CAMBRIA

February 11, 2000

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

#3769

Re: **Fourth Quarter 1999 Monitoring Report**
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, California
Incident #98995758
Cambria Project #241-0524-002

Dear Mr. Chan:

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.

HYDROCARBON REMOVAL SUMMARY

Separate-Phase Hydrocarbon Removal Summary	
This Quarter (pounds)	Cumulative Removal (pounds)
0.06	21.80

The table above summarizes the cumulative separate-phase hydrocarbon (SPH) removal from the site by manual bailing.

FOURTH QUARTER 1999 ACTIVITIES

Ground Water Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California checked for SPH and gauged and sampled the site wells. Approximately 0.06 pounds of SPH was detected this quarter. Blaine calculated ground water elevations and compiled the gasoline constituents analytical data. Cambria compiled the bioattenuation parameters analytical data (Table 1), and prepared a ground water elevation contour map (Figure 1). The Blaine report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Ground Water Extraction: Cambria visited the site on October 29 and November 30, 1999 to oversee ground water extraction from monitoring well MW-2 and tank backfill well TB-2. Ground water was extracted from the wells using a vacuum truck. During both visits, well MW-2 was dewatered after extracting approximately 100 gallons of ground water. Approximately 2,355 gallons of ground water were extracted during the October 29 visit and approximately 3,900 gallons of ground water were extracted during the November 30, 1999 visit from wells MW-2 and TB-2. Ground water extraction data and hydrocarbon removal are summarized in Table 2.

ANTICIPATED FIRST QUARTER 2000 ACTIVITIES

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

Ground Water Extraction: Cambria will continue to perform monthly site visits to oversee ground water extraction at the site from wells MW-2 and TB-2.

Monitoring Well Installation: Cambria will contact owners of the properties downgradient of the site to discuss monitoring well installation. If the adjacent property owners agree to allow us to install a monitoring well on their property, we will contact your office to discuss the proposed well installation.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Brian Busch at (925) 973-3128 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Brian Busch
Project Environmental Scientist

Ailsa S. Le May, R.G.
Senior Geologist

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

Figure: 1 - Ground Water Elevation Contour Map
Table: 1 - Bioattenuation Parameters Analytical Data
2 - Ground Water Extraction and Hydrocarbon Removal
Attachment: A - Blaine Ground Water Monitoring Report and Field Notes
B - Analytical Results for Ground Water Extraction Event

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91501-7869
Roland C. Malone, Jr., PO Box 2099, Houston, TX 77252

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Ground Water Elevation Contour Map
November 1, 1999

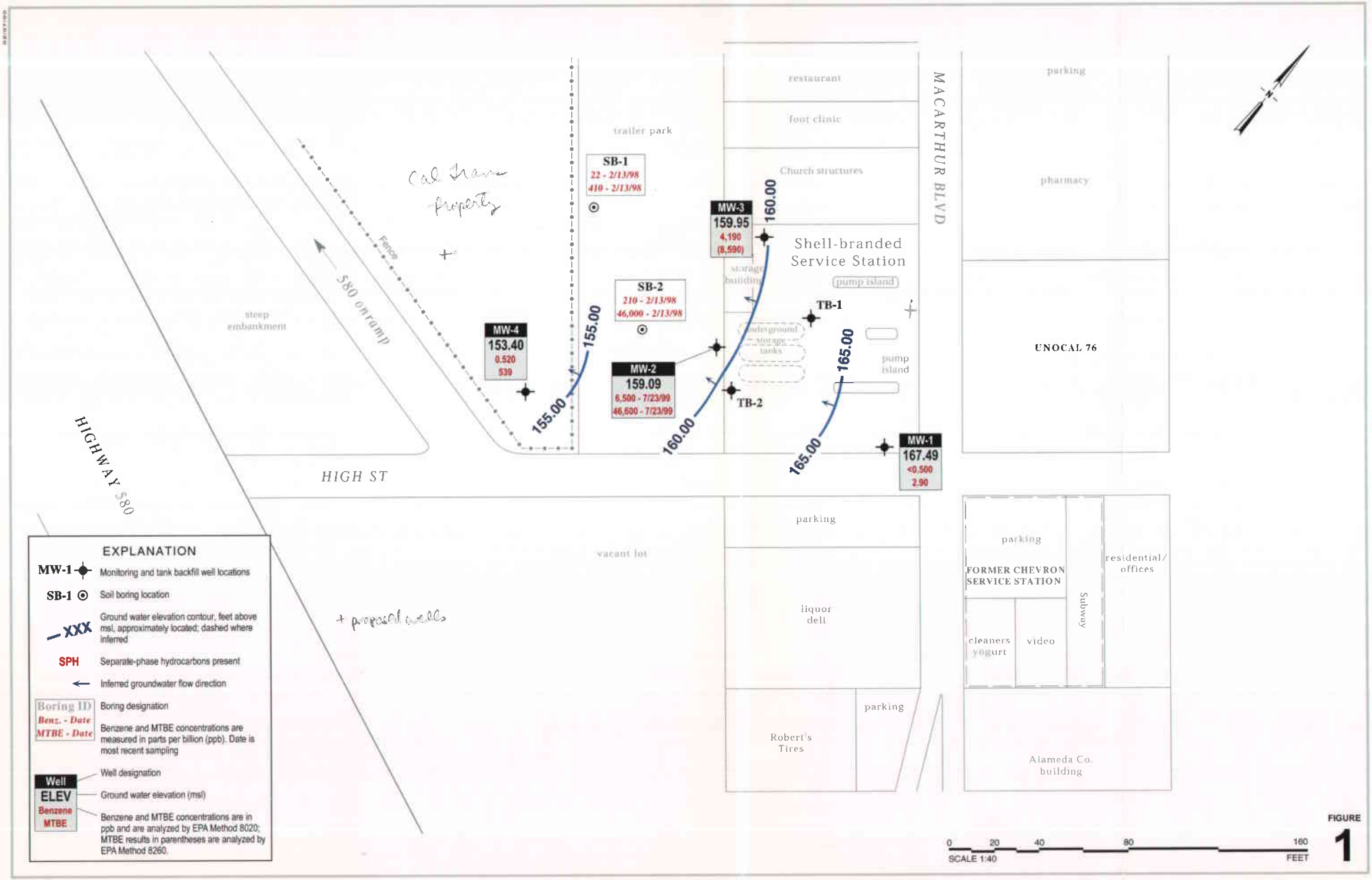

FIGURE **1**

CAMBRIA

Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, California
Incident #98995758

