark> 82.0	82.0	% by W	eight eigh		20.0	. 0	
Batch: 9050500	Date Prepare	ed: 5/26/9	<u>9</u>		Extrac	tion Method: Go	neral Pre	paration		
Blank Fractional Organic Carbon	<u>9050500-BL/</u> 5/26/99	<u>K1</u>		ND	%	0.0200	I			
<u>Duplicate</u> Fractional Organic Carbon	<u>9050500-DU</u> 5/26/99	<u>P1 M9</u>	0.0950	0.0920	%			15.0	3.21	





Sequoia Analytical - San Carlos 1551 Industrial Road

San Carlos, CA 94070

Project: Cambria (Shell) Sampled:

5/17/99

Project Manager:

Project Number: L905412 (1285 Bancroft, San Leandro)

5/24/99 Received: 6/10/99 Reported:

#### Notes and Definitions

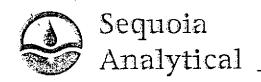
Tim Costello

Note Analyte DETECTED DET 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



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Sample ID	Dale	Budge		Tickey	<b>A</b>	Ho, of confr.	色	西西	EX C	X III	Tax for		Physic		Actori	Contrain	Paper	de S	MATERIAL DESCRIPTION		SAMPLE CONDITION/ COMMENIS
1117936	517/	900	X			1	X		X	,					ĺ				HOLD		
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MO1-7-1505.		800	X		•	2	X		X	.,			<del></del>		-				& Confirm From Mu	, <del>,</del> ,	NITH EPA
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MV1-305		755	X		·		X		X	•			X				,		,	- -	
MLL-7-35.5		955	*			7	X							~~~~					- /		
114-7-805	V	1800	X				X		X									****	·	_	
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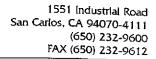


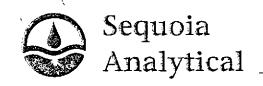
Cambria Environmental	Project:	Shell(1)	Sampled: 5/19/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bankroft, San Leandro	Received: 5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/21/99

Sample Description: Laboratory Sample Number:

MW-8-15.5 L905403-03

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	ia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C)	(2), BTEX ar	d MTBE by	DHS LUFT					1
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	_/
Benzene	"	**	n		0.00500	ND	11	
Toluene	11	н	tt		0.00500	ND	н	
Ethylbenzene	rt .	Ħ	Ħ		0.00500	ND	н	
Xylenes (total)	rt .	н	It	•	0.00500	ND	**	
Methyl tert-butyl ether	Ħ	Ħ	n		0.0500	ND	11	
Surrogate: a,a,a-Trifluorotoluene	11	н	n .	70.0-130		72.5	%	



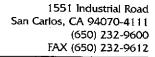


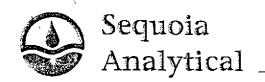
Cambria Environmental Project: Shell(1)
1144 65th St., Suite C. Project Number: Shell 1285 Bankroft, San Leandro
Oakland, CA 94608 Project Manager. Darryk Ataide

Sampled: 5/19/99 Received: 5/19/99 Reported: 6/21/99

Sample Description: Laboratory Sample Number: MW-8-20.5 L905403-04

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
· ———		Come	io Analysias	l Say Carlos				
Total Purgeable Hydrocarbons (C6-C	12) RTFV 01		····	l - San Carlos				
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	pare 1
Benzene	"	M	11		0.00500	ND	" IIIg/Rg	
Toluene	58	IT.	n		0.00500	ND	IF	1/
Ethylbenzene	17	**	n		0.00500	ND	11	
Xylenes (total)	**	O	tr		0.00500	ND	11	•
Methyl tert-butyl ether	Ħ	11	н		0.0500	ND	**	
Surrogate: a,a,a-Trifluorotoluene	"	н	#	70.0-130		76.5	%	





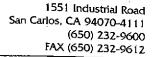
Cambria Environmental	Project:	Shell(1)	Sampled: 5/19/99	
1144 65th St., Suite C.	Project Number:	Shell 1285 Bankroft, San Leandro	Received: 5/19/99	
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported: 6/21/99	ı

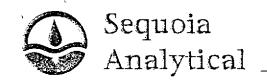
Sample Description:

**Laboratory Sample Number:** 

MW-8-20.5 L905403-05

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number_	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		<u>Seque</u>	oia Analyticai	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX an	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	
Benzene	H	10	TT .		0.00500	ND	11	
Toluene	п	0	If		0.00500	ND	"	1/
Ethylbenzene	r+	11	11		0.00500	ND	"	$\mathcal{C}$
Xylenes (total)	II .	11	¥		0.00500	ND	Ħ	
Methyl tert-butyl ether	II	tf .	*11		0.0500	ND	Ħ	
Surrogate: a,a,a-Trifluorotoluene	71	н	п	70.0-130		75.0	%	





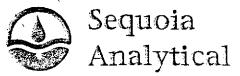
Cambria EnvironmentalProject:Shell(1)1144 65th St., Suite C.Project Number:Shell 1285 Bankroft, San LeandroOakland, CA 94608Project Manager:Darryk Ataide

Sampled: 5/19/99
Received: 5/19/99
Reported: 6/21/99

Sample Description: Laboratory Sample Number: MW-8-30.5 L905403-06

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
								110103
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar							
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	Same and
Benzene	н	17	11		0.00500	ND	"	
Toluene	ti	н	n		0.00500	ND	**	. /
Ethylbenzene	11	11	Ħ		0.00500	ND	11	
Xylenes (total)	Ħ	11	17		0.00500	ND	Ħ	
Methyl tert-butyl ether	#1	Ħ	ır		0.0500	ND	н	
Surrogate: a,a,a-Trifluorotoluene	#	n	"	70.0-130		67.0	%	

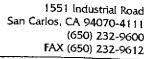


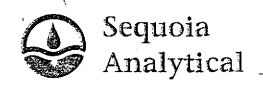


Cambria Environmental Project: Shell(1)	Sampled: 5/19/99
1144 65th St., Suite C. Project Number: Shell 1285 Bankroft, San Lean	ndro Received: 5/19/99
Oakland, CA 94608 Project Manager: Darryk Ataide	Reported: 6/21/99

Sample Description: Laboratory Sample Number: MW-8-35.5 L905403-07

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
			oia Analytical	- San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	
Benzene	**	te	11		0.00500	ND	if	
Toluene	**	IT	н		0.00500	. ND	Ħ	. /
Ethylbenzene	er .	17	#		0.00500	ND	n .	
Xylenes (total)	н	11	Ħ		0.00500	ND	n	
Methyl tert-butyl ether	n	Ħ .	ır		0.0500	ND	*	
Surrogate: a,a,a-Trifluorotoluene	"	n	"	70.0-130		69.0	%	



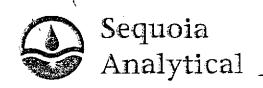


Sample Description:

Laboratory Sample Number:

MW-8-40.5 L905403-08

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit _	Result	Units	Notes*
				·-				· · · · · · · · · · · · · · · · · · ·
		Seque	<u>oia Analytica</u>	<u>l - San Carlos</u>				
Total Purgeable Hydrocarbons (C6-C	12), BTEX an	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	
Benzene		<b>"</b> .	17		0.00500	ND	II*	1
Toluene	н	H	tr		0.00500	ND	11	
Ethylbenzene	FF	n	H		0.00500	ND	11	
Xylenes (total)	(F	19	11		0.00500	ND	14	
Methyl tert-butyl ether	tt	11	11		0.0500	0.212	Ħ	
Surrogate: a,a,a-Trifluorotoluene	ii	H	н	70.0-130		77.5	%	
MTBE by EPA Method 8260A								
Methyl tert-butyl ether	9060099	6/17/99	6/17/99		0.100	0.210	mg/kg	
Surrogate: 1,2-Dichloroethane-d4	п	#	H	70.0-121		96.0	%	



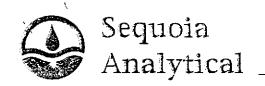
Cambria Environmental	Project:	Shell(1)	Sampled:	5/19/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bankroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

Sample Description:

Laboratory Sample Number:

MW-8-45.5 L905403-09

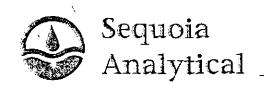
	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Samu	nia Analytical	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX an			- Ban Carlos				
Purgeable Hydrocarbons as Gasoline	9060009	6/1/99	6/1/99		1.00	ND	mg/kg	<i></i>
Benzene	Ħ	**	tt		0.00500	ND	H .	
Toluene	17	17	'n		0.00500	ND	pi	1/
Ethylbenzene	н	17	if		0.00500	ND	н	
Xylenes (total)	H	10	н		0.00500	ND	π	
Methyl tert-butyl ether	TI .	IF	17		0.0500	0.0532	**	
Surrogate: a,a,a-Trifluorotoluene	п	"	n .	70.0-130		72.5	%	



Cambria Environmental	Project:	Shell(1)	Sampled:	5/19/99
1144 65th St., Suite C.	Project Number:	Shell 1285 Bankroft, San Leandro	Received:	5/19/99
Oakland, CA 94608	Project Manager:	Darryk Ataide	Reported:	6/21/99

