GAMBRIA

December 10, 1999

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

Re:

**Third Quarter 1999 Monitoring Report** 

Shell-branded Service Station 610 Market Street Oakland, California Incident #99895750 Cambria Project #241-0594-002



Dear Mr. Seto:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this ground water monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

#### **THIRD QUARTER 1999 ACTIVITIES**

Ground Water Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells. Blaine calculated ground water elevations and compiled the analytical data. Cambria prepared a ground water elevation contour map (Figure 1). The Blaine report, presenting the laboratory report and including supporting field documents, is included as Attachment A.

#### **ANTICIPATED FOURTH QUARTER 1999 ACTIVITIES**

Oakland, CA

Sonoma, CA

Seattle, WA

Portland, OR

Ground Water Monitoring: Blaine will gauge and sample all wells and tabulate the data. Cambria will prepare a monitoring report.

Cambria **Environmental** Technology, Inc.

1144 65th Street Suite B Oakland, CA 94608 Tel (510) 420-0700 Fax (510) 420-9170 88 DEC 55 BM (1:13

## CAMBRIA

#### **CLOSING**

We appreciate the opportunity to work with you on this project. Please call Brian Busch at (510) 420-3312 if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc



For . Brian Busch

Project Environmental Scientist

Ailsa S. Le May, R.G.

A. W

Senior Geologist

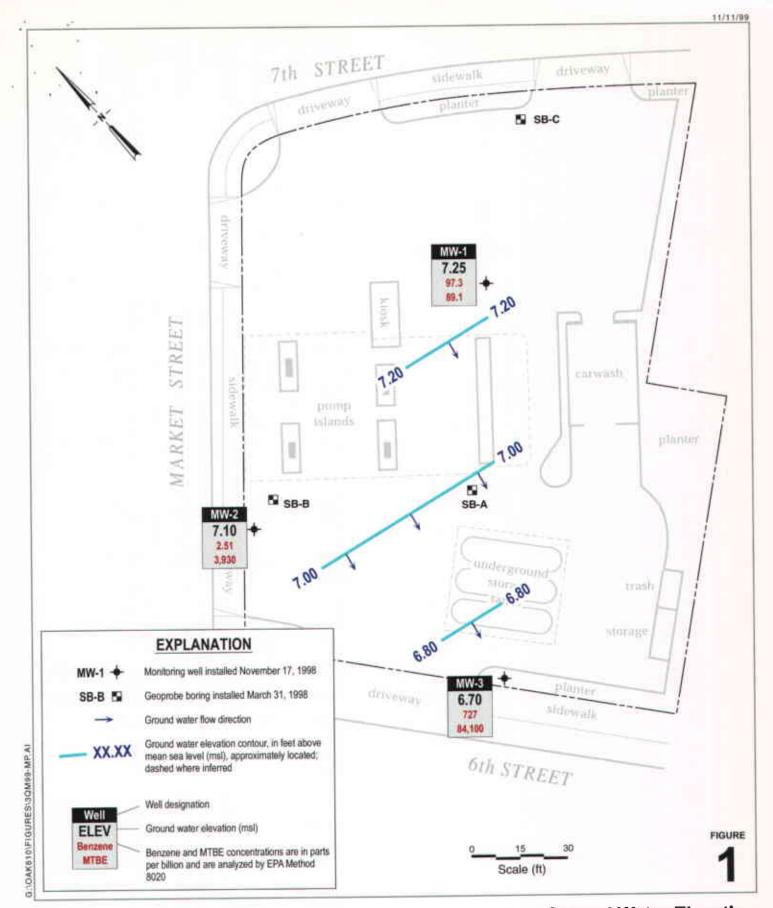
Figure: 1 - Ground Water Elevation Contour Map

Attachment: A - Blaine Ground Water Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91501-7869