Table 1. **Ground Water Analytical Data - Bioattenuation Parameters** - Shell-branded Service Station Incident #98995758 - 4255 MacArthur Blvd., Oakland, California

Well ID	Date	Ground Water Depth (ft)	DO	Total Alkalinity	Ferrous Iron	Nitrate as Nitrate	Sulfate	Notes
			← (Concentrations in mg/L) →					
MW-1	07/17/98	7.28	0.8	460	1.6	<1.0	12	
	07/23/99	8.51	1.0	480	0.790	7.49	28.6	
MW-2	07/17/98	11.75	---	---	---	---	---	SPH
	07/23/99	14.45	1.4	440	26.0	<1.00	3.24	
MW-3	07/17/98	11.51	1.3	860	5.3	<1.0	6.5	
	07/17/98	11.51	1.3	860	5.4	<1.0	5.8	duplicate
	07/23/99	14.95	1.3	920	76.0	<1.00	4.23	
MW-4	07/17/98	6.95	1.4	630	2.8	<1.0	13	
	07/23/99	11.33	0.9	620	46.0	7.41	6.03	

Notes and Abbreviations:

DO = Dissolved oxygen
ft = Feet
mg/L = Milligrams per liter
SPH = Separate-phase hydrocarbons in well; not sampled
--- = Not analyzed
<n = Below detection limit of n mg/L
Total alkalinity by EPA Method 310.2, concentrations in mg CaCO3/L
Ferrous iron by EPA Method 200.7
Nitrate as nitrate and sulfate by EPA Method 300.0

why wasn't water extracted from TB-1 also?

TABLE 2

PETROLEUM HYDROCARBON MASS REMOVAL
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, California
Incident #98995758
SAP #135701

These [illegible] F.P.

Date	Well Number	Volume Groundwater Extracted (gallons)	Sample Date	TPPH (ug/L)	TPPH Removed (pounds)	Benzene (ug/L)	Benzene Removed (pounds)	MTBE (ug/L)	MTBE Removed (pounds)
23-Apr-99	MW-2	200	13-Apr-98	180,000	0.0003	2,800	0.00000	71,000	0.000
23-Apr-99	TB-2	4,800	24-Aug-99	6,240	0.0002	400	0.00002	86,100	0.003
24-May-99	MW-2	200	13-Apr-98	180,000	0.0003	2,800	0.00000	71,000	0.000
24-May-99	TB-2	4,800	24-Aug-99	6,240	0.0002	400	0.00002	86,100	0.003
28-Jun-99	MW-2	200	13-Apr-98	180,000	0.0003	2,800	0.00000	71,000	0.000
28-Jun-99	TB-2	4,800	24-Aug-99	6,240	0.0002	400	0.00002	86,100	0.003
30-Jul-99	MW-2	200	13-Apr-98	180,000	0.0003	2,800	0.00000	71,000	0.000
30-Jul-99	TB-2	4,800	24-Aug-99	6,240	0.0002	400	0.00002	86,100	0.003
24-Aug-99	MW-2	100	13-Apr-98	180,000	0.0002	2,800	0.00000	71,000	0.000
24-Aug-99	TB-2	2,400	24-Aug-99	6,240	0.0001	400	0.00001	86,100	0.002
29-Oct-99	MW-2	100	13-Apr-98	180,000	0.0002	2,800	0.00000	71,000	0.000
29-Oct-99	TB-2	2,255	29-Oct-99	7,460	0.0001	656	0.00001	442	0.000
30-Nov-99	MW-2	100	13-Apr-98	180,000	0.0002	2,800	0.00000	71,000	0.000
30-Nov-99	TB-2	3,800	29-Oct-99	7,460	0.0002	656	0.00002	442	0.000
Total Gallons Extracted:		28,755	**Total Pounds Removed:**		0.0025		0.00009		0.016

Notes:

1) Mass removal calculations for MW-2 based on last available quarterly ground water data collected in April 1998. Calculations for backfill well TB-2 based on grab ground water sample collected during vacuum truck dewatering.
2) MTBE concentrations based on results by EPA Method 8020.
3) Ground water extracted by vacuum trucks provided by ECI. Water disposed of at Martinez Refinery.
4) Mass removed = Volume extracted (gallons) x Concentration (ug/L) x (1 g/1e9 ug) x (1 pound/453.6 g) x (3.785 L/1 gallon)

s/b 1e6

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ATTACHMENT A

Blaine Ground Water Monitoring Report
and Field Notes

BLAINE
TECH SERVICES INC.

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

December 3, 1999

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

Fourth Quarter 1999 Groundwater Monitoring at
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA

Monitoring performed on November 1, 1999

Groundwater Monitoring Report **991101-N-2**

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 Martinez Refining Company.