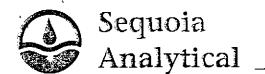
# Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9060009	Date Prepa	red: 6/1/99	9		Extract	ion Method: EP	A 5030B	[P/T]		
Blank	9060009-BI	L <u>K1</u>								
Purgeable Hydrocarbons as Gasoline	6/1/99			ND	mg/kg	1.00				
Benzene	"			ND	11	0.00500				
Toluene	и			ND	tt	0.00500				
Ethylbenzene	п			ND	n	0.00500				
Xylenes (total)	n			ND	11	0.00500				
Methyl tert-butyl ether	n			ND	11	0.0500				
Surrogate: a,a,a-Trifluorotoluene	,,	0.200		0.153	Ħ	70.0-130	76.5			
LCS	9060009-BS	S1								
Purgeable Hydrocarbons as Gasoline	6/1/99	5.00		4.71	mg/kg	70.0-130	94.2			
Surrogate: a,a,a-Trifluorotoluene	6/1/99	0.200		0.196	"	70.0-130	98.0	,		
Matrix Spike	9060009-M	S1 L9	905403-01							
Purgeable Hydrocarbons as Gasoline	6/1/99	5.00	ND	4.75	mg/kg	60.0-140	95.0			
Surrogate: a,a,a-Trifluorotoluene	6/1/99	0.200		0.176		70.0-130	88.0			
Matrix Spike Dup	9060009-M	SD1 L	905403-01							
Purgeable Hydrocarbons as Gasoline	6/1/99	5.00	ND	4.97	mg/kg	60.0-140	99.4	25.0	4.53	
Surrogate: a,a,a-Trifluorotoluene	6/1/99	0.200		0.198	n n	70.0-130	99.0			



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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9060099	Date Prepa	red: 6/17/9	<u>9</u>		Extract	ion Method: EPA	4 5030B	[P/T]		
Blank	<u>9060099-BI</u>	<u>LK1</u>								
Methyl tert-butyl ether	6/17/99			ND	mg/kg	0.100				
Surrogate: 1,2-Dichloroethane-d4	rr	2.50		2.66	n	70.0-121	106			
LCS	9060099-BS	<u>81</u>								
Methyl tert-butyl ether	6/17/99	2.50		2.23	mg/kg	70.0-130	89.2			
Surrogate: 1,2-Dichloroethane-d4	и .	2.50		2.68	н	70.0-121	107			
Matrix Spike	9060099-M	<u>S1 L9</u>	06233-01							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.10	mg/kg	60.0-140	84.0			
Surrogate: 1,2-Dichloroethane-d4	ır	2.50		2.43	n .	70.0-121	97.2			
Matrix Spike Dup	9060099-M	SD1 L	<del>206233-01</del>							
Methyl tert-butyl ether	6/17/99	2.50	ND	2.05	mg/kg	60.0-140	82.0	25.0	2.41	
Surrogate: 1,2-Dichloroethane-d4	#	2.50	,	2.39	"	70.0-121	95.6			



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

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

Project: Shell(1)

Sampled: 5/19/99

Project Number: Shell 1285 Bankroft, San Leandro Project Manager: Darryk Ataide

Received: 5/19/99 Reported: 6/21/99

**Notes and Definitions** 

Note

Analyte DETECTED

ND

DET

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dгу

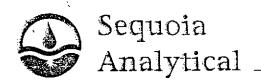
Sample results reported on a dry weight basis

Recov.

Recovery

**RPD** 

Relative Percent Difference



June 9, 1999

Tim Costello Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

RE: Cambria (Shell)/M905322

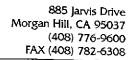
Dear Tim Costello

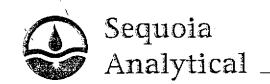
Enclosed are the results of analyses for sample(s) received by the laboratory on May 24, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lea-Ann Torres
Project Manager

CA ELAP Certificate Number 1210





Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

Project: Cambria (Shell)

Sampled: 5/19/99

Project Manager: Tim Costello

Project Number: L905403 (1285 Bancroft, San Leandro)

Received: 5/24/99 Reported: 6/9/99

#### **ANALYTICAL REPORT FOR M905322**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
L905403-02 (MW-8-10.5)	M905322-01	Soil	5/19/99
L905403-96 (MW-8-30.5)	M905322-02	Soil	5/19/99



Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

Project: Cambria (Shell)

Project Manager: Tim Costello

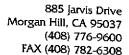
Project Number: L905403 (1285 Bancroft, San Leandro)

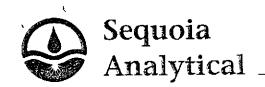
Sampled: 5/19/99

Received: 5/24/99 Reported: 6/9/99

#### 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*
L905403-02 (MW-8-10.5)			M9053	22-0 <u>1</u>			<u>Soil</u>	
Total Solids	<del>9</del> 050495	5/24/99	5/24/99	EPA 160.3	1.00	81.0	% by Weight	
Fractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.360	%	
L905403-06 (MW-8-30.5)			M9053	22-02			<u>Soil</u>	
Total Solids	9050495	5/24/99	5/24/99	EPA 160.3	1.00	82.0	% by Weight	
Fractional Organic Carbon	9050500	5/26/99	5/26/99	EPA 415.1	0.0200	0.110	%	



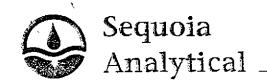


Sequoia Analytical - San CarlosProject:Cambria (Shell)Sampled:5/19/991551 Industrial RoadProject Number:L905403 (1285 Bancroft, San Leandro)Received:5/24/99San Carlos, CA 94070Project Manager:Tim CostelloReported:6/9/99

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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9050495	Date Prepa		<u>99</u>		Extract	tion Method: Ger	neral Pre	paration		
Blank Total Solids	<u>9050495-BJ</u> 5/24/99	<u>LK1</u>		NĐ	% by W	eight 1.00				
<u>Duplicate</u> Total Solids	9050495-D1 5/24/99	UPI M	9 <u>05322-02</u> 82.0	82.0	% by W	eight/eight		20.0	0	
Batch: 9050500	<u>Date Prepa</u>		<u>99</u>		Extract	tion Method: Ger	neral Pre	<u>paration</u>		
Blank Fractional Organic Carton	<u>9050500-B1</u> 5/26/99	<u>LK1</u>		ND	%	0.0200				
<u>Duplicate</u> Fractional Organic Carbon	<u>9050500-D1</u> 5/26/99	UP1 M	9 <b>05319-02</b> 0.0950	0.0920	%			15.0	3.21	





Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

Project: Cambria (Shell)

Sampled: 5/19/99

Project Number: L905403 (1285 Bancroft, San Leandro) Project Manager: Tim Costello

Received: 5/24/99 Reported: 6/9/99

#### **Notes and Definitions**

Note

Analyte DETECTED

ND

DET

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



## PETROLEUM SERVICES

Tim Costello Sequoia Analytical 1551 Industrial Blvd. San Carlos, CA 94070 May 27, 1999

Subject:

Transmittal of Geotechnical Analysis Data

SA Work order # L905412 Core Lab File No. 57111-99111

#### Dear Mr Costello:

Soil samples were submitted to our Bakersfield laboratory for geotechnical analysis. Determinations of bulk density and total porosity were requested. Grain and pore volumes were determined by Boyles Law double-cell methods utilizing an extended range helium porosimeter. The bulk densities and total porosity measurements and calculations were performed as described in API RP-40, API Recommended Practice for Core-Analysis Procedure, 1960. Accompanying this letter please find the results of this study.

We appreciate this opportunity to be of service to you and to Sequoia Analytical. Should you have any questions, or if we may be of further help in the future, please do not hesitate to contact us.

Very truly yours,

Tess Smith NW

Jeffry L. Smith

Laboratory Supervisor - Rock Properties

JLS:nw

1 original report, 1 cc report: Addressee



# Sequoia Analytical

(San Carlos) L905412 CL File No.: 57111-99111

Sample	Sample	Sample	Total	Bulk	Density	Matrix	Description
No.	Desc.	Date	Porosity %	Dry g/cc	Natural g/cc	Density g/cc	
1	L905412-02	17-May-99	31.9	1.80	2.11	2.64	Gray v clayey silt
2	L905412-06	17-May-99	35.7	1.72	2.07	2.67	Gray v clayey silt
3	L905412-11	17-May-99	31.8	1.80	2.12	2.64	Gray v clayey silt
4	L905412-15	17-May-99	36.1	1.70	2.06	2.66	Gray silty clayey vfgr sand w/gravel

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.



## PETROLEUM SERVICES

Tim Costello Sequoia Analytical 1551 Industrial Blvd. San Carlos, CA 94070 May 27, 1999

Subject :

Transmittal of Geotechnical Analysis Data

SA Work order # L905403 Core Lab File No. 57111-99110

#### Dear Mr Costello:

Soil samples were submitted to our Bakersfield laboratory for geotechnical analysis. Determinations of bulk density and total porosity were requested. Grain and pore volumes were determined by Boyles Law double-cell methods utilizing an extended range helium porosimeter. The bulk densities and total porosity measurements and calculations were performed as described in API RP-40, API Recommended Practice for Core-Analysis Procedure, 1960. Accompanying this letter please find the results of this study.

We appreciate this opportunity to be of service to you and to Sequoia Analytical. Should you have any questions, or if we may be of further help in the future, please do not hesitate to contact us.