NO. 6717

g:\oakland 610 market\qm\3q99qm.doc



## **Shell-branded Service Station**

610 Market Street Oakland, California Incident #98995750



Ground Water Elevation
Contour Map

September 29, 1999

## **ATTACHMENT A**

Blaine Ground Water Monitoring Report and Field Notes





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

October 28, 1999

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

> Third Quarter 1999 Groundwater Monitoring at Shell-branded Service Station 610 Market Street Oakland, CA

Monitoring performed on September 29, 1999

## Groundwater Monitoring Report 990929-Z-3

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Shell Martinez Manufacturing Complex.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Deidre Kerwin Operations Manager

DK/ek

attachments: Cumulative Table of WELL CONCENTRATIONS

Certified Analytical Report

Field Data Sheet

cc: Anni Kreml

Cambria Environmental 1144 65<sup>th</sup> St. Suite C Oakland, CA 94608-2411

## WELL CONCENTRATIONS Shell-branded Service Station 610 Market Street Oakland, CA

WIC #204-5508-5702

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	T	E	Х	8020	8260	TOC	Water	Elevation
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(MSL)
MW-1	12/17/1998	2,200	20	<10	110	420	<50	NA	21.70	13.71	7.99
MW-1	03/09/1999	4,320	25.8	<10.0	338	474	<100	NA	21.70	13.03	8.67
MW-1	06/16/1999	6,150	107	84.0	615	1,050	<250	NA	21.70	13.82	7.88
MW-1	09/29/1999	3,440	97.3	58.7	433	578	89.1	NA	21.70	14.45	7.25
				(6)							
MW-2	12/17/1998	<5,000	<50	<50	<50	<50	11,000	NA	19.61	12.07	7.54
MW-2	03/09/1999	<250	5.20	<2.50	<2.50	<2.50	9,870	NA	19.61	11.46	8.15
MW-2	06/16/1999	<50.0	0.569	<0.500	<0.500	<0.500	3,440	NA	19.61	12.26	7.35
MW-2	09/29/1999	58.6	2.51	0.978	<0.500	< 0.500	3,930	NA	19.61	12.51	7.10
MW-3	12/17/1998	30,000	890	110	2,100	4,300	42,000	43,000	19.05	11.65	7.40
MW-3	03/09/1999	22,700	536	<200	1,030	1,510	35,400	38,500	19.05	11.03	8.02
MW-3	06/16/1999	19,300	625	129	805	1,210	42,400	51,600	19.05	11.89	7.16
MW-3	09/29/1999	20,200	727	155	1,000	1,180	84,100	135,000a	19.05	12:35	6.70

#### Abbreviations:

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

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020

MTBE = methyl-tertiary-butyl ether by EPA Method 8020

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

NA = Not applicable

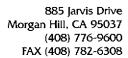
# WELL CONCENTRATIONS Shell-branded Service Station 610 Market Street Oakland, CA WIC #204-5508-5702

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	T	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						

#### Notes:

Wells MW-1, MW-2, and MW-3 surveyed December 9, 1998 by Virgil Chavez Land Surveying of Vallejo, California.

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





October 20, 1999

Leah Davis Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112

RE: Equiva 610 Market Street, Oakland/M909ABW

Dear Leah Davis

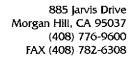
Enclosed are the results of analyses for sample(s) received by the laboratory on September 30, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kayvan Kimyai

Project Manager D.M.

CA ELAP Certificate Number 1210





Project: Equiva Project Number: 610 Market Street

Project Manager: Leah Davis

Sampled: 9/29/99 9/30/99 Received:

10/20/99 Reported:

## ANALYTICAL REPORT FOR M909ABW

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	M909ABW-01	Water	9/29/99
MW-2	M909ABW-02	Water	9/29/99
MW-3	M909ABW-03	Water	9/29/99



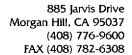
Project: Equiva
Project Number: 610 Market Street

Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99 Reported: 10/20/99

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

Batch	Date	Date	Surrogate	Reporting			
Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
		84000 A D3	IV A1			Water	
			<u>W-U1</u>	1000	2440		1
							1
11							
н	H						
**	H	н		50.0			
H	4	"	70.0-130		100	%	
		M909AB	W-02			<u>Water</u>	
9100272	10/11/99	10/11/99		50.0	58.6	ug/l	2
11	"	n		0.500	2.51	ti .	
n	11	11		0.500	0.978	п	
n	11	n .		0.500	ND	н	
It	п	II .		0.500	ND	п	
H	II .	10/13/99		50.0	3930	<b>:</b>	
"	"	10/11/99	70.0-130		76.2	%	
		M909AB	W-03			Water	
9100387	10/13/99	10/13/99		2500	20200	ug/l	1
"	"	1)		25.0	727	*	
н	n	n		25.0	155	Ff	
0 .	Ð	*1		25.0	1000	11	
*1	*1	н			1180	II .	
11	11	10/14/99			84100	11	3 .
	······································		70.0-130		102	%	
	9100271 " " " " " " " " " " " " " " " " " " "	9100271 10/11/99  """  """  9100272 10/11/99  """  9100272 10/11/99  """  """  9100387 10/13/99  """  """  """  """  """  """  """	Number         Prepared         Analyzed           M909AB         9100271         10/11/99         10/11/99           """"""""""""""""""""""""""""""""""""	Number Prepared Analyzed Limits    M909ABW-01	Number         Prepared         Analyzed         Limits           M909ABW-01         1000           """"""""""""""""""""""""""""""""""""	Number         Prepared         Analyzed         Limits         Limit         Result           M909ABW-01           9100271         10/11/99         10/11/99         1000         3440           """"""""""""""""""""""""""""""""""""	Number         Prepared         Analyzed         Limits         Result         Units           9100271         10/11/99         10/11/99         1000         3440         ug/l           """"""""""""""""""""""""""""""""""""





Project: Equiva
Project Number: 610 Market Street

Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99 Reported: 10/20/99

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-3 Methyl tert-butyl ether Surrogate: 1 2-Dichloroethane-d4	9100092	10/19/99	M909AB 10/19/99	<u>W-03</u> 76.0-114	2000	1 <u>36000</u>	<u>Water</u> ug/l %	<u>3</u>





Project Number: Equiva
Project Number: 610 Market Street
Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99 Reported: 10/20/99

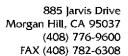
# Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS EUFT/Quality Control Sequoia Analytical - Morgan Hill