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 Sheets

cc: Anni Kreml
Cambria Environmental Technology, Inc.
1144 65th Street, Suite C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-1	11/17/1993	410	21	11	7.9	47	NA	NA	175.79	8.59	NA	167.20	NA	NA
MW-1	01/20/1994	1,200	180	19	48	47	NA	NA	175.79	8.22	NA	167.57	NA	NA
MW-1	04/25/1994	3,100	610	<10	130	27	NA	NA	175.79	7.63	NA	168.16	NA	NA
MW-1	07/07/1994	2,400	1,000	10	250	20	NA	NA	175.79	8.31	NA	167.48	NA	NA
MW-1	10/27/1994	2,200	500	3.1	72	1.8	NA	NA	175.79	8.84	NA	166.95	NA	NA
MW-1	11/17/1994	NA	NA	NA	NA	NA	NA	NA	175.79	7.60	NA	168.19	NA	NA
MW-1	11/28/1994	NA	NA	NA	NA	NA	NA	NA	175.79	7.56	NA	168.23	NA	NA
MW-1	01/13/1995	570	75	2.5	6.7	11	NA	NA	175.79	7.11	NA	168.68	NA	NA
MW-1	04/12/1995	1,800	480	<5.0	79	<5.0	NA	NA	175.79	7.08	NA	168.71	NA	NA
MW-1	07/25/1995	120	15	1.1	2.1	2.9	NA	NA	175.79	7.73	NA	168.06	NA	NA
MW-1 (D)	07/25/1995	300	88	2.4	11	6.5	NA	NA	175.79	7.73	NA	168.06	NA	NA
MW-1	10/18/1995	130	9.5	0.8	1.3	1.7	NA	NA	175.79	8.42	NA	167.37	NA	NA
MW-1 (D)	10/18/1995	120	11	0.8	1.4	1.8	NA	NA	175.79	8.42	NA	167.37	NA	NA
MW-1	01/17/1996	250	22	0.9	1.6	2.3	NA	NA	175.79	7.83	NA	167.96	NA	NA
MW-1	04/25/1996	<50	4.6	<0.5	<0.5	0.6	500b	NA	175.79	7.35	NA	168.44	NA	NA
MW-1	07/17/1996	<250	15	<2.5	<2.5	<2.5	540	NA	175.79	7.70	NA	168.09	NA	NA
MW-1	10/01/1996	1,200	500	12	57	82	1,900	NA	175.79	8.07	NA	167.72	NA	NA
MW-1	01/22/1997	640	170	4.3	33	33	1,200	NA	175.79	7.21	NA	168.58	NA	NA
MW-1	04/08/1997	<200	34	<2.0	3.3	4.3	950	NA	175.79	7.75	NA	168.04	NA	NA
MW-1 (D)	04/08/1997	<200	66	<2.0	6.4	8	740	NA	175.79	7.75	NA	168.04	NA	NA
MW-1	07/08/1997	190	49	1.2	5.8	8.6	560	NA	175.79	8.01	NA	167.78	NA	NA
MW-1	10/08/1997	<100	7	<1.0	<1.0	<1.0	620	NA	175.79	8.10	NA	167.69	NA	NA
MW-1	01/09/1998	970	390	12	48	71	1,200	NA	175.79	7.14	NA	168.65	NA	NA
MW-1	04/13/1998	<50	136	<0.50	1.5	1.8	170	NA	175.79	6.78	NA	169.01	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
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Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-1	07/17/1998	2,500	750	11	88	67	150	NA	175.79	7.28	NA	168.51	NA	NA
MW-1	10/02/1998	8,000	970	36	270	440	35	NA	175.79	7.77	NA	168.02	NA	NA
MW-1	02/03/1999	210	56	0.82	<0.50	3.2	220	NA	175.79	7.45	NA	168.34	NA	1.4
MW-1	04/29/1999	<50	4.5	<0.50	0.56	<0.50	140	196	175.79	7.58	NA	168.21	NA	1.2
MW-1	07/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	120	111*	175.79	8.51	NA	167.28	NA	1.0
MW-1	11/01/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2.90	NA	175.79	8.30	NA	167.49	NA	1.4
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	NA	NA	170.91	12.31	NA	158.60	NA	NA
MW-2	01/20/1994	40,000	6,900	5,600	780	4,100	NA	NA	170.91	11.48	NA	159.43	NA	NA
MW-2 (D)	01/20/1994	41,000	7,200	6,200	900	4,800	NA	NA	170.91	11.48	NA	159.43	NA	NA
MW-2	04/25/1994	60,000	9,300	6,100	1,400	6,200	NA	NA	170.91	10.84	NA	160.07	NA	NA
MW-2	07/07/1994	280,000a	40,000	26,000	8,100	32,000	NA	NA	170.91	11.89	NA	159.02	NA	NA
MW-2 (D)	07/07/1994	53,000	13,000	6,600	2,000	8,400	NA	NA	170.91	11.89	NA	159.02	NA	NA
MW-2	10/27/1994	130,000	14,000	12,000	2,400	13,000	NA	NA	170.91	12.89	NA	158.02	NA	NA
MW-2 (D)	10/27/1994	390,000	8,800	7,000	1,700	11,000	NA	NA	170.91	12.89	NA	158.02	NA	NA
MW-2	11/17/1994	NA	NA	NA	NA	NA	NA	NA	170.91	9.11	NA	161.80	NA	NA
MW-2	11/28/1994	NA	NA	NA	NA	NA	NA	NA	170.91	9.22	NA	161.69	NA	NA
MW-2	01/13/1995	75,000	5,900	12,000	3,100	17,000	NA	NA	170.91	8.10	NA	162.81	NA	NA
MW-2	04/12/1995	100,000	8,500	11,000	2,400	12,000	NA	NA	170.91	10.12	NA	160.79	NA	NA
MW-2 (D)	04/12/1995	80,000	4,200	9,300	2,500	12,000	NA	NA	170.91	10.12	NA	160.79	NA	NA
MW-2	07/25/1995	NA	NA	NA	NA	NA	NA	NA	170.91	11.53	NA	159.80	0.52	NA
MW-2	10/18/1995	NA	NA	NA	NA	NA	NA	NA	170.91	14.02	NA	156.99	0.13	NA
MW-2	01/17/1996	NA	NA	NA	NA	NA	NA	NA	170.91	10.27	NA	160.78	0.17	NA
MW-2	04/25/1996	NA	NA	NA	NA	NA	NA	NA	170.91	11.68	NA	159.25	0.03	NA
MW-2	07/17/1996	NA	NA	NA	NA	NA	NA	NA	170.91	12.78	NA	158.81	0.48	NA