Very truly yours,

Test Smith NW

Jeffry L. Smith

Laboratory Supervisor - Rock Properties

JLS:nw

1 original report, 1 cc report: Addressee



# **Sequoia Analytical**

CL File No.: 57111-99110

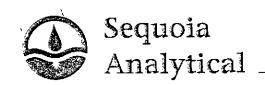
(San Carlos) L905403

Sample	Sample	Sample	Total	Bulk	Density	Matrix	Description
No.	Desc.	Date	Porosity %	Dry g/cc	Natural g/cc	Density g/cc	
1 2	L905403-02 L905403-06	19-May-99 19-May-99	33.4 34.2	1.75 1.72	2.08 2.06	2.63 2.61	Gray silt Gray clayey silt

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

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Sequoia Analytical - San Carlos

Project: Cambria (Shell)

5/18/99 Sampled:

1551 Industrial Road San Carlos, CA 94070

Project Manager:

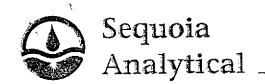
Project Number: L905400 (1285 Bancroft, San Leandro) Tim Costello

Received: 5/24/99 Reported: 6/15/99

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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Batch: 9050495 Blank	Date Prepare		<u> 19</u>		Extrac	tion Method: Ger	ieral Prej	paration		
Total Solids	5/24/99			ND	% by W	eight 1.00				
<u>Duplicate</u> Total Solids	<u>9050495-DU</u> 5/24/99	<u>P1 M9</u>	9 <u>05322-02</u> 82.0	82.0	% by W	eight eight		20.0	. 0	
Batch: 9050500	Date Prepar	ed: 5/26/9	<u>9</u>		Extrac	tion Method: Ger	<u>ieral Prej</u>	<u>paration</u>		
Blank Fractional Organic Carbon	9050500-BL 5/26/99	<u>K1</u>		ND	%	0.0200				
<u>Duplicate</u> Fractional Organic Carbon	<u>9050500-DU</u> 5/26/99	<u>P1 M9</u>	0.0950	0.0920	%			15.0	3.21	





Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

Project: Cambria (Shell)

Sampled: 5/18/99

Received: 5/24/99

Project Number: L905400 (1285 Bancroft, San Leandro)

Project Manager: Tim Costello

Reported: 6/15/99

#### Notes and Definitions

Note

Analyte DETECTED

ND

DET

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



# PETROLEUM SERVICES

May 27, 1999

Tim Costello Sequoia Analytical 1551 Industrial Blvd. San Carlos, CA 94070

Subject: Trans

Transmittal of Geotechnical Analysis Data

SA Work order # L905400 Core Lab File No. 57111-99109

#### Dear Mr Costello:

Soil samples were submitted to our Bakersfield laboratory for geotechnical analysis. Determinations of bulk density and total porosity were requested. Grain and pore volumes were determined by Boyles Law double-cell methods utilizing an extended range helium porosimeter. The bulk densities and total porosity measurements and calculations were performed as described in API RP-40, API Recommended Practice for Core-Analysis Procedure, 1960. Accompanying this letter please find the results of this study.

We appreciate this opportunity to be of service to you and to Sequoia Analytical. Should you have any questions, or if we may be of further help in the future, please do not hesitate to contact us.

Very truly yours,

Typ Smith, NW

Jeffry L. Smith

Laboratory Supervisor - Rock Properties

JLS:nw

1 original report, 1 cc report: Addressee

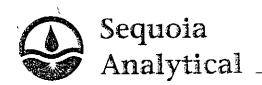


# Sequoia Analytical (San Carlos) L905400

CL File No.: 57111-99109

Sample	Sample	Sample	Total	Bulk	Density	Matrix	Description
No.	Desc.	Date	Porosity %	Dry g/cc	Natural g/cc	Density g/cc	
1 2	L905400-02 L905400-06	18-May-99 18-May-99	32.4 34.2	1.77 1.75	2.10 2.09	2.62 2.66	Gray clayey silt Gray clayey silt

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



June 15, 1999

Tim Costello Sequoia Analytical - San Carlos 1551 Industrial Road San Carlos, CA 94070

RE: Cambria (Shell)/M905320

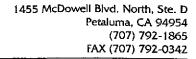
Dear Tim Costello

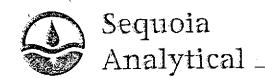
Enclosed are the results of analyses for sample(s) received by the laboratory on May 24, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lea-Ann Torres Project Manager

CA ELAP Certificate Number 1210



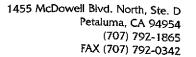


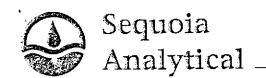
Project: Subbed in
Project Number: L905400
Project Manager: Tim Costello

Sampled: 5/18/99 Received: 5/19/99 Reported: 6/8/99

#### **ANALYTICAL REPORT FOR P905703**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
L905400-14	P905703-01	Soil	5/18/99



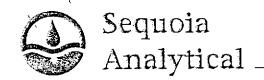


Project: Subbed in Project Number: L905400 Project Manager: Tim Costello Sampled:

5/18/99 Received: 5/19/99 Reported: 6/8/99

#### 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*
<u>L905400-14</u> Lead	9060050	6/2/99	<u><b>P90570</b></u> 6/3/99	03-01 EPA 6010A	15.0	42.2	<u>Soil</u> mg/kg	

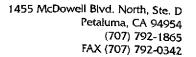


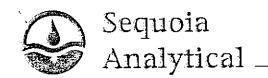
Project: Subbed in
Project Number: L905400
Project Manager: Tim Costello

Sampled: 5/18/99 Received: 5/19/99 Reported: 6/8/99

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

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
<u>Batch: 9060050</u> <u>Blank</u>	Date Prepare				Extract	tion Method: EP.	A 3050B			
Lead	6/3/99	<u>. N</u>		ND	mg/kg	7.50				
LCS Lead	9060050-BS1 6/3/99	50.0		47.9	mg/kg	80.0-120	95.8			
<u>Matrix Spike</u> Lead	9060050-MS 6/3/99	<u>1</u> <u><b>P90</b></u> 48.1	05703-01 42.2	63.3	mg/kg	75.0-125	43.9			1
Matrix Spike Dup Lead	9060050-MSI 6/3/99	<u>D1</u> <u>P90</u> 43.9	05703-01 42.2	49.0	mg/kg	75.0-125	15.5	20.0	95.6	1





Project: Subbed in
Project Number: L905400
Project Manager: Tim Costello

Sampled: 5/18/99 Received: 5/19/99 Reported: 6/8/99

#### **Notes and Definitions**

#	Note
I	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

SENT BY:

1551 Industrial Road

6-23-99 ; 10:11 ; SEQUOIA ANALYTICAL→

510 420 9170;# 2/ 4

Sequoia **Analytical** 

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Stc. D

Reciwood City, CA 94063 Walnut Crook, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792 1865 (650) 232-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 79Z-034Z FAX (650) 232-9612

Sequoia Analytical-San Carlos 1551 Industrial Road San Carlos, CA 94070 Attention: Tim Costello

Client Project ID: Sample Descript: Analysis Method:

First Sample #:

L905400, Cambria (Shell) Soll

California LUFT Manual, 12/87 905-2365

Sampled: May 18, 1999 Received: Digested:

May 19, 1999₹ Jun 1, 1999

Analyzed: Jun 2, 1999 Reported: Jun 17, 1999∰

#### ORGANIC LEAD

Sample Sample Sample Number Description Results mg/kg (ppm)

905-2365

Composite

N.D.

**Detection Limits:** 

2.5

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

SEQUOIA ANALYTICAL

Charlie Westwater

Project Manager

6-23-99 ; 10:11; SEQUOTA ANALYTICAL→ 510 420 91/0;# 3/ 4

Sequoia **Analytical** 

680 Chesapeake Drive 404 N. Wiget Lanc 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road

Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

Redwood City, CA 94063

(650) 364-9600 FAX (650) 364-9233 (925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

FAX (925) 988-9673 FAX (916) 9Z1-0100 FAX (707) 792-0342 FAX (650) 232-9612

Sequoia Analytical-San Carlos 1551 Industrial Road San Carlos, CA 94070

Client Project ID:

L905400, Cambria (Shell)

Matrix:

Attention: Tim Costello  QC Sample Group: 9052365

Reported:

Jun 17, 1999

#### QUALITY CONTROL DATA REPORT

Soll

Analyte: Organic Lead

QC Batch#: ME060199LUFTMDA

Analy. Method:

LUFT

Prep. Method:

LUFT

Analyst: MS/MSD #: T. Le

Sample Conc.:

9052359 N.D.

Prepared Date:

6/1/99

Analyzed Date: Instrument LD.#: 6/2/99

Conc. Spiked:

MV-1

20 mg/kg

Result:

2.3 mg/kg

MS % Recovery:

12

Dup. Result:

2.1 mg/kg

MSD % Recov.:

11

RPD:

**RPD Limit:** 

9.1

0-20

LCS #:

SEQUOIA ANALYTICAL, #1271

LCSD060199

Prepared Date:

6/1/99

Analyzed Date:

6/2/99 MV-1

Instrument I.D.#: Conc. Spiked:

20 mg/kg

LCS Result:

5.2 mg/kg

LCS % Recov.:

26

MS/MSD

0-62

LCS Control Limits

10-110

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an allquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix Interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD - MS Duplicate, RPD = Relative % Difference

Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

(925) 988-9600 FAX (916) 921-9600 FAX (707) 792-1865 FAX (650) 232-9600 FAX

(650) 364-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

Sequoia Analytical-San Carlos 1551 Industrial Road San Carlos, CA 94070 Attention: Tim Costello

Client Project ID: Sample Descript: Analysis Method:

First Sample #:

L905400, Cambria (Shell) Soil

: California LUFT Manual, 12/87 905-2365

Sampled: May 18, 1999 Received: May 19, 1999 Digested: Jun 1, 1999

Analyzed: Jun 2, 1999 Reported: Jun 17, 1999

#### **ORGANIC LEAD**

Sample Number	Sample Description	Sample Results mg/kg (ppm)				
905-2365	Composite	N.D.				