	Date	Spike	Sample	QC		Reporting Limit		RPD	RPD	Notes*
Analyte	Analyzed	Level	Result	Result	Units_	Recov. Limits	<u>%</u> _	Limit	70	Notes
Batch: 9100271	Date Prepa	red: 10/11/	99		Extraction Method: EPA 5030B [P/T]					
Blank	9100271-BI									
Purgeable Hydrocarbons	10/11/99			ND	ug/l	50.0				
Benzene	H			ND	**	0.500				
Foluene	"			ND	11	0.500				
Ethylbenzene	H			ND	Ħ	0.500				
Kylenes (total)	H			ND	μ	0.500				
Methyl tert-butyl ether	11			ND	н	2.50			J	
Surrogate: a,a,a-Trifluorotoluene	т	10.0		10.4	"	70.0-130	104			
LC <u>S</u>	910027 <u>1-B</u> 3	S1								
Purgeable Hydrocarbons	10/11/99	250		248	ug/l	70.0-130	99.2			
Benzene	10/11/22	250		6.48	"	70.0-130				
	19			20.3	11	70.0-130				
Toluene	11			5.60	п	70.0-130				
Ethylbenzene	n .			25.0		70.0-130				
Xylenes (total)	D.			21.4	**	70.0-130				
Methyl tert-butyl ethet Surrogate: a,a,a-Trifluorotoluene		10.0		13.5		70.0-130	135			
surrogate. u,u,u tryttim moment										
<u>Matrix Spike</u>	<u>9100271-M</u>		)9ABV-01		,,	ZO 0 140	86.4			
Purgeable Hydrocarbons	10/11/99	250	ND	216	ug/l "	60.0-140	80.4			
Benzene	11		ND	5.87		60.0-140				
Toluene	II		ND	18.8	19	60.0-140				
Ethylbenzene	lf .		ND	5.13	н	60.0-140				
Xylenes (total)	It.		ND	23.7	**	60.0-140				
Methyl tert-butyl ether	н		19.6	57.6		60.0-140				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.7	**	70.0-130	117			
Matrix Spike Dup	9100271-M	1 <u>SD1</u> <u>M9</u>	09ABV-01							
Purgeable Hydrocarbons	10/11/99	250	ND	229	ug/l	60.0-140	91.6	25.0	5.84	
Benzene	II .		ND	5.76	11	60.0-140		25.0		
Toluene	H		ND	19.0	"	60.0-140		25.0		
Ethylbenzene	**		ND	5.25	**	60.0-140		25.0		
Xylenes (total)	IF.		ND	24.3	11	60.0-140		25.0		
Methyl tert-butyl ether	*1		196	30.9	п	60.0-140		25.0		,
Surrogate: a,a,a-Trifluorotoluene		10.0	· · · · · · · · · · · · · · · · · · ·	10.9	"	70.0-130	109			
Batch: 9100272	Date Pren	ared: 10/11	1/99		<u>Ext</u> rac	ction Method: EP.	A 5030B	[P/T]		
	91002 <u>72-B</u>									
Blank Durgockle Hudrocarbons	10/11/99			ND	ug/l	50.0				
Purgeable Hydrocarbons	H 10/11/22			ND	"	0.500				
Benzene	11			ND	IF.	0.500				
Toluene				1112						

Sequoia Analytical - Morgan Hill

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





Blaine Tech Services (Shell)

Project: Equiva

1680 Rogers Avenue

Project Number: 610 Market Street

San Jose, CA 95112

Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99 Reported: 10/20/99

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

	Date	Spike	Sample	QC		Reporting Limit		RPD	RPD
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	<u>%</u>	Limit	% Notes*
Blank (continued)	9100272-B]	LK1							
Ethylbenzene	10/11/99			ND	ug/i	0.500			
Xylenes (total)	"			ND	п Т	0.500			
Methyl tert-butyl ether	п			ND	11	2.50			
Surrogate: a,a,a-Trifluorotoluene		10.0		10.2	"	70.0-130	102		
Burroguie. u,u,u 17 yruo, oromone									
<u>LCS</u>	9100272-B	_		262	/1	70.0-130	105		
Purgeable Hydrocarbons	10/11/ <del>9</del> 9	250			ug/l	70.0-130	105		
Benzene	••			4.51		70.0-130			
Toluene	п			21.3	18				
Ethylbenzene	It			4.78		70.0-130			
Xylenes (total)	•			14.5	#	70.0-130			
Methyl tert-butyl ether	11			7.86		70.0-130			
Surrogate: a,a,a-Trifluorotoluene	,	10.0		9.69	"	70.0-130	96.9		
LCS Dup	9100272- <u>B</u>	SD1							
Purgeable Hydrocarbons	10/11/99	250		278	ug/l	70.0-130	111	25.0	5.56
Benzene	fr fr			4.74	11	70.0-130		25.0	
Toluene	19			21.8	П	70.0-130		25.0	
<del> </del>	*1			5.00	11	70.0-130		25.0	
Ethylbenzene	п			15.1	**	70.0-130		25.0	
Xylenes (total)	It			6.52	**	70.0-130		25.0	
Methyl tert-butyl ether	<del></del>	10.0		10.6		70.0-130	106		
Surrogate: a,a,a-Trifluorotoluene		10.0		10.0					
Batch: 9100387		<u>ared: 10/1.</u>	<u>3/99</u>		<u>Extra</u>	action Method: EF	A 5030B	[P/T]	
Blank	9100387-B	<u> </u>		M	(1	50.0	1		
Purgeable Hydrocarbons	10/13/99			ND	ug/l "	0.500			
Benzene	11*			ND	п	0.500			
Toluene	**			ND					
Ethylbenzene	H			ND		0.500			
Xylenes (total)	1)			ND	H	0.500			
Methyl tert-butyl ether	П			ND	"	2.50			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70.0-130	107		
LCS	9100387-I	3S1							
Benzene	10/13/99	10.0		12.0	ug/l	70.0-130			
Toluene	10,15,33	10.0		11.6	"¯	70.0-130	) 116		
	n .	10.0		11.7	н	70.0-130	117		
Ethylbenzene Xylenes (total)	,,	30.0		34.8	н	70.0-130	) 116		