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-2	10/01/1996	NA	NA	NA	NA	NA	NA	NA	170.91	14.21	NA	156.70	0.28	NA
MW-2	01/22/1997	NA	NA	NA	NA	NA	NA	NA	170.91	10.92	NA	160.08	0.11	NA
MW-2	04/08/1997	NA	NA	NA	NA	NA	NA	NA	170.91	14.12	NA	156.95	0.20	NA
MW-2	07/08/1997	NA	NA	NA	NA	NA	NA	NA	170.91	14.98	NA	156.08	0.19	NA
MW-2	10/08/1997	NA	NA	NA	NA	NA	NA	NA	170.91	12.97	NA	157.98	0.05	NA
MW-2	01/08/1998	NA	NA	NA	NA	NA	NA	NA	170.91	12.54	NA	158.43	0.08	NA
MW-2	04/13/1998	180,000	2,800	5,200	2,400	13,000	71,000	NA	170.91	10.05	NA	160.86	NA	NA
MW-2	07/17/1998	NA	NA	NA	NA	NA	NA	NA	170.91	11.75	NA	159.24	0.10	NA
MW-2	10/02/1998	NA	NA	NA	NA	NA	NA	NA	170.91	16.78	NA	154.22	0.11	NA
MW-2	02/03/1999	NA	NA	NA	NA	NA	NA	NA	170.91	9.90	9.82	161.07	0.08	NA
MW-2	04/29/1999	NA	NA	NA	NA	NA	NA	NA	170.91	9.86	9.81	161.09	0.05	NA
MW-2	07/23/1999	65,800	6,500	4,480	1,960	8,960	46,600	58,500*	170.91	14.45	NA	156.46	NA	1.4
MW-2	11/01/1999	NA	NA	NA	NA	NA	NA	NA	170.91	11.84	11.81	159.09	0.03	NA
MW-3	11/17/1993	18,000	5,400	660	720	2,200	NA	NA	174.61	15.40	NA	159.21	NA	NA
MW-3	01/20/1994	55,000	13,000	2,600	2,200	6,500	NA	NA	174.61	14.61	NA	160.00	NA	NA
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	NA	NA	174.61	13.12	NA	161.49	NA	NA
MW-3 (D)	04/25/1994	78,000	12,000	1,900	2,600	7,300	NA	NA	174.61	13.12	NA	161.49	NA	NA
MW-3	07/07/1994	NA	NA	NA	NA	NA	NA	NA	174.61	14.54	NA	160.07	0.02	NA
MW-3	10/27/1994	NA	NA	NA	NA	NA	NA	NA	174.61	15.62	NA	159.03	0.05	NA
MW-3	11/17/1994	NA	NA	NA	NA	NA	NA	NA	174.61	13.83	NA	160.78	NA	NA
MW-3	11/28/1994	NA	NA	NA	NA	NA	NA	NA	174.61	14.02	NA	160.59	NA	NA
MW-3	01/13/1995	180,000	3,200	2,700	1,700	5,200	NA	NA	174.61	12.13	NA	162.48	NA	NA
MW-3 (D)	01/13/1995	23,000	4,000	690	960	3,000	NA	NA	174.61	12.13	NA	162.48	NA	NA
MW-3	04/12/1995	56,000	8,700	1,500	2,100	6,300	NA	NA	174.61	12.96	NA	161.65	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-3	07/25/1995	NA	NA	NA	NA	NA	NA	NA	174.61	14.28	NA	160.38	0.06	NA
MW-3	10/18/1995	NA	NA	NA	NA	NA	NA	NA	174.61	15.88	NA	158.77	0.05	NA
MW-3	01/17/1996	NA	NA	NA	NA	NA	NA	NA	174.61	13.86	NA	160.94	0.24	NA
MW-3	04/25/1996	NA	NA	NA	NA	NA	NA	NA	174.61	13.82	NA	160.81	0.02	NA
MW-3	07/17/1996	NA	NA	NA	NA	NA	NA	NA	174.61	16.11	NA	158.52	0.03	NA
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	NA	174.61	16.56	NA	158.05	NA	NA
MW-3 (D)	10/01/1996	47,000	7,100	530	1,700	4,000	2,900	NA	174.61	16.56	NA	158.05	NA	NA
MW-3	01/22/1997	82,000	5,200	1,300	2,800	8,900	1,100	NA	174.61	13.07	NA	161.54	NA	NA
MW-3 (D)	01/22/1997	61,000	8,400	1,100	2,300	7,000	2,700	NA	174.61	13.07	NA	161.54	NA	NA
MW-3	04/08/1997	NA	NA	NA	NA	NA	NA	NA	174.61	17.09	NA	157.54	0.03	NA
MW-3	07/08/1997	56,000	8,800	580	2,000	4,900	2,800	NA	174.61	15.85	NA	158.76	NA	NA
MW-3	10/08/1997	48,000	8,000	590	1,700	3,400	5,100	NA	174.61	16.22	NA	158.39	NA	NA
MW-3	01/08/1998	47,000	9,400	810	2,300	4,700	6,300	NA	174.61	13.80	NA	160.81	NA	NA
MW-3 (D)	01/08/1998	48,000	8,100	750	2,000	4,100	5,800	NA	174.61	13.80	NA	160.81	NA	NA
MW-3	04/13/1998	32,000	6,800	540	1,400	3,400	4,000	NA	174.61	12.97	NA	161.64	NA	NA
MW-3 (D)	04/13/1998	36,000	7,300	660	1,600	3,700	4,000	NA	174.61	12.97	NA	161.64	NA	NA
MW-3	07/17/1998	71,000	11,000	590	2,200	6,900	3,900	NA	174.61	11.51	NA	163.10	NA	NA
MW-3 (D)	07/17/1998	76,000	12,000	700	2,600	8,000	3,000	NA	174.61	11.51	NA	163.10	NA	NA
MW-3	10/02/1998	66,000	8,900	510	2,000	4,900	4,600	NA	174.61	16.50	NA	158.11	NA	NA
MW-3 (D)	10/02/1998	59,000	9,400	460	2,000	4,900	4,700	NA	174.61	16.50	NA	158.11	NA	NA
MW-3	02/03/1999	36,000	6,800	300	1,600	2,900	18,000	NA	174.61	15.21	NA	159.40	NA	1.3
MW-3	04/29/1999	45,000	8,100	580	2,200	5,800	4,700	5,150	174.61	15.43	NA	159.18	NA	1.5
MW-3	07/23/1999	29,400	3,540	215	810	3,800	4,720	6,950*	174.61	14.95	NA	159.66	NA	1.3
MW-3	11/01/1999	20,000	4,190	294	1,060	1,740	5,540	6,590	174.61	14.66	NA	159.95	NA	0.6