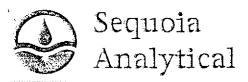
**Detection Limits:** 

2.5

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

**SEQUOIA ANALYTICAL** 

Charlie Westwater Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

Sequoia Analytical-San Carlos 1551 Industrial Road

San Carlos, CA 94070 Attention: Tim Costello Client Project ID: L905400, Cambria (Shell)

Matrix:

QC Sample Group: 9052365

Reported:

Jun 17, 1999

#### QUALITY CONTROL DATA REPORT

Analyte:

Organic Lead

QC Batch#: ME060199LUFTMDA

Analy. Method:

LUFT

Prep. Method:

LUFT

Analyst: MS/MSD #: T. Le

Sample Conc.:

9052359 N.D.

Prepared Date:

Analyzed Date:

6/1/99

Instrument I.D.#:

6/2/99 MV-1

Conc. Spiked:

20 mg/kg

Result: MS % Recovery: 2.3 mg/kg

12

Dup. Result:

2.1 mg/kg

MSD % Recov.:

11

RPD:

9.1

**RPD Limit:** 

0-20

LCS #: LCSD060199

Prepared Date:

6/1/99

Analyzed Date:

6/2/99

Instrument I.D.#: Conc. Spiked:

MV-1 20 mg/kg

LCS Result:

5.2 mg/kg

LCS % Recov.:

26

MS/MSD

0-62 10-110

LCS **Control Limits** 

Please Note:

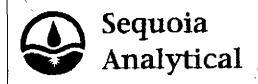
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Charlie Westwater Project Manager

SEQUOIA ANALYTICAL, #1271

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Project: Shell(2)

Project Number: Shell 1285 Bancroft, San Leandro

Sampled: 6/4/99 Received: 6/4/99

Project Manager: Ann Pember

Reported: 6/7/99

#### **ANALYTICAL REPORT FOR L906081**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
Irrigation Well	L906081-01	Water	6/4/99
MW-5	L906081-02	Water	6/4/99
MW-6	L906081-03	Wat <del>er</del>	6/4/99
MW-7	L906081-04	Water	6/4/99
MW-8	L906081-05	Water\	6/4/99



Blaine Tech Services Project: Shell(2) 1680 Rogers Avenue Project Number: Shell 1285 Bancroft, San Leandro San Jose, CA 95112 Project Manager: Ann Pember	Sampled: 6/4/99 Received: 6/4/99 Reported: 6/7/99	
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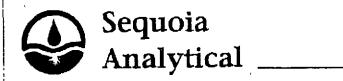
BLAINE TECH SERVICES, INC

Sample Description:

Laboratory Sample Number:

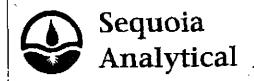
Irrigation Well L906081-01

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seau	ola Analytica	I - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12). BTEX an							
Purgeable Hydrocarbons as Gasolina	9060026	6/4/99	6/4/99		50.0	ND	ug∕l	
Benzene	11	H	41		0.500	ИD	lt -	
Foluene	ч	Щ	ø		0.500	ND	u	
Sthylbenzene	я	и	н		0.500	ND	(f	
•	H	ŗ#	Ħ		0.500	ND	Ħ	
Kylenes (total) Methyl tert-buryl ether	31	(f	ч		5.00	ND	ŧI	
Surrogase: a.a.a-Trifluorosoluene	Ĥ	н	Ą	70.0-130	<u></u> .	84,7	%	
MTBE by EPA Method 8260A								
Mothyl terr-buryl ether	9060043	6/7/99	6/7/99		2.00	שמ	ug/l	
Surrogate: 1,2-Dichloroethane-d4	и	H.	H	76.0-114	<u></u>	111	%	



Sample Description: Laboratory Sample Number: MW-5 L906081-02

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,							
•				L-San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX or	d MTBE by	<b>PHS LUFT</b>					
Purgeable Hydrocarbons as Gasoline	9060036	6/6/99	6/6/99		20000	80400	ug/l	1
Benzens	H	11	н		200	4400	ц	
Toluene	<b>B</b>	þ	η		200	26000	н	
Ethylbenzene	-	u	9		200	1480	11	
Xylenes (total)	¥J	a	11		200	11000	11	
Methyl tert-butyl ether	91	u	II		2000	3660	41	
Surragate: a.a.a-Trifluorotoluene	н	Ħ	н	70.0-130		79.1	%	

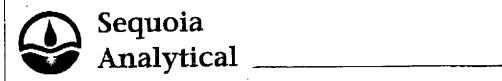


	Blaine Tech Services 1680 Rogers Avenue	Project: Project Number:	Shell (2) Shell 1285 Bencroft, Sen Leandro	Sampled: 6/4/99 Received: 6/4/99	7
1	San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 6/7/99	

Sample Description:
Laboratory Sample Number:

MW-6 L906081-03

Danat atot A pauthie Maniper.			2200001					
Analyte	Barch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
				I - San Carlos				
Total Purgeoble Hydrocarbons (C6-C)	.2), BTEX ar	id MTRE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060036	6/6/99	6/6/99		5000	56900	ug/l	1
Benzene	TÉ	н	ц		50.0	6830	H	
Toluone	I <b>?</b>	H	11		50.0	6050	<b>t</b> 1	
	u	н	31		50.0	1970	И 1	
Ethylbenzene	11	D.	и		50.0	9060	u '	
Xylence (total)	11		п		500	17000	н	
Methyl tert-butyl ether		····			300		- 4/	
Surrogate: a,a,a-Trifluoratoluene	<b>f</b> (	μ	U	70.0-130		83.8	%	
MTBE by EPA Method \$260A								
Methyl tert-butyl other	9060043	6/7/99	6/7/99		666	24300	บะ/ไ	
Surrogase: 1,2-Dichloroethane-d4	Ü	д	n	76.0-114		109	%	
• • • • • • • • • • • • • • • • • • • •								



TEL:408 5/3 ///I

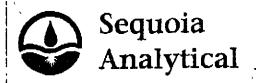
Blaine Tech Services	Project	Shell(2)	Sampled:	6/4/99
1680 Rogers Avenue	Project Number:	Shell 1285 Bancroft, San Leandro	Received:	6/4/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported:	6/7/99

Sample Description:

Laboratory Sample Number:

MW-7 L906081-04

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notos*
2 511001 7 000				<u> </u>				
		Segue	ia Analytica	I - San Carlos				
Total Pargeable Hydrocarbons (C6-C	12), BTEX 41	d MTBE by	DHS LUFT					/
Purgeable Hydrocarbons as Gasoline	9060026	6/4/99	6/4/99		50.0	ND	ug∕l '	
Benzene	e.	μ	ħ		0.500	0.663	H	. /
Toluene	ąı	10	11		0.500	ИD	H .	$\mathbf{V}$
Ethylbenzone	11	10	a i		0.500	0.677	n	
Xylenes (total)	н	4	11		0.500	ND	t#	
Methyl tert-butyl ether	<b>1</b> 1	Ħ	H		5.00	11.7	Pt .	
Surrogate: a,a,a-Trifluorotoluene	'lı	an .	n	70.0-130		86.5	%	



ne Tech Services Project: Shell(2)	Sampled: 6/4/99	
O Rogers Avenue Project Number: Shell 1285 Bancroft, San Leandro	Received: 6/4/99	
Jose, CA 95112 Project Manager: Ann Pember	Reported: 6/7/99	

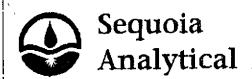
BLAINE TECH SERVICES, INC

Sample Description: Laboratory Sample Number:

MW-8 L906081-05

Analyts	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Segue	olo Analytica	- San Carlos				
Total Purgeable Hydrocarbons (Ch-C)	(2), BTEX ap	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060026	6/4/99	6/4/99		50.0	ND	ug/l	1/
Benzone	ķĮ	π	11		0.500	ND	11	· ·
Toluene	n	н	(1		0.500	ND	).	
Ethylbenzene	11	4	n		0,500	ND	Ħ	
Xylenes (total)	11	H	ıt		0.500	ND	II	
Methyl tert-butyl ether	ų.	ħ	it		5.00	186	11	
Surrogate: a,a,a-Trifluorosoluene	σ	H	li.	70.0-130		90.0	%	1

BLAINE BANJOSE, C	1880 ROGERS AVENUE ALIFORNIA 851 12-1105		CONDUCT	ANALY	SIS TO I	ETECT	LAB SECUCIA
	FAX (408) 573-7771 PHONE (408) 573-0555  SEE STATE OF TOTAL  J 3 Vo A's	TPH - gas, BTEX	X X X MIBE by 8020	iesel	Senates by 8260	1,2~DCA & BDB by adio.	ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMIT SET BY CALIFORNIA DHS AND    EPA
SAMPLING DATE TIME SAME COMPLETED 6/4/19/15/0 PERFERENCE BY RELEASED BY RELEASED BY	PUNG ORMED BY DATE DATE DATE	/99 17	TIME TIME TIME	*	RECEIV	ED BY	RESULTS NEEDED 24 Int TAT DATE THAT DATE TIME  DATE TIME  DATE TIME  UNIVERSALES  DATE TIME  UNIVERSALES  UNIVERSALES  DATE TIME  UNIVERSALES  UNIVE



JUL. -19' 99 (MON) 10:43

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

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Project: Shell(2)

Project Number: Shell 1285 Bankcroft, San Leandro Project Manager: Ann Pember

Sampled: 6/4/99

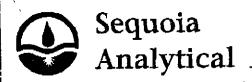
TEL:408 573 7//L

Received: 6/4/99

Reported: 6/30/99

## **ANALYTICAL REPORT FOR L906095**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-6NP	1.906095-01	Water	6/4/99
MW-7NP	L906095-02	Water	6/4/99
MW-8NP	L906095-03	Water	6/4/99
MW-5NP	1906095-04	Water	6/4/99



1680 Rogers Avenue Project Numb	oct. Shell 1285 Bankcroft, San Leandro	Received: 6/4/99
San Jose, CA 95112 Project Manag	ger: Ann Pember	Reported: 6/30/99