Sequoia Analytical - Morgan Hill

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



Project: Equiva

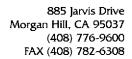
Project Number: 610 Market Street Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99

10/20/99 Reported:

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

	Date	Spike	Sample	QC		Reporting Limit		RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits		Limit	%_	Notes*
D-4-L. 0100003	Date Prepa	red: 10/18	/99		Extract	tion Method: <u>EP</u>	A 5030B	[P/T]		
Batch: 9100092	9100092-BI		<u>,55</u>							
Blank	10/18/99	<u>DIXI</u>		ND	ug/l	2.00				
Methyl tert-butyl ether	"	50.0		54.2	н .	76.0-114	108			
Surrogate: 1,2-Dichloroethane-d4		20.0		5 7.2						
Blank	9100092-BI	LK2								
Methyl tert-butyl ether	10/19/99	<del></del>		ND	ug/l	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	50.0		52.0	"	76.0-114	104			
Buri oguie. 1,2-Dienior centario ar										
LCS	9100092-B	<b>S1</b>								
Methyl tert-butyl ether	10/18/99	50.0		46.7	ug/l	70.0-130	93.4			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		55.4	"	76.0-114	111			
Sarrogaio. 1,2 2 to the same										
<u>LCS</u>	9100092- <u>B</u> 3	<u>S2</u>								
Methyl tert-butyl ether	10/19/99	50.0		45.1	ug/l	70.0-130				
Surrogate: 1,2-Dichloroethane-d4		50.0		52.5	)r	76.0-114	105			
5 vg										
Matrix Spike	9100092-M	<u> </u>	<u>910116-05</u>							
Methyl tert-butyl ether	10/18/99	50.0	ND	47.7	ug/l	60.0-140				
Surrogate: 1,2-Dichloroethane-d4	,,	50.0		53.4	n	76.0-114	107			
Matrix Spike Dup	9100092-M	ISD1 L	<u>910116-05</u>							
Methyl tert-butyl ether	10/18/99	50.0	ND	47.3	ug/l	60.0-140		25.0	0.842	
Surrogate: 1,2-Dichloroethane-d4	"	50.0		54.9	"	76.0-114	110			
Surrogate: 1,2-Dichloroethane-d4	**	30.0		24.9		70.0 117				





Project: Equiva Project Number: 610 Market Street

Project Manager: Leah Davis

Sampled: 9/29/99 Received: 9/30/99

Reported: 10/20/99

### **Notes and Definitions**

#	Note
1	Chromatogram Pattern: Gasoline C6-C12
2	Chromatogram Pattern: Unidentified Hydrocarbons C6-C12
3	This sample was analyzed outside the EPA recommended holding time.
4	Closing blk had detectable TPH due to carry over. Trip Blank in batch indicates samples not effected by carry over. Package qulified per Nokowhat Herrera.
5	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