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-4	11/17/1994	NA	NA	NA	NA	NA	NA	NA	164.06	6.62	NA	157.44	NA	NA
MW-4	11/28/1994	2,900	200	17	76	260	NA	NA	164.06	6.11	NA	157.95	NA	NA
MW-4	01/13/1995	1,900	130	5.6	13	40	NA	NA	164.06	6.05	NA	158.01	NA	NA
MW-4	04/12/1995	680	150	<2.0	10	13	NA	NA	164.06	6.31	NA	157.75	NA	NA
MW-4	07/25/1995	340	100	0.8	8.8	3	NA	NA	164.06	7.36	NA	156.70	NA	NA
MW-4	10/18/1995	150	31	<0.5	3.5	0.8	NA	NA	164.06	8.54	NA	155.52	NA	NA
MW-4	01/17/1996	290	14	<0.5	1.8	0.8	NA	NA	164.06	8.48	NA	155.58	NA	NA
MW-4	04/25/1996	<500	65	<5	<5	<5	1,700	NA	164.06	7.40	NA	156.66	NA	NA
MW-4 (D)	04/25/1996	<500	66	<5	8.7	<5	1,500	NA	164.06	7.40	NA	156.66	NA	NA
MW-4	07/17/1996	<500	84	<5.0	6.5	<5.0	1,500	NA	164.06	7.75	NA	156.31	NA	NA
MW-4 (D)	07/17/1996	<500	54	<5.0	<5.0	<5.0	1,700	2,100	164.06	7.75	NA	156.31	NA	NA
MW-4	10/01/1996	<500	1.9	<5.0	<5.0	<5.0	3,000	NA	164.06	8.82	NA	155.24	NA	NA
MW-4	01/22/1997	580	130	<2.5	18	5.2	1,200	NA	164.06	7.51	NA	156.55	NA	NA
MW-4	04/08/1997	770	200	7	26	55	1,500	8	164.06	7.18	NA	156.88	NA	NA
MW-4	07/08/1997	570	78	<5.0	14	11	1,200	NA	164.06	9.00	NA	155.06	NA	NA
MW-4 (D)	07/08/1997	640	81	<5.0	16	19	1,600	NA	164.06	9.00	NA	155.06	NA	NA
MW-4	10/08/1997	<500	40	<5.0	7.4	5.4	1,400	NA	164.06	8.97	NA	155.09	NA	NA
MW-4 (D)	10/08/1997	<500	36	<5.0	5.9	<5.0	1,400	NA	164.06	8.97	NA	155.09	NA	NA
MW-4	01/08/1998	<1,000	55	<10	13	<10	2,000	NA	164.06	7.90	NA	156.16	NA	NA
MW-4	04/13/1998	350	110	2.4	20	26	<2.5	NA	164.06	7.35	NA	156.71	NA	NA
MW-4	07/17/1998	210	66	0.78	5.4	9.8	1,700	NA	164.06	6.95	NA	157.11	NA	NA
MW-4	10/02/1998	<50	0.69	<0.50	<0.50	<0.50	2,900	NA	164.06	7.35	NA	156.71	NA	NA
MW-4	02/03/1999	560	120	2.5	29	34	6,800	NA	164.06	7.71	NA	156.35	NA	0.9
MW-4	04/29/1999	390	80	1.9	13	19	7,000	8,360	164.06	7.83	NA	156.23	NA	1.1
MW-4	07/23/1999	460	93.6	8.40	25.2	28.8	3,760	6,000*	164.06	11.33	NA	152.73	NA	0.9

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)
MW-4	11/01/1999	77.3	0.520	<0.500	<0.500	<0.500	539	NA	164.06	10.66	NA	153.40	NA	2.8
TB-1	04/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	6.00	NA	NA	NA	3.8
TB-1	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	12.65	NA	NA	NA	0.2
TB-2	04/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	4.76	NA	NA	NA	4.2
TB-2	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	11.33	NA	NA	NA	0.5

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

TOC = Top of Casing Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable

WELL CONCENTRATIONS
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA
Wic #204-5510-0600

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

Notes:

* = Sample analyzed outside the EPA recommended holding time.

a = Ground water surface had a sheen when sampled

b = MTBE value is estimated by Sequoia Analytical of Redwood City, California

When separate-phase hydrocarbons are present, ground water elevation is adjusted using the relation:

Corrected ground water elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness).

Sequoia Analytical

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

November 15, 1999

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

RE: Equiva 4255 McArthur Blvd. Oakland/M911047

Dear Leah Davis

Enclosed are the results of analyses for sample(s) received by the laboratory on November 2, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kayvan Kimyai
Project Manager D.M.