BLAINE TECH SERVICES, INC

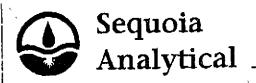
Sample Description:

Laboratory Sample Number:

MW-6NP L906095-01

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogete Limits	Reporting Limit	Result	Units	Notes*
		Segu	olo Analytica	1 - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX 40							
Purgeable Hydrocarbons as Gasoline	9060110	6/18/99	6/18/99		20000	36000	ug/l	A
Benzene	п	a	п		200	4240	#	
Toluene	H	17	31		200	1680	16	
Ethylbenzene	EĮ	ri	n		200	1100	u	$\mathcal{V}$
Xylenes (total)	Į)	N	π		200	4160 .	k	
Mothyl tert-butyl ether	lt	η	a		2000	11300	u	
Surrogase: a,a,a-Trifluorosoluene	"	ij .	r.	70,0-130		89.4	%	
MTBE by EPA Method 8260A								1
Methyl tert-hutyl ether	9060143	6/28/99	6/28/99		500	17500	ug/l	
Surrogate: 1,2-Dichloroethane-d4	'n	<del>u</del>	и	76.0-114	<u> </u>	107	%	<del></del>

TEL:408 573 7771

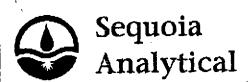


1551 Industrial Road San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612

Blaine Tech Services Project: Shell(2) Sampled: 6/4/99
1680 Rogers Avenue Project Number: Shell 1285 Bankcroft, San Leandro Roccived: 6/4/99
San Jose, CA 95112 Project Mausgor: Ann Pember Reported: 6/30/99

Sample Description: Laboratory Sample Number: MW-7NP L906095-02

	Batch	Date	Date	Specific Method/				
Analyte	Number	Prepared	Analyzed	Surrogate Limita	Limit	Result_	Unite	Notes*
•		Segni	ia Analytica	- San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX at	id MTBE by	PHS LUFT				/	
Purgeable Hydrocarbons as Gasoline	9060103	6/17/99	6/17/99		50.0	ND	ug/l /	
Benzene	H	Ħ	н		0,500	מא	" 1/	
l'oluene	vi	4	н		0.500	ND	"	
Ethylbenzene	p.	H	le		0.500	ND	•	
Xylenes (total)	п	et.	UT.		0.500	ND	u	
Methyl text-buryl ether	11	II	Ŋ		5.00	ND	17	
Surrogaie: a,a,a-Trifluorotoluene	H	<b>#</b>	"	70,0-130		85,5	%	,



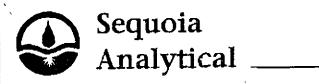
1551 Industrial Road San Carlos, CA 94070-4111 (650) 232-9600 FAX (650) 232-9612

TEL:408 573 7771

Blaine Tech Services Project: Shell(2) Sampled: 6/4/99
1680 Rogers Avenue Project Number: Shell 1285 Bankcroft, San Leandro Received: 6/4/99
San Jose, CA 95112 Project Manager: Ann Pember Reported: 6/30/99

Sample Description: Laboratory Sample Number: MW-8NP L906095-03

Analyte	Barch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
<del></del>		Comme	de Anolesia	l Car Carlos		<u></u>		
				- San Carlos				
Total Purgeable Hydrocarbons (C6-C	<u>12), BTEX 81</u>	IN MITTER by	PHS LUFT					/
Purgeable Hydrocarbons as Gasoline	9060103	6/17/99	6/17/99		50	ND	ug/l	/
Benzene	tt	ષ	H		0.500	ND	n .	~/
Toluene	te	п	H		0.500	ИD	ŋ	Ŭ
Ethylbenzene	11	n	ц		0.500	ND	rt.	
Xylenes (total)	**	et.	п		0.500	ND	11	
Methyl tort-butyl ether	9060116	6/21/99	6/21/99		10.0	452	•1	1
Surrogase: a,a,a-Trifluorosoluene	9060103	6/17/99	6/17/99	70.0-130		86.7	%	



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

Blaine Tech Services	Project:	Shell(2)	Sampled: 6/4/99
1680 Rogers Avenue	Project Number:	Shell 1285 Bankcroft, San Leandro	Received: 6/4/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported: 6/30/99

BLAINE TECH SERVICES, INC

Sample Description: Laboratory Sample Number:

MW-5NP L906095-04

	Batch	Date	Date	Specific Method/	Reporting	Result	Units	37-4
Analyte	Number	Prepared	Analyzed	Surrogate Limite	Limit	1/CHUIT	Onts	Notes*
		Seque	la Analytica	- San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX 61	d MTBE by	DHS LUFT					1
Purgeable Hydrocarbons as Gasoline	9060110	6/18/99	6/18/99		50000	159000	ug/l /	3
Benzone	4	ŧI	II.		500	7190	" /	
Toluene	Ħ	Ħ	н .		500	39300	" 4 /	
Ethylbenzepe	•1	if	Ħ		500	2450	, 0	
Xylenes (total)	н	u .	11		500	16700	н :	
Methyl tert-butyl ether	11	В	u		5000	ND	n	
Surrogate: a,a,a-Triffuorotoluene	fr	H	61	70.0-130		89.6	%	

BLANE SAN JOSE, CAUPORNIA 95112-1105			CONI	UCT /	MAL	YEIS T	DETECT		ALOUOZZ BAJ			ıDHS#
SAN JOSE, CAUFORNIA 95112-1105 FAX (402) 573-7771 TECH SERVICES INC.  CHAIN OF CUSTODY  990604-63  CLIENT  Equiva - Karen Petryna  SITE 1285 Bancroft  San Leandro, CA    CICCO     MATRIX CONTAINERS     SAMPLE I.D.   MW-6NF 6447 1405 W 3 VOAS  MW-7NF   1325   MW-9NF     MW-9NF   1223   MW-5NF     MW-5NF   1445 W 3 VOAS		XXXX TPH - gas, BIEN	8020	by 8260		by 8260	ЕDB by 8010		ALL ANALYSES MUST NO SET BY CALIFORNIA DO LIA DOTHER  SPECIAL INSTRUCTION  Send invoice of Incident  Send report to Attn: And ADDLINFORMATION  Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE Authority Send Confirm hydres of ATTE AUTHORITY Send Con	NS  Equiva  A 989  Blaine  Pember  STATUS	□RWQ0	B REGIOII
SAMPLING DATE TIME SAMPLING PERFORMED BY PERFORMED BY DATE  RELEASED BY DATE  PED VIA DATE	4/2		TIME			REC	EIVED BY	,	RESULTS NEEDED NO LATER THAN	Torna 1	DATE DATE  DATE  DATE	TIME

Attachment B

Soil Boring Logs



# Cambria Environmental Technology, Inc. 1144 - 65th St.

### **BORING/WELL LOG**

Oakland, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME _	Equiva Services LLC	BORING/WELL NAME	MW-5		
JOB/SITE NAME _	snl1285	DRILLING STARTED	18-May-99		
LOCATION _	1285 Bancroft Avenue, San Leandro, California	DRILLING COMPLETED	18-May-99		
PROJECT NUMBER _	241-0504	WELL DEVELOPMENT D	ATE (YIELD)	NA	
DRILLER _	Gregg Drilling	GROUND SURFACE ELE	VATION	NA	
DRILLING METHOD _	Hollow-stem auger	TOP OF CASING ELEVAT	TION NA		
BORING DIAMETER	6"/10"	SCREENED INTERVAL	25 to 50	ft bgs	
LOGGED BY	J. Riggi	DEPTH TO WATER (First	Encountered)	33.0 ft (18-May-99)	$\overline{\Sigma}$
REVIEWED BY	A. Le May, RG	DEPTH TO WATER (Stati	c)	33.30ft (18-May-99)	Ţ
REMARKS	Hand augered to 5' bos; located 9' SW of SW US	T slab corner.			

CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY SAMPLE ID BLOW GRAPHIC LOG DEPTH (ft bgs) U.S.C.S. EXTENT LITHOLOGIC DESCRIPTION WELL DIAGRAM Silty Sandy GRAVEL; (FILL); dry; 10% clay, 15% silt, 35% sand, 40% gravel; no plasticity; high estimated permeability. 2.0 Clayey SILT; (ML); brown; stiff; damp; 30% clay, 60% silt, 10% fine grained sand; low plasticity; low estimated permeability. Portland Type MW-5 <1.0 100% 10 ИII -5' <1.0 100% MW-5 @ 10' - very stiff. -10' ML <1.0 MW-5 @ 15' - hard. 100% 16 -15 Schedule 40 PVC 20 MW-5 <1.0 100% @ 15' - very stiff. LOG (TPH-G) GASNL1285/GINTASNL1285.GPJ DEFAULT.GDT 7/27/99 -20' ■ Bentonite Seal 22.5 Sandy Clavey SILT; (ML); brown; stiff; damp; 30% clay, 45% silt, 25% fine grained sand; low plasticity; low Monterey estimated permeability. Sand #3 ML <1.0 100% MW-5 -25' 27.5 Clayey SAND; (SC); brown; medium dense; damp; 30% clay, 10% slit, 60% fine grained sand; low plasticity; low estimated permeability. <1.0 100% MW-5 -30' SC ¥ PAGE 1 OF Continued Next Page