<b>BLAI</b>	NE	CAN I			ERS AVEN			CON	DUCT	ANAL	YSIS 1	O DETECT		LAB Sequoia		DHŞ#
TECH SERV CHAIN OF CLIENT SITE		Karen I	\ <b>9 -</b> 7	FAX (PHONE (	A 95112-11 408) 573-75 408) 573-05	COMPOSITE ALL CONTAINERS 55.22	H - gas, BTEX	MTBE by 8020	MTBE by 8260	H - diesel	Oxygenates by 8260			LIA OTHER	989957 rvices, In	3 W
SAMPLE I.D.	DATE	TIME		TOTAL		= C	TPH		M	ТРН	Ő			ADD'L INFORMATION STATUS C	NOITION	LAB SAMPLE #
MU-1 MU-3	9/29		$\frac{\omega}{1}$	7			×	X					<u>01</u> 07	>> C . C		11-05
100-0	<del>\</del>	1420	$\forall$			+	X	×					03		host	MTBE
ر در ا		1) [2				+-							<i>v)</i>	hi+ b> 812	60"	<del></del>
																1 <u>2</u>
		-														
AMPLING OMPLETED	DATE 4/29	TIME	SAMPLI PERFOR	NG RMED BY	Je	re	m-7							RESULTS NEEDED NO LATER THAN		<del></del>
ELEASED BY		1	/2	7	<u> </u>	TDATI			TIME	00		RECEIVED I	3Y		ATE	TIME
ELEASED BY	up					DAT	30/9		TIME			RECEIVED	3Y		75/94 ATE 7/20	9:00 TIME 75 /2/6
ELEASED BY	· · · · · · · · · · · · · · · · · · ·			-	,	10ATI		1	TIME			RECEIVED	SY.	NO.	ATE //	TIME
HIPPED VIA	<del></del>					DATI	Ē SEN	Т Т	TIME	SENT	7	COOLER#				

-

# EQUIVA WELL MONITORING DATA SHEET

1				<u> </u>	· · · · · · · · · · · · · · · · · · ·						
Project #	: 990°	129-7	3	Job # 204	- 5508-57	02					
Sampler:	: 3R	·		1	29-99						
Well I.D.	.: <u>H</u>	- 1		Well Diameter: 2 3 (4) 6 8							
Total We	ell Depth:	24.	70	Depth to Water: 14.45							
Depth to	Free Prod	uct:		Thickness of Free Product (feet):							
Referenc	ed to:	PVC	Grade	D.O. Meter (if	<del></del>	YSI HACH					
	Well Diams   2"   3"   4"			Well Diameter   Multiplier							
Purge Metho	PI	Bailer Middleburg ectric Submers Extraction Pun	ible	Sampling Method							
		7 ume (Gals.)	X Specified Vo	<del></del>	Gals.						
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observations					
1459	739	6.9	617	7200	7	turbil class					
1200	73.3	6-8	587	70.0	14						
1501	73.0	6.8	592	172	21	clea					
Did well c	dewater?	Yes (	No	Gallons actuall	y evacuated: 7						
Sampling	Time: /	505		Sampling Date	: 9-29 -	75					
Sample I.I	D.: 11				Sequeia BC	Óther					
Analyzed	for TPH-	G BTEX	мтве трн-D	Other:							
O.O. (if re	q'd):		Pre-purge:	mg/L	Post-purge:	mg/L					
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:	mV					

