

CAMBRIA

# 3737

ENVIRONMENTAL PROTECTION  
March 17, 1999

99 APR -1 PM 3:18

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

need to characterize WTE better  
plume

Re: **Fourth Quarter 1998 Monitoring Report**  
Shell-branded Service Station  
630 High Street  
Oakland, California  
Incident # 98995751  
SAP# 135693  
Cambria Project# 24-314-498



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.

**FOURTH QUARTER 1998 ACTIVITIES**

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

*Closure Request:* Cambria is awaiting your response to the *Regulatory Status Review and Recommendations* section of the *Fourth Quarter 1997 Monitoring Report* for this site, in which we proposed closure as a low-risk ground water site.

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

**Cambria  
Environmental  
Technology, Inc.**

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

**ANTICIPATED FUTURE ACTIVITIES**

*Ground Water Monitoring:* The next sampling event is scheduled for second quarter 1999. At that time, Blaine will gauge and sample selected site wells and tabulate the data. Cambria will prepare a monitoring report.

**CLOSING**



We appreciate the opportunity to work with you on this project. Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

Sincerely,

**Cambria Environmental Technology, Inc**

Darryk Ataide  
Project Environmental Scientist

Diane M. Lundquist, P.E.  
Principal Engineer



Attachment: A - Blaine Ground Water Monitoring Report

cc: Karen Petryna, Equiva Services LLC, P.O. Box 6249, Carson, California 90749

g:\oak630\qm\4q98qm.doc

# RAMP TO HIGHWAY 880

0:\OAK930\FIGURES\MONROE-MP.DWG

## EXPLANATION

MW-1 ● Monitoring well location

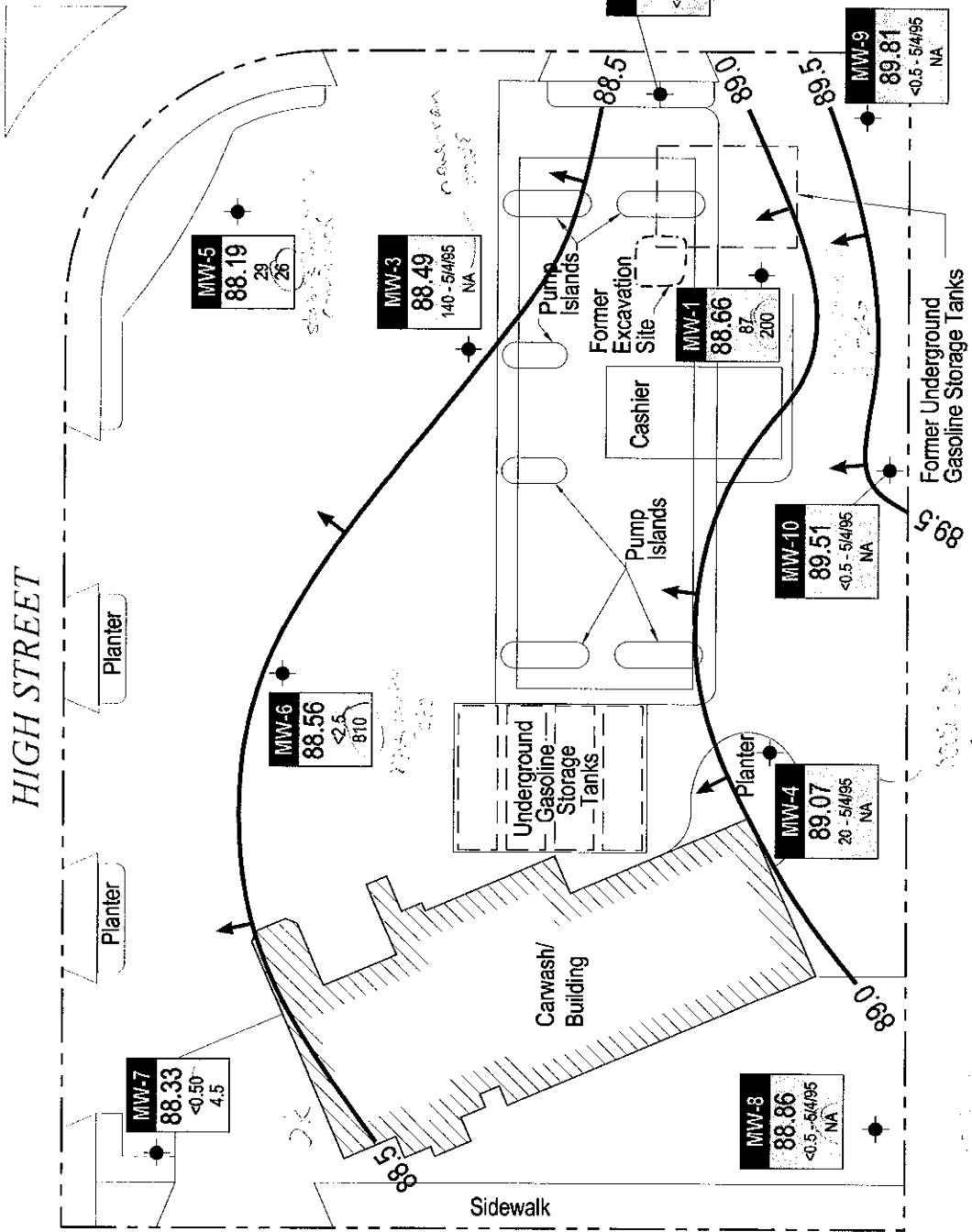
→ Ground water flow direction

—XX.XX Ground water elevation contour, in feet above mean sea level (msl), dashed where inferred

Well	ELEV	Benz - date	MTBE - date
MW-1	88.66	87	200
MW-2	88.55	<0.5	5/4/95
MW-3	88.49	140	5/4/95
MW-4	89.07	20	5/4/95
MW-5	88.19	29	26
MW-6	88.56	<2.5	8/10
MW-7	88.33	<0.50	4.5
MW-8	88.86	<0.5	5/4/95
MW-9	89.81	<0.5	5/4/95
MW-10	89.51	<0.5	5/4/95

Well designation  
Ground water elevation (msl)  
Benzene and MTBE concentrations are in parts per billion (ppb).  
Date is most recent sampling.

HIGH STREET



JENSEN STREET

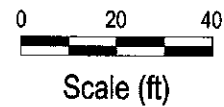


FIGURE 1

## Shell-branded Service Station

630 High Street  
Oakland, California  
Incident #98995751



C A M B R I A

## Ground Water Elevation Contour Map

November 6, 1998

**ATTACHMENT A**

Blaine Ground Water Monitoring Report