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

**BORING/WELL LOG** 

PAGE 2 OF 2

CLIENT NAME	Equiva Services LL
JOB/SITE NAME	snl1285

**BORING/WELL NAME DRILLING STARTED** 

MW-5 18-May-99

1285 Bancroft Avenue, San Leandro, California

DRILLING COMPLETED \_\_\_\_18-May-99

### LOCATION Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY GRAPHIC LOG BLOW EXTENT DEPTH (ft bgs) U.S.C.S. SAMPLE WELL DIAGRAM LITHOLOGIC DESCRIPTION 1.91 MW-5 @ 35' - dense; wet. 100% 21 -351 37.5 4"-diam., 0.010" Slotted Sandy GRAVEL; (GW); grey to black; medium dense; wet; 10% silt, 30% sand, 60% fine to coarse grained Schedule 40 gravel; no plasticity; high estimated permeability. **PVC** GW 10.5 MW-5 100% -40' 11 42.5 Silty Gravelly Clayey SAND; (SC); brown; very dense; wet; 25% clay, 15% silt, 45% fine grained sand, 15% gravel; low plasticity; low estimated permeability. MW-5 6.67 100% -45' 45 SC 50.0 Bottom of Boring @ 50 ft WELL LOG (TPH-G) GNSNL1285/GINT/SNL1285.GPJ DEFAULT.GDT



#### Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608

**BORING/WELL LOG** 

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME _	Equiva Services LLC	BORING/WELL NAME	MW-6		
JOB/SITE NAME _	snl1285	DRILLING STARTED _	17-May-99		
LOCATION _	1285 Bancroft Avenue, San Leandro, California	DRILLING COMPLETED	17-May-99		
PROJECT NUMBER _	241-0504	WELL DEVELOPMENT DA	TE (YIELD)_	NA	
DRILLER _	Gregg Drilling	GROUND SURFACE ELEV	ATION	NA	
DRILLING METHOD _	Hollow-stem auger limited access	TOP OF CASING ELEVAT	ON NA		
BORING DIAMETER _	8"	SCREENED INTERVAL	25 to 50	ft bgs	
LOGGED BY	J. Riggi	DEPTH TO WATER (First	Encountered)	32.0 ftNA	$\nabla$
REVIEWED BY	A. Le May, RG	DEPTH TO WATER (Statio	)	NA	Ţ
REMARKS	Hand augered to 5' bgs.				

CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY SAMPLE ID GRAPHIC LOG BLOW COUNTS DEPTH (ft bgs) EXTENT U.S.C.S. LITHOLOGIC DESCRIPTION WELL DIAGRAM Silty Clayey Sandy GRAVEL; (FILL); brown; damp; 20% clay, 15% silt, 25% sand, 40% gravel; low plasticity; low estimated permeability. 2.0 Clayey SAND; (SC); brown; damp; 25% clay, 10% sift, 65% fine grained sand; low plasticity; low estimated permeability. Portland Type 100% MW-6 <1.0 -5' <1.0 100% MW-6 -10' <1.0 MW-6 100% 2"-diam., 0.010" Slotted -15' Schedule 40 PVC SC MW-6 <1.0 100% -20' Bentonite Seal DEFAULT.GDT Monterey Sand #3 WELL LOG (TPH-G) G:\SNL1285\GINT\SNL1285.GPJ <1.0 100% MW-6 -25' 100% MW-6 30 <1.0 NA -30' ք PAGE 1 OF Continued Next Page



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

### **BORING/WELL LOG**

**CLIENT NAME** JOB/SITE NAME

LOCATION

Equiva Services LLC snl1285

**BORING/WELL NAME DRILLING STARTED** 

17-May-99

MW-6

1285 Bancroft Avenue, San Leandro, California

17-May-99 DRILLING COMPLETED \_

Continued from Previous Page

CONTACT DEPTH (ft bgs) TPHg (mg/kg) SAMPLE 1D GRAPHIC LOG RECOVERY BLOW COUNTS EXTENT U.S.C.S. DEPTH (ft bgs) LITHOLOGIC DESCRIPTION **WELL DIAGRAM** 273 MW-6 100% -35 37.5 2"-diam., Clayey Sandy GRAVEL; (GC); brown; wet; 20% clay, 10% silt, 30% sand, 50% fine to coarse grained gravel; low plasticity; high estimated permeability. 0.010" Slotted Schedule 40 PVC GC 96.1 100% MW-6 -40' 42.5 Clayey SAND; (SC); brown; wet; 30% clay, 10% silt, 60% fine grained sand; low plasticity; low estimated permeability. 1.83 100% MW-6 -45 SC 50.0 Bottom of Boring @ 50 ft WELL LOG (TPH-G). G:\SNL1285\GINT\SNL1285.GPJ. DEFAULT.GDT. 7/27/99 PAGE 2 OF 2



#### 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 NAMEMW-7	
JOB/SITE NAME	sni1285	DRILLING STARTED 17-May-99	
LOCATION	1285 Bancroft Avenue, San Leandro, California	DRILLING COMPLETED 17-May-99	
PROJECT NUMBER	241-0504	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATION	NA
DRILLING METHOD _	Hollow-stem auger limited access	TOP OF CASING ELEVATION NA	
BORING DIAMETER _	8"	SCREENED INTERVAL 25 to 50	ft bgs
LOGGED BY	J. Riggi	DEPTH TO WATER (First Encountered)	35.6 ft (17-May-99)
REVIEWED BY	A. Le May, RG	DEPTH TO WATER (Static)	32.90ft (17-May-99)
REMARKS	Hand augered to 5' hos: located in driveway behin	ad Shall on property line	

CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY GRAPHIC LOG BLOW DEPTH (ft bgs) EXTENT U.S.C.S. SAMPLE LITHOLOGIC DESCRIPTION WELL DIAGRAM Sandy Clayey GRAVEL; (FILL); brown; dry; 20% clay, 10% silt, 20% sand, 50% gravel; low plasticity; low estimated permeability. 2.0 Clayey SAND; (SC); brown; damp; 30% clay, 10% silt, 60% fine grained sand; low plasticity; low estimated SC permeability. 5.0 Portland Type <1.0 MW-7 100% Clayey SILT; (ML); brown; damp; 30% clay, 60% silt, 10% fine grained sand; low plasticity; low estimated permeability. 1/11 -5' ML 7.5 Silty Clayey SAND; (SC); brown; damp; 30% clay, 20% silt, 50% fine grained sand; low plasticity; low estimated permeability. SC 10 <1.0 MW-7 100% NA -101 12.5 Clayey SILT; (ML); brown; damp; 30% clay, 50% silt, 20% fine grained sand; low plasticity; low estimated permeability. <1.0 MW-7 100% 2" diam., -15' Schedule 40 ML <1.0 100% MW-7 -201 ■ Bentonite Seal DEFAULT.GDT 22.5 Silty Clayey SAND; (SC); brown; damp; 35% clay, 25% silt, 40% fine grained sand; low plasticity; low estimated Monterey permeability. Sand #3 25 G:\SNL1285\GINT\SNL1285.GPJ <1.0 MW-7 100% NA -25' SC <1.0 MW-7 100% NA -30' LOG (TPH-G) Ţ Continued Next Page PAGE 1 OF 2



LOCATION

WELL LOG (TPH-G) GASNL1285/GINTASNL1285.GPJ DEFAULT.GDT 7/27/99

#### Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608

**BORING/WELL LOG** 

PAGE 2 OF

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	
JOB/SITE NAME	snl1285	ı

BORING/WELL NAME MW-7
DRILLING STARTED 17-May-99

1285 Bancroft Avenue, San Leandro, California DRILLING COMPLETED 17-May-99

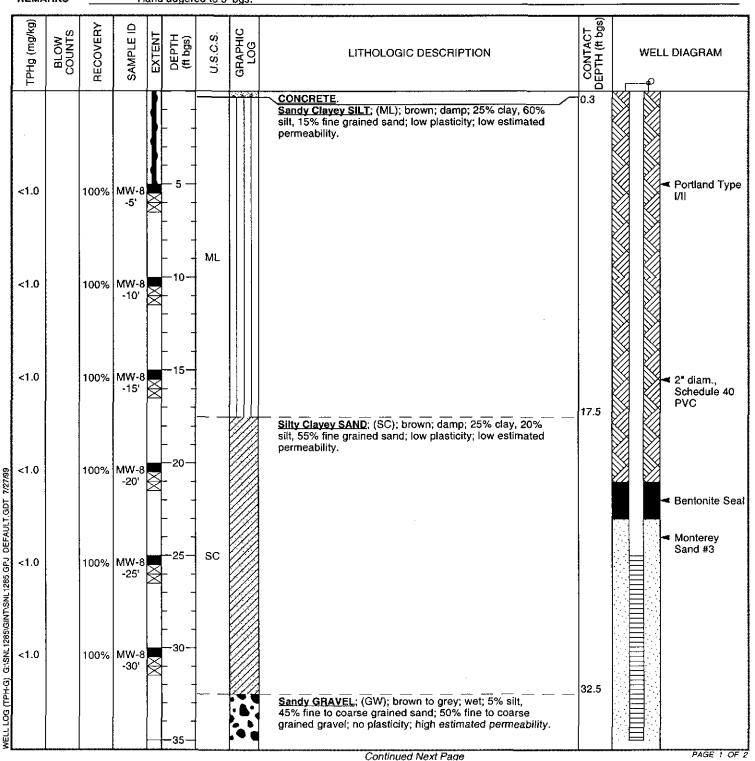
Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY SAMPLE ID BLOW GRAPHIC LOG EXTENT U.S.C.S. DEPTH (ft bgs) LITHOLOGIC DESCRIPTION **WELL DIAGRAM** <1.0 MW-7 ⊻ 100% NΑ -35' 37.5 2"-diam., Clayey SAND; (SC); brown; wet; 30% clay, 10 % silt, 0.010" Slotted 60% fine grained sand; low plasticity; low estimated permeability. Schedule 40 PVC 100% MW-7 <1.0 -40' sc <1.0 100% MW-7 NA -45' 50.0 50 Bottom of Boring @ 50 ft



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-8
JOB/SITE NAME	snl1285	DRILLING STARTED 19-May-99
LOCATION _	1285 Bancroft Avenue, San Leandro, California	DRILLING COMPLETED 19-May-99
PROJECT NUMBER _	241-0504	WELL DEVELOPMENT DATE (YIELD) NA
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATION NA
DRILLING METHOD _	Hollow-stem auger limited access	TOP OF CASING ELEVATION NA
BORING DIAMETER _	8"	SCREENED INTERVAL 25 to 50 ft bgs
LOGGED BY	J. Riggi	DEPTH TO WATER (First Encountered) 36.0 ft (19-May-99)
REVIEWED BY	A. Le May, RG	DEPTH TO WATER (Static) NA
REMARKS	Hand augered to 5' bos.	





Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608 **BORING/WELL LOG** 

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME JOB/SITE NAME

LOCATION

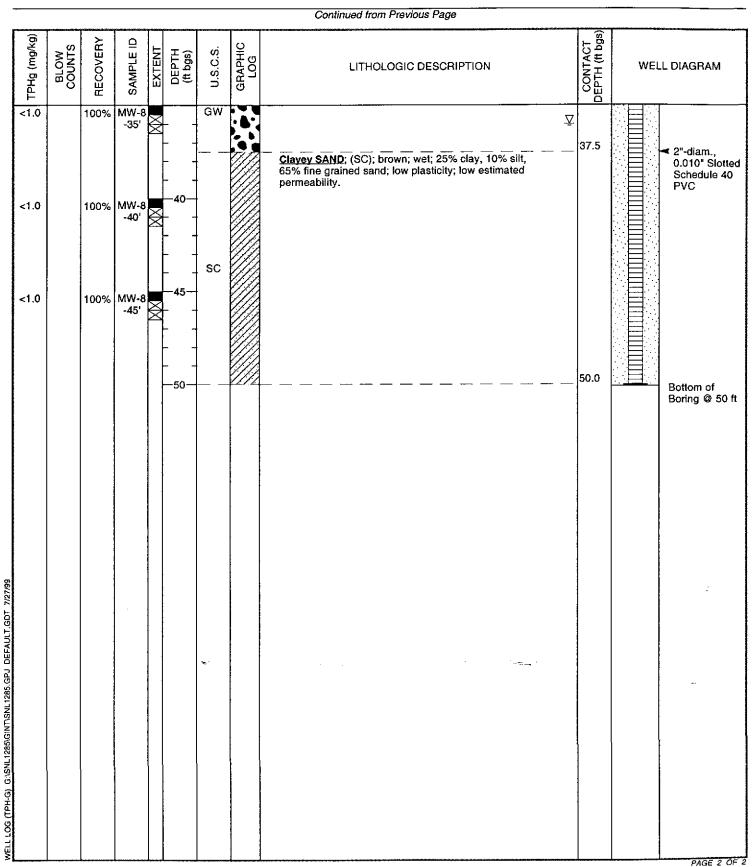
Equiva Services LLC snl1285 BORING/WELL NAME

DRILLING STARTED
DRILLING COMPLETED

19-May-99 19-May-99

MW-8

1285 Bancroft Avenue, San Leandro, California



### **Attachment C**

Standard Field Procedures for Monitoring Well Installation

# **CAMBRIA**

#### STANDARD FIELD PROCEDURES FOR MONITORING WELLS

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling ground water monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

#### **SOIL BORINGS**

#### **Objectives**

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Registered Geologist (RG).

#### Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

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

#### Sample Analysis

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

#### Field Screening

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

# **CAMBRIA**

#### Water Sampling

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

#### Grouting

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

#### MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

#### Well Construction and Surveying

Ground water monitoring wells are installed to monitor ground water quality and determine the ground water elevation, flow direction and gradient. Well depths and screen lengths are based on ground water depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 ft below and 5 ft 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 ft 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 ft 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.

# **CAMBRIA**

#### Well Development

Wells are generally developed using a combination of ground water surging and extraction. Surging agitates the ground water and dislodges fine sediments from the sand pack. After about ten minutes of surging, ground water 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 ground water are extracted and the sediment volume in the ground water 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.

#### **Ground Water Sampling**

Depending on local regulatory guidelines, three to four well-casing volumes of ground water are purged prior to sampling. Purging continues until ground water pH, conductivity, and temperature have stabilized. Ground water 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.

F:\TEMPLATE\SOPS\WELLS-GW.WPD

### Attachment D

Drilling and Encroachment Permit



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651

PRONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262

(510) 670-5248 ALVIN KAN

DRILLING PERMIT	APPLICATION
FOR APPLICANT TO COMPLETE	FOR OFFICE USE
	PERMIT NUMBER 99WR186
OCATION OF PROJECT 1285 BANKETOT ALE	PERMIT NUMBER
SAN LOSING CA 94579	WELL NUMBER
	AFN
alifornia Ceordinates Sourceft. Accuracy ±ft.	PERMIT CONDITIONS
	, ,
CN	Circled Permit Requirements Apply
LIENT	(1.) A permit application should be submitted so as so
ame Equiva Europeanses LLC	arrive at the ACPWA office five days prior to
ddress RO-1608 6249 Phone 559-645-5643	proposed starting date.
in Calson CA Zip 90749	2. Submit to ACPWA within 60 days after completion of
_	normined work the original Department of Water
PPLICANT RIGHT - CAMBUA ENUR.	Resources Water Well Drillers Report or equivalent for
	well projects, or drilling logs and location sketch for
194 65 Fix 510 - 420 - 4170  ddress Ste 8 Phone 510 - 420 - 3340	replechnical projects.
# O. Sc #2	3. Permit is void if project not begun within 90 days of
tity OAKLANA CA Zip 491000	approval date.
YPE OF PROJECT	R WATER SUPPLY WELLS
Well Construction Georgehnical Investigation	1. Minimum surface seal thickness is two inches of
Cathodic Protection   General	coment grout placed by tremic.
Water Supply C Contamination C	2. Minimum seal depth is 50 feet for aumicipal and
Monitoring & Well Destruction	industrial wells or 20 feet for domestic and irrigation
arkinio nig	wells unless a lesser depth is specially approved.
ROPOSED WATER SUPPLY WELL USE	( C. GROUNDWATER MONITORING WELLS
New Domestic D Replacement Domestic D	INCLUDING PIEZOMETERS
Municipal C Impation C	1)Minimum surface seal thickness is two inches of
Industrial D Other D	Cement grout placed by tramic.
	( 2. Minimum seal depth for monitoring wells is the
RILLING METHOD:	maximum depth practicable or 20 feet
Mud Rottey D Air Rottey D Auger 🗶	D. GEOTECHNICAL
Cable   Other	Backfill bore hole with compacted cuttings or heavy
RILLER'S LICENSE NO. Grega Dilling C57# 485/65	bentonite and upper two feet with compacted material.
RILLER'S LICENSE NO. DECAL VIVILIA CS 12 TOSTOS	In areas of known or suspected contamination, remied
$\mathcal{M}_{\mathcal{A}}$	cement grout shall be used in place of compacted cuttings.
VELL PROJECTS	E. CATHODIC  Fill hole above anode zone with concrete placed by tremic
Dull Hole Diameter p in. Maximum 1	Elli pole apone audae sous mill enuciam history
Casing Diameter 2,4 in. Depth 50 ft.	F. WELL DESTRUCTION
Surface Seal Depthft. Number	Ser articled. G. SPECIAL CONDITIONS
EOTECHNICAL PROJECTS	G. II ECIME COMMINGING
Number of Borings Maximum	
Hole Diameter in. Depthft.	
	MIT III Con
STIMATED STARTING DATE 5-17-99	//////////////////////////////////////
STIMATED COMPLETION DATE 5-19- 95	APPROVED DATEDATE
<del></del>	Alland
• .	<b>▼</b>
hereby agree to comply with all requirements of this permit and	

APPLICANT'S

All charges to be billed to

per inspection stop

TOTAL HOURS CHARGED:

### Attachment E

Well Development Field Data Sheets

# WELL GAUGING DATA

Project # 990528 78 Date_	5/22/99	Client 204-10852-0703
SILE 1285 BANCROFT AUC, SANLE	EANDED CA	<u> </u>

	Mell		<b>D</b> epth to	Thickness of	Volume of Immiscibles			Survey	PAH- Pongt
Well ID	Sizo (in.)	Sheen / Odor	Immiscible Liquid (ft.)	Immiscible Liquid (fr.)	Removed (ml)	Depth to water (fr.)	Depth to well bottom (fr.)	Paint: TOB or TOC	· · · · · · · · · · · · · · · · · · ·
W 5	4					33.15	49.40	TOC	1.8
Hn, P	2					31.85	49,32		2.7
7	2					32.70	49.71		2,2
HWB	2					31.90	50,05	P	2.3
•		_					•		
				·					
								,	
						·			
		<del></del>							
		,							
							*		
		<del> </del>					<del></del> -		