CA ELAP Certificate Number 1210

Sequoia Analytical

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FAX (408) 782-6308

Blaine Tech Services (Shell)	Project:	Equiva	Sampled:	11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received:	11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	11/15/99

ANALYTICAL REPORT FOR M911047

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	M911047-01	Water	11/1/99
MW-3	M911047-02	Water	11/1/99
MW-4	M911047-03	Water	11/1/99

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received: 11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 11/15/99

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-1			**M911047-01**				**Water**	
Purgeable Hydrocarbons	9110334	11/10/99	11/10/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	**2.90**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*110*	%	
MW-3			**M911047-02**				**Water**	
Purgeable Hydrocarbons	9110376	11/11/99	11/11/99		5000	**20000**	ug/l	1,D
Benzene	"	"	"		50.0	**4190**	"	D
Toluene	"	"	"		50.0	**294**	"	D
Ethylbenzene	"	"	"		50.0	**1060**	"	D
Xylenes (total)	"	"	"		50.0	**1740**	"	D
Methyl tert-butyl ether	"	"	"		125	**5540**	"	2,D
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*113*	%	
MW-4			**M911047-03**				**Water**	
Purgeable Hydrocarbons	9110334	11/10/99	11/10/99		50.0	**77.3**	ug/l	1
Benzene	"	"	"		0.500	**0.520**	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	11/11/99		5.00	**539**	"	2,D
Surrogate: a,a,a-Trifluorotoluene	"	"	*11/10/99*	*70.0-130*		*106*	%	

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received: 11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 11/15/99

MTBE by EPA Method 8260A
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-3			**M911047-02**				**Water**	
Methyl tert-butyl ether	9110429	11/12/99	11/12/99		500	**8590**	ug/l	D
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*70.0-130*		*93.5*	%	

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received: 11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 11/15/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9110334	**Date Prepared: 11/10/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9110334-BLK1**									
Purgeable Hydrocarbons	11/10/99			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.69*	"	*70.0-130*	*96.9*			
LCS	**9110334-BS1**									
Purgeable Hydrocarbons	11/10/99	250		267	ug/l	70.0-130	107			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*13.4*	"	*70.0-130*	*134*			*3*
Matrix Spike	**9110334-MS1**		**M911047-01**							
Purgeable Hydrocarbons	11/10/99	250	ND	330	ug/l	60.0-140	**132**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*11.9*	"	*70.0-130*	*119*			
Matrix Spike Dup	**9110334-MSD1**		**M911047-01**							
Purgeable Hydrocarbons	11/10/99	250	ND	274	ug/l	60.0-140	**110**	25.0	**18.2**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.6*	"	*70.0-130*	*106*			
Batch: 9110376	**Date Prepared: 11/11/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9110376-BLK1**									
Purgeable Hydrocarbons	11/11/99			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Methyl tert-butyl ether	"			**ND**	"	**2.50**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.55*	"	*70.0-130*	*95.5*			
LCS	**9110376-BS1**									
Benzene	11/11/99	10.0		8.78	ug/l	70.0-130	87.8			
Toluene	"	10.0		8.59	"	70.0-130	85.9			
Ethylbenzene	"	10.0		9.34	"	70.0-130	93.4			
Xylenes (total)	"	30.0		27.8	"	70.0-130	92.7			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.87*	"	*70.0-130*	*98.7*			
Matrix Spike	**9110376-MS1**		**M911250-11**							
Benzene	11/12/99	10.0	ND	9.39	ug/l	60.0-140	**93.9**			
Toluene	"	10.0	ND	9.47	"	60.0-140	**94.7**			

Sequoia Analytical

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received: 11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 11/15/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Matrix Spike (continued)	**9110376-MS1**		**M911250-11**							
Ethylbenzene	11/12/99	10.0	ND	10.0	ug/l	60.0-140	**100**			
Xylenes (total)	"	30.0	ND	29.7	"	60.0-140	**99.0**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*8.78*	"	*70.0-130*	*87.8*			
Matrix Spike Dup	**9110376-MSD1**		**M911250-11**							
Benzene	11/12/99	10.0	ND	8.92	ug/l	60.0-140	**89.2**	25.0	**5.13**	
Toluene	"	10.0	ND	9.04	"	60.0-140	**90.4**	25.0	**4.65**	
Ethylbenzene	"	10.0	ND	9.32	"	60.0-140	**93.2**	25.0	**7.04**	
Xylenes (total)	"	30.0	ND	28.1	"	60.0-140	**93.7**	25.0	**5.50**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*9.11*	"	*70.0-130*	*91.1*			

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Blaine Tech Services (Shell)	Project:	Equiva	Sampled: 11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received: 11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported: 11/15/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9110429	**Date Prepared: 11/11/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9110429-BLK1**									
Methyl tert-butyl ether	11/11/99			**ND**	ug/l	**0.500**				
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*9.34*	"	*70.0-130*	*93.4*			
Blank	**9110429-BLK2**									
Methyl tert-butyl ether	11/12/99			**ND**	ug/l	**0.500**				
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*8.32*	"	*70.0-130*	*83.2*			
LCS	**9110429-BS1**									
Methyl tert-butyl ether	11/11/99	10.0		9.44	ug/l	70.0-130	94.4			
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*8.40*	"	*70.0-130*	*84.0*			
LCS	**9110429-BS2**									
Methyl tert-butyl ether	11/12/99	10.0		8.91	ug/l	70.0-130	89.1			
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*7.93*	"	*70.0-130*	*79.3*			
Matrix Spike	**9110429-MS1**		**M910886-01**							
Methyl tert-butyl ether	11/11/99	10.0	7.19	15.9	ug/l	70.0-130	**87.1**			
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*8.80*	"	*70.0-130*	*88.0*			
Matrix Spike Dup	**9110429-MSD1**		**M910886-01**							
Methyl tert-butyl ether	11/11/99	10.0	7.19	18.5	ug/l	70.0-130	**113**	25.0	**25.9**	4
Surrogate: 1,2-Dichloroethane-d4	"	*10.0*		*9.40*	"	*70.0-130*	*94.0*			

Sequoia Analytical

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

Blaine Tech Services (Shell)	Project:	Equiva	Sampled:	11/1/99
1680 Rogers Avenue	Project Number:	4255 McArthur	Received:	11/2/99
San Jose, CA 95112	Project Manager:	Leah Davis	Reported:	11/15/99

Notes and Definitions

#	Note
D	Data reported from a dilution.
1	Chromatogram Pattern: Gasoline C6-C12
2	Sample was analyzed at a second dilution per clients request.
3	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
4	The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

BLAINE TECH SERVICES INC.