**BLAINE**  
TECH SERVICES, INC.



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

February 3, 1999

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

Fourth Quarter 1998 Groundwater Monitoring at  
SHELL-branded Service Station  
630 High Street  
Oakland, CA

Monitoring performed on November 6, 1998

---

Groundwater Monitoring Report **981106-L-1**

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, appropriate 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.

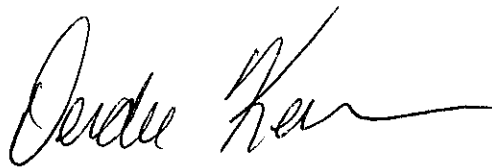
At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an

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,

A handwritten signature in black ink, appearing to read "Deidre Kerwin". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Deidre Kerwin  
Operations Manager

DK/ew

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheet

cc: Cambria Environmental  
1144 65th St., Suite C  
Oakland, CA 94608  
Attn: Anni Kreml

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-1	01/29/1991	11,000	21,000a	310	41	500	400	NA	NA	99.35	10.79	88.56	NA
MW-1	04/30/1991	8,300	2,100	250	32	310	300	NA	NA	99.35	9.48	89.87	NA
MW-1	07/22/1991	11,000	3,800	310	36	290	280	NA	NA	99.35	10.53	88.82	NA
MW-1	02/21/1992	7,300	8,900b	200	36	340	270	NA	NA	99.35	8.31	91.04	NA
MW-1	05/22/1992	7,600	18,000b, c	140	<50	300	140	NA	NA	99.35	10.02	89.33	NA
MW-1	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	99.35	10.06	89.29	NA
MW-1	08/20/1992	9,100	5,200b	530	340	860	540	NA	NA	99.35	10.32	89.03	NA
MW-1	11/18/1992	15,000	4,100b	220	50	790	340	NA	NA	99.35	10.64	88.71	NA
MW-1	02/09/1993	7,000	1,200	130	23	220	160	NA	NA	99.35	8.71	90.64	NA
MW-1	06/16/1993	4,800	NA	150	31	320	130	NA	NA	99.35	9.71	89.64	1.73/1.58k
MW-1	08/24/1993	10,000	NA	170	27	610	170	NA	NA	99.35	10.23	89.12	1.49/1.70k
MW-1	11/23/1993	7,600	NA	190	<12	430	140	NA	NA	99.35	10.48	88.87	1.77/2.80k
MW-1	02/14/1994	8,000	NA	150	47	210	68	NA	NA	99.35	9.17	90.18	6.2/2.5k
MW-1	05/25/1994	8,800	NA	95	<10	210	63	NA	NA	99.35	9.52	89.83	NA
MW-1	08/04/1994	6,200	NA	150	14	350	180	NA	NA	99.35	10.51	88.84	NA
MW-1	11/08/1994	7,600	NA	190	<10	480	200	NA	NA	99.35	10.20	89.15	NA
MW-1	02/01/1995	8,200	NA	130	21	170	130	NA	NA	99.35	6.94	92.41	NA
MW-1	05/04/1995	7,000	NA	130	47	190	180	NA	NA	99.35	8.40	90.95	NA
MW-1	05/16/1997	5,600	NA	57	<10	26	29	84	NA	99.35	9.93	89.42	1.5
MW-1	11/03/1997	6,900	NA	81	<10	32	30	170	NA	99.35	10.27	89.08	0.8/0.6k
MW-1	06/05/1998	4,200	NA	68	7.6	39	69	84	NA	99.35	8.95	90.40	1.0/0.5k
MW-1	11/06/1998	6,200	NA	87	<2.5	48	55	200	NA	99.35	10.69	88.66	1.2/1.8