## EQUIVA WELL MONITORING DATA SHEET

	<u> </u>							
73	Job # 204	- 5508-57	02	·				
	Date: 9-	29-99						
	Well Diameter: 2 3 (4) 6 8							
80	Depth to Water: 12.51							
	Thickness of Free Product (feet):							
Grade								
			191	НАСН				
0.16	5"	1.02						
	6"	1.47						
0.65	Other rad	lius <sup>2</sup> * 0.163						
	Sampling Method	Bailer						
rg								
ersible	Other							
<del></del>	Other	•	-					
шпр								
<u> </u>								
, 3	( ~	۸. ۱						
	= <u></u>	Gals.						
Specified V	Olumes Cal	Iculated Volume						
Cond.	Turbidity	Gals. Removed	Obse	ervations				
894	59	5	do	767				
841	78	10		,				
817	39	15						
			t					
No	Gallons actuall	y evacuated:	15	-				
	Sampling Date	: 9-29 -	75					
2	Laboratory: (		Other					
МТВЕ ТРН-D	Other:							
Pre-purge:	mg/L	Post-purge:	<u></u>	mg/L				
Pre-purge:	mV	Post-purge:		mV				
	o.37 o.65  rg ersible rump  X Specified V  Cond. 894  817  No  MTBE TPH-D  Pre-purge:	Well Diameter  Well Diameter  Thickness of I  Grade D.O. Meter (in  Multiplier Vell Diameter  5" 0.16 5" 0.65 Other rac  Sampling Method  rg ersible Other  Turbidity  Square Square  Fig. Square  Cond. Turbidity  Square  Square  Fig. Square  And Square  Can  Cond. Turbidity  Square  Square  Can  Cond. Turbidity  Square  Square  Can  Cond. Turbidity  Can  Cond. Turbidity  Can  Cond. Square  Cond.	Well Diameter: 2 3 (4)  Well Diameter: 2 3 (4)  Depth to Water: 1 2 . S  Thickness of Free Product (fee Grade D.O. Meter (if req'd):  Multiplier Well Diameter Multiplier 0.16 5* 1.47  O.65 Other radius * 0.163  Sampling Method: Bailer Extraction Port  Other: Laboratory: Gals. Removed  Sampling Date: 9-29 -  Laboratory: Sequesia BC  MTBE TPH-D Other:  Pre-purge: Pre-purge:	Well Diameter: 2 3 4 6 8  Well Diameter: 2 3 4 6 8  Depth to Water: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				