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

CHAIN OF CUSTODY 24101-N2

CLIENT: Equiva - Karen Petryna

SITE: 4255 McArthur Blvd,
Oakland, CA

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT

LAB: SEQUOIA DHS #:

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

☐ EPA ☐ RWQCB REGION ____
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Send invoice to Equiva

Incident # 98995758

Send report to Blaine Tech Services

Attn: Ann Pember

SAMPLE I.D.	Date	Time	MATRIX S = SOIL W = H2O	CONTAINERS TOTAL	C	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH-diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010		ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
mw-1	11-1-99	1100	w	3		X	X						* Confirm highest			
mw-3	↓	1145	↓	3		X	X						MTBE hit by			
mw-4	↓	1115	↓	3		X	X						EPA 8260			

SAMPLING COMPLETED DATE 11-1-99 TIME 1210

SAMPLING PERFORMED BY ZR

RESULTS NEEDED NO LATER THAN

RELEASED BY ZR DATE TIME RECEIVED BY DATE TIME

RELEASED BY DATE TIME RECEIVED BY DATE 11-2 TIME 1053

RELEASED BY DATE TIME RECEIVED BY MH DATE 11/2/99 TIME 12:11

SHIPPED VIA DATE SENT TIME SENT COOLER #

WELL GAUGING DATA

Project # 991101-M2 Date 11-1-99 Client

Site

Equiva 98995758
4255 MACARTHUR BLVD.
OAKLAND

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	DO / ORP
MW-1	4					8.30	23.30	TOC	
MW-2	4		11.81	.03	35 ml	11.84			
MW-3	4	sheen odor				14.66	21.84		
MW-4	~~2~~ 4					~~11.84~~ 10.66	30.50		
TB-1	4					12.65	13.45		0.2 / -16
TB-2	4					11.23	12.90	↓	0.5 / -14

EQUIVA WELL MONITORING DATA SHEET

Project #: 991101-N2	Job # 204-5510-0600
Sampler: NS	Date: 11-1-99
Well I.D.: MW-1	Well Diameter: 2 3 @ 6 8 ___
Total Well Depth: 23.30	Depth to Water: 8.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible (X) / Extraction Pump / Other: ___

Sampling Method: Bailer (X) / Extraction Port / Other: ___

9.8	X	3	=	29.4 Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	9.6 pH	Cond.	Turbidity	Gals. Removed	Observations
1052	71.6	9.4	1180	32	10	PH w
1053	72.6	9.3	1140	31	20	"
1054	72.2	9.2	1142	25	30	

Did well dewater? Yes (No)			Gallons actually evacuated: 30		
Sampling Time: 1100			Sampling Date: 11-1-99		
Sample I.D.: MW-1			Laboratory: (Sequoia) BC Other___		
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other:					
D.O. (if req'd):	Pre-purge:	1.4 mg/L	Post-purge:		mg/L
O.R.P. (if req'd):	Pre-purge:	-71 mV	Post-purge:		mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 991101-N2	Job # 204-5510-0600
Sampler: NS	Date: 11-1-99
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water: 11.84
Depth to Free Product: 11.81	Thickness of Free Product (feet): NS: 0.03
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: Bailer (*) / Extraction Port / Other: Disposable Bailer

___ (1 Case Volume (Gals.)) X 3 (Specified Volumes) = ___ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
		Emptied skimmer		2	20 ml	
1200	Bailed	FP		2	15 ml	
		(added 2 15 gallons purgewater to drum)				

Did well dewater? Yes No — Gallons actually evacuated: —

Sampling Time: — Sampling Date: 11-1-99

Sample I.D.: MW-2 Laboratory: (Sequoia) BC Other ___

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other:

D.O. (if req'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

Project #: 211101-2	Job # 204-5510-0600
Sampler: CS	Date: 11-1-99
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 21.87	Depth to Water: 14.66
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): ~~YSI~~ HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius^2 * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible X / Extraction Pump / Other: ____

Sampling Method: Bailer X / Extraction Port / Other: ____

1 Case Volume (Gals.)	X	Specified Volumes	=	Calculated Volume
4.7	X	3	=	14.1 Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1140	73.2	7.0	1445	70	5	odor
1141	73.5	6.8	1408	63	10	
1142	74.3	6.8	1383	54	15	
~~1145~~						

Did well dewater? Yes (No)		Gallons actually evacuated:	15
Sampling Time:	1145	Sampling Date:	11-1-99
Sample I.D.:	MW-3	Laboratory: (Sequoia) BC Other	
Analyzed for: ~~TPH-G~~ ~~BTEX~~ ~~MTBE~~ TPH-D Other:			
D.O. (if req'd): Pre-purge:	0.6 mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	-110 mV	Post-purge:	mV

EQUIVA WELL MONITORING DATA SHEET

Project #: 991101-N2	Job # 204-5510-0600
Sampler: NS	Date: 11-1-99
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 30.50	Depth to Water: 10.66
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Purge Method: Bailer X; Middleburg; Electric Submersible; Extraction Pump; Other: ____

Sampling Method: Bailer X; Extraction Port; Other: ____

3.2 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 9.6 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1107	69.4	7.1	1209	7200	3.25	
1109	68.6	7.2	1220	7200	6.5	
1112	68.8	7.2	1190	7200	10	

Did well dewater? Yes (No)		Gallons actually evacuated: 10	
Sampling Time: 1115		Sampling Date: 11-1-99	
Sample I.D.: MW-4		Laboratory: (Sequoia) BC Other ____	
Analyzed for: ~~TPH-G~~ (BTEX) (MTBE) TPH-D Other:			
D.O. (if req'd): Pre-purge:	2.8 mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	3 mV	Post-purge:	mV

ATTACHMENT B

Analytical Results for Ground Water Extraction Event

Sequoia
Analytical

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

November 15, 1999

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

RE: Shell 4255 MacArthur, Oakland/M910ACF

Dear Brian Busch

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

Sincerely,

Kayvan Kiryai
Project Manager D.M.