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-2	01/29/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	13.25	87.90	NA
MW-2	04/30/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	10.94	90.21	NA
MW-2	07/22/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	12.14	89.01	NA
MW-2	02/21/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	10.08	91.07	NA
MW-2	05/22/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	11.52	89.63	NA
MW-2	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	101.15	11.50	89.65	NA
MW-2	08/20/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	11.72	89.43	NA
MW-2	11/18/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	13.06	88.09	NA
MW-2	02/09/1993	95	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	10.06	91.09	NA
MW-2	06/16/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	11.60	89.55	NA
MW-2	08/24/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	12.16	88.99	NA
MW-2	11/23/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	12.74	88.41	NA
MW-2	02/14/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	10.91	90.24	NA
MW-2	05/25/1994	100	NA	1.2	4.9	2.3	13	NA	NA	101.15	11.06	90.09	NA
MW-2	08/04/1994	NA	NA	NA	NA	NA	NA	NA	NA	101.15	12.04	89.11	NA
MW-2	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	12.38	88.77	NA
MW-2	02/01/1995	NA	NA	NA	NA	NA	NA	NA	NA	101.15	8.76	92.39	NA
MW-2	05/04/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	101.15	10.20	90.95	NA
MW-2	05/16/1997	NA	NA	NA	NA	NA	NA	NA	NA	101.15	11.28	89.87	NA
MW-2	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	101.15	11.71	89.44	NA
MW-2	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	101.15	9.85	91.30	NA
MW-2	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	101.15	12.60	88.55	NA