# EQUIVA WELL MONITORING DATA SHEET

						<del></del>			
Well I.D.: Mu-3 Well Diameter: 2 3 4 6 8  Total Well Depth: G. God Depth to Water: 12.3  Depth to Free Product:  Referenced to: PVO Grade D.O. Meter (if req'd): YSI HACH  Well Diameter Multiplier  1 100  1	Project #	: 9909	129-7	·3	Job # 204-5508-5702				
Total Well Depth:   G, \( \phi \)   Depth to Water:   \( \frac{1}{2} \) 3 \( \frac{1}{3} \)    Depth to Free Product:   Thickness of Free Product (feet):    Referenced to:   PvC   Grade   D.O. Meter (if req'd):   YSI   HACH      Well Diameter   Multiplier   Verification   Verification   Verification	Sampler:	5R							
Depth to Free Product:  Referenced to:  PVO Grade  D.O. Meter (if req'd):  Well Diameter  10.65  10.65  10.75  10.65  Sampling Method:  Extraction Port  Other:  Time Temp (°F) pH Cond.  Time Temp (°F) pH Cond.  Sign of the condition of the cond	Well I.D.	: Mu	-3		Well Diameter: 2 3 4 6 8				
Depth to Free Product:  Referenced to:  PVO Grade  D.O. Meter (if req'd):  Well Diameter  Well Diameter  10 1.67  10 1.63  Purge Method:  Bailer  Extraction Purt  Other:  Extraction Purt  Other:  Time Temp (°F) pH Cond. Turbidity Gals. Removed Observations  Signature of the second of the secon	Total We	ell Depth:	19.6	0					
Referenced to:  PVO Grade  D.O. Meter (if req'd):  VSI HACH  Well Diameter  1.02 3° 0.16 3° 1.02 3° 0.037 6° 1.47 4° 0.65  Other radius 0.16  Extraction Port  Other:  Extraction Pump  Other:  1 Case Volume (Gals.)  Time Temp (°F) pH Cond.  Second Grade Volumes  Second Grade D.O. Meter (if req'd):  VSI HACH  Well Diameter Multiplier 5° 1.02 5° 1.02 5° 1.47 6° 1.47	Depth to	Free Produ	uct:						
Well Diameter    Well Diameter   Multipolier   Well Diameter   Multipolier   Sir   1.02	Reference	ed to:	PVC	Grade	DO Motor (if == 11)				
Purge Method:  Bailer Middleburg  Extraction Pump Other:  Time Temp (°F) pH Cond. Turbidity Gals. Removed Observations  [514 75.6 6.9 6.0 72.0 72.0 70  [515 75.5 6.9 597 72.0 70  [516 75.5 6.9 599 72.0 72.0 70  [517 75.6 6.9 599 72.0 72.0 70  [518 75.5 6.9 599 72.0 72.0 70  [519 75.5 6.9 599 72.0 72.0 70  [519 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 70  [510 75.5 6.9 599 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0	Well Diameter         Multiple           2"         0.16           3"         0.37			Multiplier 0.16 0.37	Well Diameter 5" 6"	Multiplier 1.02 1.47	151	НАСН	
Time Temp (°F) pH Cond. Turbidity Gals. Removed Observations    SIY 75.6 6.9 6.0 70 72.0	Purge Metho	Ælle E	Middleburg	sible	Sampling Method:  Extraction Port				
			me (Gals.)		Cais.				
Did well dewater? Yes (No)  Gallons actually evacuated: /5  Sampling Time: (570  Sample I.D.:  Analyzed for: TPH-G BTEX MTBE TPH-D Other:  DO (if reald):  Page 1	Time	Temp (°F) pH Cond.			Turbidity	Gals. Removed	Obse	Observations	
Did well dewater? Yes (No) Gallons actually evacuated:  Sampling Time: (520 Sampling Date: 9-29-95  Sample I.D.: Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:	1514	75.66.9 610		610	7200	5	Ver-	clouds	
Did well dewater? Yes (No) Gallons actually evacuated:  Sampling Time: (520 Sampling Date: 9-29-95  Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:	1515	75.5	6.9	597	7200	10	7		
Sampling Time: 1520 Sampling Date: 9-29-95  Sample I.D.: Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:	1516	75.5	6.9	599	7200	15			
Sampling Time: (520 Sampling Date: 9-29-95  Sample I.D.: Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:									
Sampling Time: 1520 Sampling Date: 9-29-95  Sample I.D.: Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:							-	·	
Sample I.D.:  Laboratory: Sequeia BC Other  Analyzed for: TPH-G BTEX MTBE TPH-D Other:	Did well d	ewater?	Yes	No	Gallons actuall	y evacuated:	15		
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	Sampling	Time:	1520	)	Sampling Date	: 9-29 -	95	-	
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	Sample I.L	).: M	~.3		Y .				
O.O. (if req'd):  Pre-purge:  Pre-purge:  Post-purge:	Analyzed f	for: TPH-G	BTEX	MTBE TPH-D					
i of rost parge.	O.O. (if req'd): Pre-purge			nng/L	Post-purge:				
).R.P. (if rea'd):	O.R.P. (if req'd): Pre-			Pre-purge:	mV		mV		

## WELL GAUGING DATA

Project # 990929-23 Date 9-29-99	_ Client Shell 204 5-
Site	Shell 204-5508-5702 610 MARKET ST. OAKLAND

	1		Ţ ·	Thickness	Volume of			1	ı
	Well		Depth to	of	Immiscibles			Survey	
Well ID	Size	Sheen /	Immiscible	Immiscible	Removed	Depth to water			
	(in.)	Odor	riding (tt.)	Liquid (ft.)	(m1)	(ft.)	bottom (ft.)	or TOC	
MW-1	Ч					14.45	24.70	toc	
MW-1 MW-2 MW-1	4					12.51	19.80		
Muy	Ч					12.55	19.60	A	
						•	1 . 0 -		
		<u>                                     </u>							_
							9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		
					4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				·
						<u> </u>			
			<u> </u>				1		
				<u> </u>					
			100000000000000000000000000000000000000			10 mm			
			***************************************						
						·	<u> </u>	i	
***************************************									
								l	-