CA ELAP Certificate Number 1210

Sequoia Analytical

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

Cambria - Oakland (Shell)	Project:	Shell	Sampled: 10/29/99
1144 65th St. Suite C	Project Number:	4255 Mac Arthur	Received: 10/29/99
Oakland, CA 94608	Project Manager:	Brian Busch	Reported: 11/15/99

ANALYTICAL REPORT FOR M910ACF

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
TB -2	M910ACF-01	Water	10/29/99

Sequoia Analytical

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FAX (408) 782-6308

Cambria - Oakland (Shell)	Project:	Shell	Sampled: 10/29/99
1144 65th St. Suite C	Project Number:	4255 Mac Arthur	Received: 10/29/99
Oakland, CA 94608	Project Manager:	Brian Busch	Reported: 11/15/99

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

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TB -2			**M910ACF-01**				**Water**	
Purgeable Hydrocarbons	9110211	11/5/99	11/5/99		1000	**7460**	ug/l	1
Benzene	"	"	"		10.0	**656**	"	
Toluene	"	"	"		10.0	**23.4**	"	
Ethylbenzene	"	"	"		10.0	**148**	"	
Xylenes (total)	"	"	"		10.0	**442**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70.0-130*		*117*	%	

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Cambria - Oakland (Shell)	Project:	Shell	Sampled: 10/29/99
1144 65th St. Suite C	Project Number:	4255 Mac Arthur	Received: 10/29/99
Oakland, CA 94608	Project Manager:	Brian Busch	Reported: 11/15/99

MTBE by EPA Method 8260A
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
TB -2			**M910ACF-01**				**Water**	
Methyl tert-butyl ether	9110038	11/5/99	11/6/99		1000	**57500**	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*87.6*	%	

Sequoia Analytical

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Cambria - Oakland (Shell)	Project:	Shell	Sampled: 10/29/99
1144 65th St. Suite C	Project Number:	4255 Mac Arthur	Received: 10/29/99
Oakland, CA 94608	Project Manager:	Brian Busch	Reported: 11/15/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9110211	**Date Prepared: 11/5/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9110211-BLK1**									
Purgeable Hydrocarbons	11/5/99			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*12.4*	"	*70.0-130*	*124*			
LCS	**9110211-BS1**									
Benzene	11/5/99	10.0		9.38	ug/l	70.0-130	93.8			
Toluene	"	10.0		9.28	"	70.0-130	92.8			
Ethylbenzene	"	10.0		9.15	"	70.0-130	91.5			
Xylenes (total)	"	30.0		28.6	"	70.0-130	95.3			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*11.9*	"	*70.0-130*	*119*			
LCS Dup	**9110211-BSD1**									
Benzene	11/5/99	10.0		9.48	ug/l	70.0-130	94.8	25.0	1.06	
Toluene	"	10.0		9.49	"	70.0-130	94.9	25.0	2.24	
Ethylbenzene	"	10.0		9.45	"	70.0-130	94.5	25.0	3.23	
Xylenes (total)	"	30.0		28.9	"	70.0-130	96.3	25.0	1.04	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*11.3*	"	*70.0-130*	*113*			

Sequoia Analytical

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Cambria - Oakland (Shell)	Project:	Shell	Sampled: 10/29/99
1144 65th St. Suite C	Project Number:	4255 Mac Arthur	Received: 10/29/99
Oakland, CA 94608	Project Manager:	Brian Busch	Reported: 11/15/99

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

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9110038	**Date Prepared: 11/5/99**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**9110038-BLK1**									
Methyl tert-butyl ether	11/5/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*44.7*	"	*76.0-114*	*89.4*			
Blank	**9110038-BLK2**									
Methyl tert-butyl ether	11/7/99			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.6*	"	*76.0-114*	*91.2*			
LCS	**9110038-BS1**									
Methyl tert-butyl ether	11/5/99	50.0		43.7	ug/l	70.0-130	87.4			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.6*	"	*76.0-114*	*91.2*			
LCS	**9110038-BS2**									
Methyl tert-butyl ether	11/7/99	50.0		40.3	ug/l	70.0-130	80.6			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*44.0*	"	*76.0-114*	*88.0*			
Matrix Spike	**9110038-MS1**		**L911045-09**							
Methyl tert-butyl ether	11/5/99	50.0	ND	41.6	ug/l	60.0-140	**83.2**			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*44.6*	"	*76.0-114*	*89.2*			
Matrix Spike Dup	**9110038-MSD1**		**L911045-09**							
Methyl tert-butyl ether	11/5/99	50.0	ND	43.1	ug/l	60.0-140	**86.2**	25.0	**3.54**	
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.2*	"	*76.0-114*	*90.4*			

Sequoia Analytical

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Cambria - Oakland (Shell)		Project:	Shell	Sampled:	10/29/99
1144 65th St. Suite C		Project Number:	4255 Mac Arthur	Received:	10/29/99
Oakland, CA 94608		Project Manager:	Brian Busch	Reported:	11/15/99

Notes and Definitions

#	Note
1	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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ______

Date: 10-29-99
Page 1 of 1

Site Address: 4255 MacArthur, Oakland

~~WIC#:~~ Incident # 98995758

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

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

Consultant Contact: BRIAN BUSCH
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: BRIAN BUSCH

Printed Name:

Analysis Required: M910ACH

LAB: SEQUOIA

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

TURN AROUND TIME
24 hours [ ]
48 hours [ ]
15 days [X] (Normal)
Other [ ] ______

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

UST AGENCY: ______

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	MTBE by EPA 8260		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
TB-2	10-29-99			X		3						X	X			40 ml	Ø	no	groundwater	01

Relinquished By (signature):	Printed Name:	Date: / Time:	Received (signature):	Printed Name:	Date: / Time:
[signature]	BRIAN BUSCH	Date: 10/29 Time: 12:40	[signature]	Steve Teu	Date: 10/29 Time: 12:40
[signature]		Date: 10/29 Time:	[signature]	CHEUNG, D.	Date: 10/29 Time: 1830
		Date: Time:			Date: Time:

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