**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-3	01/29/1991	2,300	410a	17	14.1	10	230	NA	NA	99.49	11.09	88.40	NA
MW-3	04/30/1991	<50	260	22	4	7	17	NA	NA	99.49	9.57	89.92	NA
MW-3	07/22/1991	2,000	310	51	<0.5	<0.5	<0.5	NA	NA	99.49	10.66	88.83	NA
MW-3	02/21/1992	2,800	640d	15	2.8	<2.5	12	NA	NA	99.49	8.97	90.52	NA
MW-3	05/22/1992	3,700	220b, c	27	11	20	110	NA	NA	99.49	9.32	90.17	NA
MW-3	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	99.49	10.22	89.27	NA
MW-3	08/20/1992	13,000	340b	72	85	71	140	NA	NA	99.49	10.44	89.05	NA
MW-3	11/18/1992	2,100	430b	21	3.6	11	13	NA	NA	99.49	10.79	88.70	NA
MW-3	02/09/1993	3,300	83	21	5.6	6.1	<0.5	NA	NA	99.49	9.35	90.14	NA
MW-3	06/16/1993	3,500e	NA	66	6	<0.5	<0.5	NA	NA	99.49	9.56	89.93	NA
MW-3	08/24/1993	3,400e	NA	110	<5	<5	<5	NA	NA	99.49	10.51	88.98	NA
MW-3	11/23/1993	3,000	NA	36	44	6.9	23	NA	NA	99.49	10.77	88.72	NA
MW-3	02/14/1994	4,700g	NA	9.9	5.2	8.8	<5.0	NA	NA	99.49	9.61	89.88	NA
MW-3	05/25/1994	1,200	NA	<10	<10	<10	<10	NA	NA	99.49	10.00	89.49	NA
MW-3	08/04/1994	2,600	NA	29	<5	14	11	NA	NA	99.49	10.63	88.86	NA
MW-3	11/08/1994	2,600	NA	5.5	1.5	1.9	0.9	NA	NA	99.49	11.02	88.47	NA
MW-3	02/01/1995	4,600	NA	27	1.2	3.2	2.5	NA	NA	99.49	8.31	91.18	NA
MW-3	05/04/1995	1,800	NA	140	11	11	16	NA	NA	99.49	8.70	90.79	NA
MW-3	05/16/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.49	10.30	89.19	NA
MW-3	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.49	10.52	88.97	NA
MW-3	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.49	9.18	90.31	NA
MW-3	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.49	11.00	88.49	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-4	01/29/1991	2,600	1,300	83	<0.5	<0.5	110	NA	NA	99.24	10.76	88.48	NA
MW-4	04/30/1991	2,600	750	22	4	7	17	NA	NA	99.24	9.45	89.79	NA
MW-4	07/22/1991	4,300	1,200	120	<0.5	<0.5	10	NA	NA	99.24	10.34	88.90	NA
MW-4	02/21/1992	2,000	8,300b	31	6.3	3.5	6.6	NA	NA	99.24	7.60	91.64	NA
MW-4	05/22/1992	3,600	3,400b, c	55	5	3	10	NA	NA	99.24	9.90	89.34	NA
MW-4	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	99.24	10.02	89.22	NA
MW-4	08/20/1992	3,100	3,400	100	45	14	45	NA	NA	99.24	10.32	88.92	NA
MW-4	11/18/1992	2,200	1,400	32	12	4.2	24	NA	NA	99.24	10.51	88.73	NA
MW-4	02/09/1993	1,500	180	1.1	<0.5	<0.5	<0.5	NA	NA	99.24	8.13	91.11	NA
MW-4	06/16/1993	1,100	NA	120	47	5.1	19	NA	NA	99.24	9.60	89.64	1.86/4.82k
MW-4	08/24/1993	2,700	NA	46	11	25	0.97	NA	NA	99.24	10.05	89.19	1.46/1.27k
MW-4	11/23/1993	2,500	NA	23	5.7	3.7	16	NA	NA	99.24	10.25	89.99	5.29/6.59k
MW-4	02/14/1994	1,500	NA	12	7.8	<2.5	<2.5	NA	NA	99.24	8.83	90.41	2.1/1.9k
MW-4	05/25/1994	810	NA	20	<2	<2	4	NA	NA	99.24	9.64	89.60	NA
MW-4	08/04/1994	2,300	NA	99	15	6.3	24	NA	NA	99.24	10.62	88.62	NA
MW-4	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.24	9.28	89.96	NA
MW-4	02/01/1995	960	NA	5.6	2.2	2.6	2.8	NA	NA	99.24	6.52	92.72	NA
MW-4	05/04/1995	960	NA	20	4.7	3.7	5.6	NA	NA	99.24	8.40	90.84	NA
MW-4	05/16/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.24	9.35	89.89	NA
MW-4	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.24	10.17	89.07	NA
MW-4	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.24	8.85	90.39	NA
MW-4	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.24	10.17	89.07	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-5	01/29/1991	3,100	720	86	<0.5	24	28	NA	NA	100.08	11.72	88.36	NA
MW-5	04/30/1991	<50	90	46	<0.5	9	9	NA	NA	100.08	10.45	89.63	NA
MW-5	07/22/1991	1,700	300	23	<0.5	6,700	10,000	NA	NA	100.08	11.43	88.65	NA
MW-5	02/21/1992	240	180h	1	<0.5	<0.5	1	NA	NA	100.08	9.24	90.84	NA
MW-5	05/22/1992	6,200	7,100b, c	6	95	56	99	NA	NA	100.08	10.97	89.11	NA
MW-5	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	100.08	10.98	89.10	NA
MW-5	08/20/1992	7,400	120b	56	95	91	150	NA	NA	100.08	11.14	88.94	NA
MW-5	11/18/1992	3,300	320b	27	<12.5	20	470	NA	NA	100.08	11.21	88.87	NA
MW-5	02/09/1993	160	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.08	10.01	90.07	NA
MW-5	06/16/1993	140	NA	0.8	<0.5	<0.5	<0.5	NA	NA	100.08	11.05	89.03	1.53/2.72k
MW-5	08/24/1993	1,000	NA	7.9	<1	2.2	<1.5	NA	NA	100.08	11.32	88.76	2.69/1.41k
MW-5	11/23/1993	2,000	NA	67	15	11	33	NA	NA	100.08	11.35	88.73	8.20/3.09k
MW-5	02/14/1994	660	NA	1.3	<0.5	0.5	0.7	NA	NA	100.08	10.34	89.74	2.0/1.9k
MW-5	05/25/1994	670	NA	0.65	<0.5	2.6	<0.5	NA	NA	100.08	10.54	89.54	NA
MW-5	08/04/1994	700	NA	5	<0.5	1.2	<0.5	NA	NA	100.08	11.50	88.58	NA
MW-5	11/08/1994	810	NA	4.2	<0.5	1.5	0.8	NA	NA	100.08	11.24	88.84	NA
MW-5	02/01/1995	110	NA	7	<0.5	<0.5	<0.5	NA	NA	100.08	9.05	91.03	NA
MW-5	05/04/1995	260	NA	3.1	1.3	2	1.5	NA	NA	100.08	10.35	89.73	NA
MW-5	05/16/1997	440	NA	2.4	3.1	1.6	3.3	7.1	NA	100.08	11.21	88.87	2.9
MW-5	11/03/1997	1,400	NA	34	<2.5	2.8	4.4	33	NA	100.08	11.43	88.65	3.0/1.2k
MW-5	06/05/1998	230	NA	3.6	0.5	<0.50	1.3	34	NA	100.08	10.35	89.73	3.2/1.4k
MW-5	11/06/1998	1800	NA	29	<0.50	3.8	7.1	26	NA	100.08	11.89	88.19	2.6/3.0