Project #:	990528	-13		Client: 20	4-6882-0	703		
Develope	r: Mí		<u></u>	Date Deve	loped: 5/28	)		
Well I.D.	MW 5			Well Dian	neter: (circle	one)	2 3 4 6	
Total We	ll Depth:			Depth to V	Vater:			
Before 4	9.40	After 49.9	3	Before 3	33,25 Afte	er 30.	01	
Reason no	ot develop	ied:		If Free Pro	duct, thickn	ess:		
	l Notation							
( 12 x (c where 12 = in /	netar (br.) 416	);	Well dis.         VC           2" = 0.16         3" = 0.37           4" = 0.65         6" = 1.47           10" = 4.04         12" = 6.87					
10.	<u>5</u>	X		0			05	<del></del>
1 Case	Volume		Specified	i Volumes	=		gallons	
Purging De	vice:	Bailer Middleburg		Electric Subs Suction Pum		0.43		
<u></u>		Type of Insta Other equipm	<b>-</b>		(	6	m)	
TIME	TEMP (F)	рН	COND.	TURBIDITY	VOLUME REMOVED:	TO	NOTATIONS:	DIW
1436	68.2	4.8	885	7200	il	2.3	Removing Sitt	41.00
1436	68.3	6.8	850	7280	22	2,1	ct ft	41.62
1440	LOBA	6.8	824	7200	33	2,0	th ti	41.10
1442	61.9	6,9	821	>200	44	1,9	11 ", afor	41.06
14 44	67.5	0.9	821	>200	55	1.9	0 11 11	41.10
446	67.5	6.8	810	7200	ido	1.9	11 11 11	41.0
14-48	67.5	6.8	SDI	7200	17	1.9	11 11 11	41.10
14 50	67.5	6.8	783	170.3	88	2.0	il "	41.10
14 52	674	6.8	180	96.1	99	1.9	Cleaved up	41.10
H 54	67.4	6.7	177	70,7	110	1,9	16 16	41.10
	<del></del>	Bunbbed W					ament	_
-	S. 430 1	TOTAL IS	101 1-	MAN TO LEAST	10 14-72	aver-		
<del></del> -				<del></del>				
Did Wall Deu	vater? (Y)	If yes, note abov	/A	Gallons Actual	v Evacuated:	116		<del></del>

BLAINE TECH SERVICES, INC

Project #: 990528-12	Client: 204-(1862-0103					
Developer: M	Date Developed: 5/28					
Well I.D. MWG	Well Diameter: (circle one) 💯 3 4 6					
Total Well Depth:	Depth to Water:					
Before ARA2 After 50.10	Before 31.85 After 32.15					
Reason not developed:	If Free Product, thickness:					
Additional Notations:						
Volume Conversion Factor (VCF): Well dia.  [12 x (d <sup>3</sup> /4) x π] /231 2" = 2" = 2"	9.16 0.16					

2"	=	0.16
3"	3	037
4*	=	8.65
6.	=	1.47
ייון	=	4.08
12"	-	6.17
	10- 6. 4. 3.	10. = 6. = 4. = 3. =

2.8	Х	10		29	
1 Case Volume		Specified Volumes	=	gallons	

Electric Submersible Bailer Purging Device: Middleburg **Q** Suction Pump

> Type of Installed Pump Other equipment used

1 GPM

TIME	TEMP (F)	рН	COND.	TURBIDITY	VOLUME REMOVED:	00	NOTATIONS:	DIW
1249	66.0	9.0	1200	7200	3	2.9	Removing Silt Bob	32.61
1252	losilo	4.7	1172	>200	G	2.9	n II n	32.6
1255	185.2	4.8	1425	7200	9	23	14 24 H	32.4
1258	164.9	60	(0 640	7200	12	2.i	j) si di	32.4
1301	65.1	ig.7	1249	>200	15	2.0	11 11 (V	32.4
1304	65.0	6.7	[020	7200	İB	2.0	11 11	326
13 07	64.8	- 6.7	999	7200	21	7.1	Clearing up ofor	32.0
13 10	64.8	6.7	986	720	24	1.2	() at it	32.0
13 is	64.9	07	983	1200	27	2.1	31 × H	32,0
13 10	04,9	<u>un</u>	973	116.2	30	211	4 4 11 <u>11 11 11 11 11 11 11 11 11 11 11 11</u>	32.6
•	# Swak	bed well	or 15 min.	Prior to	Parge Den	elopmen	<i>ł.</i>	
oid Well De	water? Po	If yes, note abo		College Acres	ly Evacuated: 3			

-This well is Located in between # Aportment building & Property Fence @ back of Station This is too tight for truck to fit w/ work doors open. Bring 100 ff middleburg reel.

Project #	: 99052	8-m		Client: 2	04-6852	-0703		
Develope		<del> </del>			eloped: 5/2			
Well I.D					neter: (circle		Ø 3 4 6	
Total We	ll Depth:			Depth to V				<u>-</u>
Before 4	9.71	After 50.2	7	Before 32		er 33.	.06	
Reason n	Reason not developed: If Free Product, thickness:							
	al Notatio			·				
(12 x ( Whose 12 = in /	mcus (lp.) 416	P):		65 47 08				· · · · · · · · · · · · · · · · · · ·
2.7		Х	10				7	
1 Case	Volume		Specifie	ed Volumes			gallons	
Purging De	vice:	Bailer Middleburg	ď	Electric Subs Suction Pum		0 0		
		Type of Insta Other equipm					IGPM)	
TIME	TEMP (F)	рН	COND.	TURBIDITY	VOLUME REMOVED:	Domp	NOTATIONS:	BTW
1157	180-3	7.ها	1029	7700	2.75	3.9	Silta	33.00
1200	60.7	6.7	1004	7200	5.5	3.6	RiporiusSift	33.1D
(203	185.0	6.8	930	>200	8.25	23	11 11	33.06
1206	649	io.8	927	7210	11.0	23	11. 61	33.01
1209	65.0	6.8	855	>200	13.75	THE.	11 11	33,05
1212	(05.2	6.8	830	7200	10.5	1.8	ाः भ	33,05
1215	64.9	6.9	862	>200	19.25	1.9	11 11	33.05
1213	104.9	6.9	851	>200	22	1.7	u 4	33.02
1221	105.0	6.9	856	>200	24715	1.7	11 11	33.64
1224	651	10.9	<b>୧</b> ५७	7210	27.5	1.0	11 /1	33.04
	Surjed	for 15 m	in Prior	to Deve	oping			
Did Well Dow	ater? 136	If yes, note abov		Gallons Actually	v Evacuated:	222		

- This well is in a Small Parking Area behind the station. Accross from the parking stall.
Very tight fit through Access Drive ways. M

Project #:	990528	-13		Client: 204	1-4852-67	03			
Developer	·M	<b></b>		Date Devel	oped: 5/22				
Well I.D.	MM8			Well Diam	eter: (circle	one) (	2) 3 4	16_	<u>-</u>
Total Wel				Depth to W	ater:				
Before 5	).ος	After 51.42	2	Before 3 4	0 Afte	I 32.	Ø		
Reason no	t develop	ed:		If Free Proc	duct, thickno	ess:			
Additiona									
[12 x (d where 12 = in / I	veter (UL.) 16	:	Well dia.     VCI       2" = 0.16     3" = 0.37       4" = 0.65     6" = 1.47       10" = 4.08     12" = 687	•	,				· —
3.0	)	х	(0			3	0		
1 Case	Volume		Specified	l Volumes	=	1	gallons		
Purging De	vice:	Bailer Middleburg	<b>M</b>	Electric Subn Suction Pump		0			
		Type of Insta Other equipm	_				GAL	·)	
TIME	TEMP (F)	pH	COND.	TURBIDITY	VOLUME REMOVED:	Do	NOTA'	TIONS:	DW
1343	104.93	7.0	96b	>240 .	3	2.3	Resources	Silt	3240
340	651	69	796	>2W	4	2,6	10	(1)	3243
1349	449	6.8	751	7200	9	26	ţ1	(1	32.41
1352	LA.7	6.8	739	7200	12	2,5	14	" olg	-32.42
13 55	65.0	UB	704	7200	15	2A	l)	11 1	32.43
1358	(050	6.8	1089	7 200	18	23	51	H II	32,41
1461	451	10.8	682	7200	21	2.0	11	11 4	32,4
14 04	125.1	6.9	le 70	> 200	24	2.0	13	11 H	32.43
14 07	105.2	6.8	un	>200	27	2.0	Įt.	ic ti	32.43
14 10	105-0	6.3	656	>210	30	2.0	11	1( 1)	32.42
_		Swabbed u			o purse / D	velop v	ent.		
			MAX. INC.	HALL PLANT	<del></del>				
									·
Did Well Deu	eter?	If ves, note above	ve	Gallone Acousti	v Evacuated: 1	2	•		

<sup>-</sup> This well is on the sidewalk in front of a residence. Traffic control consist of 10 comes, 2 road signs.

Traffic Strobes & Proper PPE. It Requires shutting down turn lane. MT

# Attachment F

Monitoring Well Survey Data

# Virgil Chavez Land Surveying

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

June 30, 1999 Project No. 1703-21

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

Subject: Monitoring Well Survey Shell Service Station 1285 Bancroft Avenue San Leandro, 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 June 21, 1999. The benchmark for the survey was the disk in a monument well at the southeast corner of Estudillo Ave. and Bancroft Ave. Measurement locations were marked at approximate north side of top of box and top of casings. The stations and offsets are referenced to the face of the existing station building looking northerly.

Benchmark Elevation = 65.098 feet, MSL.

Monitoring Well No.	Rim Elevation	<u>TOC Elevation</u>
MW - 5	67.07 <i>′</i>	66.50′
MW - 6	65.44′	64.98′
MW - 7	66.14′	65.83′
MW - 8	65.30′	65.07′
Well No.	Station	Offset
MW - 5	0-00.84	20.20(Rt.)
MW - 6	0+00.16	-39.36(Lt.)
MW - 7	0+87.35	-56.03(Lt.)
MM - 8	0-96.61	42.00(Rt.)
SE Bldg Cor.	0+00.00	0.00
NE Bldg Cor.	0+62.69	0.00

Ma. 6323

Ear 12-31-02

Was Cof California

Sincerely,

Virgil B. Chavez, PLS 6323

Attachment G

Disposal Confirmation