*b/a purge*

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-6	01/29/1991	<50	860	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	10.23	88.33	NA
MW-6	04/30/1991	<50	1,100	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	9.15	89.41	NA
MW-6	07/22/1991	<50	1,200	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	10.10	88.46	NA
MW-6	02/21/1992	<50	60d	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	7.15	91.41	NA
MW-6	05/22/1992	<50	650c	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	9.55	89.01	NA
MW-6	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	98.56	9.53	89.03	NA
MW-6	08/20/1992	140e	510c	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	9.84	88.72	NA
MW-6	11/18/1992	200e	350	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	10.03	88.53	NA
MW-6	02/09/1993	14,000e	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	7.91	90.65	NA
MW-6	06/16/1993	5,700e	NA	<0.5	22	<0.5	34	NA	NA	98.56	8.74	89.82	8.46/9.73k
MW-6	08/24/1993	4,300e	NA	<12.5	<12.5	<12.5	<12.5	NA	NA	98.56	9.66	88.90	2.15/1.52k
MW-6	11/23/1993	3,300e	NA	<12	<12	<12	<12	NA	NA	98.56	9.86	88.70	3.86/6.75k
MW-6	02/14/1994	14,000e	NA	<12.5	<12.5	<12.5	<12.5	NA	NA	98.56	8.27	90.29	2.3/5.2k
MW-6	05/25/1994	<1,000i	NA	<10	<10	<10	<10	NA	NA	98.56	8.89	89.67	NA
MW-6	08/04/1994	250j	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	10.10	88.46	NA
MW-6	11/08/1994	4,600e	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	8.98	89.58	NA
MW-6	02/01/1995	710	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	7.07	91.49	NA
MW-6	05/04/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.56	8.56	90.00	NA
MW-6	05/16/1997	<500	NA	<5.0	<5.0	<5.0	<5.0	1,700	NA	98.56	9.57	88.99	6.2
MW-6	11/03/1997	<500	NA	<5.0	<5.0	<5.0	<5.0	990	NA	98.56	9.76	88.80	1.4/1.0k
MW-6	06/05/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	590	NA	98.56	8.50	90.06	1.5/1.1k
MW-6	11/06/1998	<250	NA	<2.5	<2.5	<2.5	<2.5	810	NA	98.56	10.00	88.56	2.0/1.4

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-7	01/29/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.91	88.62	NA
MW-7	04/30/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.38	89.15	NA
MW-7	07/22/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	9.13	88.40	NA
MW-7	02/21/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	6.87	90.66	NA
MW-7	05/22/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.08	89.45	NA
MW-7	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	97.53	8.82	88.71	NA
MW-7	08/20/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.89	88.64	NA
MW-7	11/18/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	9.54	87.99	NA
MW-7	02/09/1993	72	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	7.84	89.69	NA
MW-7	06/16/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	7.80	89.73	NA
MW-7	08/24/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.51	89.02	NA
MW-7	11/23/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.70	88.83	NA
MW-7	02/14/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	7.52	90.01	NA
MW-7	05/25/1994	<50	NA	<0.5	0.63	<0.5	0.93	NA	NA	97.53	9.04	88.49	NA
MW-7	08/04/1994	NA	NA	NA	NA	NA	NA	NA	NA	97.53	9.80	87.83	NA
MW-7	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.45	89.08	NA
MW-7	02/01/1995	NA	NA	NA	NA	NA	NA	NA	NA	97.53	5.51	92.02	NA
MW-7	05/04/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.53	8.34	89.19	NA
MW-7	05/16/1997	<50	NA	<0.50	<0.50	<0.50	<0.50	2.7	NA	97.53	8.80	88.73	2.8
MW-7	11/03/1997	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	97.53	8.95	88.58	1.6/1.2k
MW-7	06/05/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	4.3	NA	97.53	7.75	89.78	1.5/1.1k
MW-7	11/06/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	4.5	NA	97.53	9.20	88.33	4.1/2.2

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-8	01/29/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	8.47	88.66	NA
MW-8	04/30/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	7.64	89.49	NA
MW-8	07/22/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	8.36	88.77	NA
MW-8	02/21/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	6.54	90.59	NA
MW-8	05/22/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	7.68	89.45	NA
MW-8	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	97.13	8.16	88.97	NA
MW-8	08/20/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	8.25	88.88	NA
MW-8	11/18/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	8.32	88.81	NA
MW-8	02/09/1993	63	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	5.58	91.55	NA
MW-8	06/16/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	7.19	89.94	NA
MW-8	08/24/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	7.98	89.15	NA
MW-8	11/23/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	8.09	89.04	NA
MW-8	02/14/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	9.42	87.71	NA
MW-8	05/25/1994	<50	NA	<0.5	1.1	<0.5	2.5	NA	NA	97.13	7.18	89.95	NA
MW-8	08/04/1994	NA	NA	NA	NA	NA	NA	NA	NA	97.13	8.51	88.62	NA
MW-8	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	6.24	90.89	NA
MW-8	02/01/1995	NA	NA	NA	NA	NA	NA	NA	NA	97.13	3.94	93.19	NA
MW-8	05/04/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	97.13	5.04	92.09	NA
MW-8	05/16/1997	NA	NA	NA	NA	NA	NA	NA	NA	97.13	7.65	89.48	NA
MW-8	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	97.13	7.03	90.10	NA
MW-8	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	97.13	6.47	90.66	NA
MW-8	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	97.13	8.27	88.86	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-9	01/29/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.27	91.45	NA
MW-9	04/30/1991	<50	<50	0.6	<0.5	<0.5	1.1	NA	NA	99.72	7.62	92.10	NA
MW-9	07/22/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.48	91.24	NA
MW-9	02/21/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	6.91	92.81	NA
MW-9	05/22/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.64	91.08	NA
MW-9	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	99.72	7.55	92.17	NA
MW-9	08/20/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	7.38	92.34	NA
MW-9	11/18/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	10.17	89.55	NA
MW-9	02/09/1993	290	110	6	<0.5	<0.5	<0.5	NA	NA	99.72	6.89	92.83	NA
MW-9	06/16/1993	90e	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.74	90.98	1.51/2.17k
MW-9	08/24/1993	50e	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.32	91.40	2.86/2.74k
MW-9	11/23/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	8.17	91.55	3.41/3.78k
MW-9	02/14/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	7.67	92.05	4.6/5.2k
MW-9	05/25/1994	56	NA	1.3	4	1.4	8.3	NA	NA	99.72	7.89	91.83	NA
MW-9	08/04/1994	NA	NA	NA	NA	NA	NA	NA	NA	99.72	9.76	89.96	NA
MW-9	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	7.75	91.97	NA
MW-9	02/01/1995	NA	NA	NA	NA	NA	NA	NA	NA	99.72	5.66	94.06	NA
MW-9	05/04/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	99.72	7.40	92.32	NA
MW-9	05/16/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.72	7.72	92.00	NA
MW-9	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	99.72	6.93	92.79	NA
MW-9	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.72	7.23	92.49	NA
MW-9	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	99.72	9.91	89.81	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
MW-10	01/29/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	10.81	88.18	NA
MW-10	04/30/1991	<50	460	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	8.79	90.20	NA
MW-10	07/22/1991	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.94	89.05	NA
MW-10	02/21/1992	<50	120	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.11	89.88	NA
MW-10	05/22/1992	<50	310	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.14	89.85	NA
MW-10	07/07/1992	NA	NA	NA	NA	NA	NA	NA	NA	98.99	9.87	89.12	NA
MW-10	08/20/1992	<50	460	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.30	89.69	NA
MW-10	11/18/1992	<50	470	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	10.21	88.78	NA
MW-10	02/09/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	7.63	91.36	NA
MW-10	06/16/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	8.57	90.42	NA
MW-10	08/24/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.61	89.38	NA
MW-10	11/23/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	10.10	88.89	NA
MW-10	02/14/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.01	89.98	NA
MW-10	05/25/1994	<50	NA	<0.5	1.1	<0.5	1.4	NA	NA	98.99	8.84	90.15	NA
MW-10	08/04/1994	NA	NA	NA	NA	NA	NA	NA	NA	98.99	9.82	89.17	NA
MW-10	11/08/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	9.40	89.59	NA
MW-10	02/01/1995	NA	NA	NA	NA	NA	NA	NA	NA	98.99	6.78	92.21	NA
MW-10	05/04/1995	NA	NA	NA	NA	NA	NA	NA	NA	98.99	7.00	91.99	NA
MW-10	05/16/1997	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	98.99	8.66	90.33	NA
MW-10	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	98.99	9.37	89.62	NA
MW-10	06/05/1998	NA	NA	NA	NA	NA	NA	NA	NA	98.99	7.27	91.72	NA
MW-10	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	98.99	9.48	89.51	NA



**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**630 High Street**  
**Oakland, CA**  
**WIC #204-5508-5801**

Well ID	Date	TPHg (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC Elev. (ft)	Depth to Water (ft)	GW Elevation (ft)	DO Reading (ppm)
---------	------	----------------	-----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------------	---------------------------	-------------------------	------------------------

**Abbreviations:**

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015  
 TPH-D = Total petroleum hydrocarbons as diesel by Modified EPA Method 8015  
 TPH-MO = Total petroleum hydrocarbons as motor oil by EPA Method 8015  
 BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020  
 NA = Not applicable.

MTBE = Methyl tert-butyl ether  
 VOCs = Volatile organic compounds by EPA Method 8240  
 DO = Dissolved Oxygen; pre-purge/post-purge  
 <n = Below detection limits of n ug/L  
 ND = Not detected at the reporting limit for the analysis as performed.

- a =Compounds detected and calculated as TPH-D do not match the diesel standard; pattern is characteristic of weathered diesel.
- b =Concentration reported as TPH-D is primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene
- c =Concentration reported as TPH-D is primarily due to a heavier petroleum product, possibly motor oil or aged diesel fuel
- d =Compounds detected within the TPH-D range are not characteristic of the standard diesel chromatographic pattern
- e =Concentration reported as TPH-G is primarily due to the presence of a discrete hydrocarbon peak not indicative of gasoline
- f =26 ug/L benzene detected using EPA Method 8240
- g =The concentration reported as TPH-G is due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline
- h =Compounds detected and calculated as TPH-D appear to be the less volatile constituents of gasoline
- i =Sample diluted due to high-non hydrocarbon peak.
- j =The positive result has an atypical pattern for gasoline analysis
- k =Field measurement of DO concentrations before and after well purging



# Sequoia Analytical

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

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

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

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

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112  
Attention: Fran Thie

Project: Shell 630 High St.

Enclosed are the results from samples received at Sequoia Analytical on November 9, 1998.  
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9811543 -01	LIQUID, MW-1	11/06/98	Purgeable TPH/BTEX/MTBE
9811543 -02	LIQUID, MW-5	11/06/98	Purgeable TPH/BTEX/MTBE
9811543 -03	LIQUID, MW-6	11/06/98	Purgeable TPH/BTEX/MTBE
9811543 -04	LIQUID, MW-7	11/06/98	Purgeable TPH/BTEX/MTBE

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

**SEQUOIA ANALYTICAL**

  
Peggy Penner  
Project Manager





**Sequoia  
Analytical**

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

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

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

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

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Client Proj. ID: Shell 630 High St.  
Sample Descript: MW-1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9811543-01

Sampled: 11/06/98  
Received: 11/09/98  
Analyzed: 11/14/98  
Reported: 11/21/98

Attention: Fran Thie

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	6200
Methyl t-Butyl Ether	12	200
Benzene	2.5	87
Toluene	2.5	N.D.
Ethyl Benzene	2.5	48
Xylenes (Total)	2.5	55
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	104

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager

Page:

1





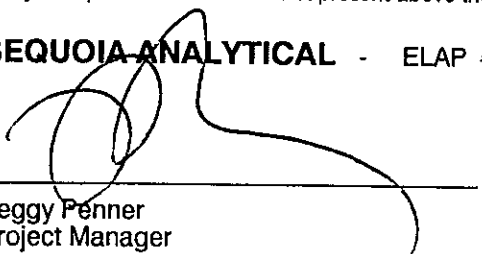
Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Shell 630 High St. Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811543-02	Sampled: 11/06/98 Received: 11/09/98  Analyzed: 11/14/98 Reported: 11/21/98
Attention: Fran Thie		

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	1800
Methyl t-Butyl Ether	2.5	26
Benzene	0.50	29
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.8
Xylenes (Total)	0.50	7.1
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	86

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

**SEQUOIA ANALYTICAL** - ELAP #1210



Peggy Penner  
Project Manager





**Sequoia  
Analytical**

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

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

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

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

Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112

Client Proj. ID: Shell 630 High St.  
Sample Descript: MW-6  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9811543-03

Sampled: 11/06/98  
Received: 11/09/98  
Analyzed: 11/14/98  
Reported: 11/21/98

Attention: Fran Thie

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	N.D.
<b>Methyl t-Butyl Ether</b>	<b>12</b>	<b>810</b>
Benzene	2.5	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	105

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

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Peggy Penner  
Project Manager





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Shell 630 High St. Sample Descript: MW-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811543-04	Sampled: 11/06/98 Received: 11/09/98  Analyzed: 11/14/98 Reported: 11/21/98
Attention: Fran Thie		

**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
<b>Methyl t-Butyl Ether</b>	<b>2.5</b>	<b>4.5</b>
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	106

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

**SEQUOIA ANALYTICAL** - ELAP #1210

  
Peggy Penner  
Project Manager





Blaine Tech Services, Inc.  
1680 Rogers Ave.  
San Jose, CA 95112  
Attention: Fran Thie

Client Project ID: Shell 630 High St.  
Matrix: Liquid

Work Order #: 9811543 -01-04

Reported: Dec 3, 1998

**QUALITY CONTROL DATA REPORT**

<b>Analyte:</b>	Gasoline
<b>QC Batch#:</b>	8110236
<b>Analy. Method:</b>	EPA 8015M/8020M
<b>Prep. Method:</b>	EPA 5030

**Analyst:** -  
**MS/MSD #:** P811136-01  
**Sample Conc.:** N.D.  
**Prepared Date:** 11/14/98  
**Analyzed Date:** 11/14/98  
**Instrument I.D.#:** -  
**Conc. Spiked:** 1000 µg/L

**Result:** 1580  
**MS % Recovery:** 96.4

**Dup. Result:** 1560  
**MSD % Recov.:** 94.4

**RPD:** 1.27  
**RPD Limit:** 0-12

**LCS #:** LCS111498  
**Prepared Date:** 11/14/98  
**Analyzed Date:** 11/14/98  
**Instrument I.D.#:** -  
**Conc. Spiked:** 1000 µg/L

**LCS Result:** 1010  
**LCS % Recov.:** 101

<b>MS/MSD</b>	53-146
<b>LCS</b>	79-127
<b>Control Limits</b>	

**SEQUOIA ANALYTICAL**  
Eisp #2245

Reggy Benner  
Project Manager

**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

9811543.BLA <1>





Sequoia  
Analytical

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

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

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

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

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Shell 630 High St.  Lab Proj. ID: 9811543	Received: 11/09/98  Reported: 11/21/98
--	--	--

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

**SEQUOIA ANALYTICAL**

Peggy Penner  
Project Manager







**SHELL OIL COMPANY**  
RETAIL ENVIRONMENTAL ENGINEERING - WEST

**CHAIN OF CUSTODY RECORD**  
Serial No: 981106-L1

Date: 11-6-98  
Page 1 of 7

Site Address: 630 High St., Oakland, CA

WIC#: 204-5508-5801

Shell Engineer: Alex Perez Phone No.: (510) 675-6168  
Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc.  
985 Timothy Dr., San Jose, CA 95133

Consultant Contact: Fran Thie Phone No.: (408) 995-5535  
Fax #: 293-8773

Comments:

Sampled by: [Signature]

Printed Name: LAD GILCHRIST

**Analysis Required**

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 <u>MIX</u>	Asbestos	Container Size	Preparation Used	Composite Y/N
-------------------------	----------------------------	---------------------	------------------------------	-------------------	---	----------	----------------	------------------	---------------

LAB: SEQUOIA

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input checked="" type="checkbox"/> 4461		24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/> 4441		48 hours <input type="checkbox"/>
Soil Classfy/Disposal <input type="checkbox"/> 4442		15 days <input checked="" type="checkbox"/> (Normal)
Water Classfy/Disposal <input type="checkbox"/> 4443		Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/> 4452		
Water Rem. or Sys. O & M <input type="checkbox"/> 4453		
Other <input type="checkbox"/>		

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

UST AGENCY: 9811543

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/g COMMENTS	
MW-1	11/6			X		3						X							
MW-5	02			X		3						X							
MW-6	6			X		3						X							
MW-7	a			X		3						X							
EB				X		3						X							CANCEL
DUP				X		3						X							CANCEL

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>LAD GILCHRIST</u>	Date: <u>11/4/98</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>LAUC3 A. DAVIDSON</u>	Date: <u>11-9-98</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>LAUC3 A. DAVIDSON</u>	Date: <u>11-30</u>	Received (signature): <u>[Signature]</u>	Printed Name:	Date: <u>11-30</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name:	Date:	Received (signature): <u>[Signature]</u>	Printed Name:	Date:

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