

February 24, 1999

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

Re: **Fourth Quarter 1998 Monitoring Report**  
Shell-branded Service Station  
1285 Bancroft Avenue  
San Leandro, California  
Incident# 98996067  
Cambria Project #24-314-498

99 MAR 10 PM 9:13  
CALIFORNIA  
DEPARTMENT OF  
PACIFIC COAST  
PROTECTION



Dear Ms. Shin:

On behalf of Equilon Enterprises 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 the site wells. Cambria calculated ground water elevations (Table 1), compiled the analytical data (Tables 2A and 2B), and prepared a ground water elevation contour map (Figure 1). The Blaine report is included as Attachment A.

**Oxygen-Releasing Compound (ORC) Monitoring Update:** Installation of ORCs in wells MW-2 and MW-3 was approved by the Alameda County Health Care Services Agency (ACHCSA) in a September 11, 1997 letter to Shell Oil Products Company. As a result, ORCs were installed in both wells on October 24, 1997. In a phone conversation with Cambria on December 10, 1998, you requested removal of ORCs from both wells since you felt that they were masking the true petroleum hydrocarbon concentrations in the aquifer. On January 22, 1999, the ORCs were removed from MW-2 and MW-3.

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 FIRST QUARTER 1999 ACTIVITIES**

**Ground Water Monitoring:** Blaine will gauge, measure DO concentrations, and sample the site wells and tabulate the data. Cambria will prepare a monitoring report.

**Ground Water Sample Analysis:** Additional ground water analysis and sample frequency was requested in an ACHCSA letter to Equilon dated December 30, 1998. The following chemical analysis and frequency will be implemented in the first quarter of 1999:

- 
- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015/8020, all wells quarterly;
  - Benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8015/8020, all wells quarterly;
  - Methyl tert-butyl ether (MTBE) by EPA Method 8015/8020 and confirmed with EPA Method 8260, all wells one time event. Subsequent sampling events by EPA Method 8015/8020 with the highest MTBE concentration confirmed by EPA Method 8260;
  - Tertiary butyl ether (TBA), tertiary amyl methyl ether (TAME), diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE) by EPA Method 8260, all wells one time only in first quarter, 1999;
  - ethylene dibromide (EDB) and ethylene dichloride (EDC) by EPA Method 8010, all wells one time only in first quarter 1999.

In the December 30, 1998 ACHCSA letter, analysis of tetrachloroethylene (PCE) was requested for all wells on a semi-annual basis. We don't believe this analysis is warranted at this time as PCE in ground water does not appear to be a result of PCE in soil beneath the subject site. The highest concentration of PCE in unsaturated zone soil samples was 0.002 milligrams per kilogram (mg/kg) from boring BH-A (MW-1) in 1990 at 9.2 ft bgs. This concentration of PCE was equal to the detection limit of 0.002 mg/kg. For the same soil sampling event, PCE was not detected in soil samples from BH-A at depths of 19.7, 29.7 and 39.7 ft bgs, however low levels of PCE were detected in the capillary fringe soil samples from BH-A. The historical concentrations of PCE in ground water samples from MW-1 (BH-A) are greater than concentrations detected in the capillary fringe soil samples from the same borehole indicating the source of PCE in soil beneath the site is more likely a result of PCE in ground water in the vicinity.

**ACHCSA Letter Response:** Cambria's *Letter Response and Work Plan* dated February 24, 1999 was submitted in response to the ACHCSA letter to Equiva Services LLC dated December 30, 1998.

**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



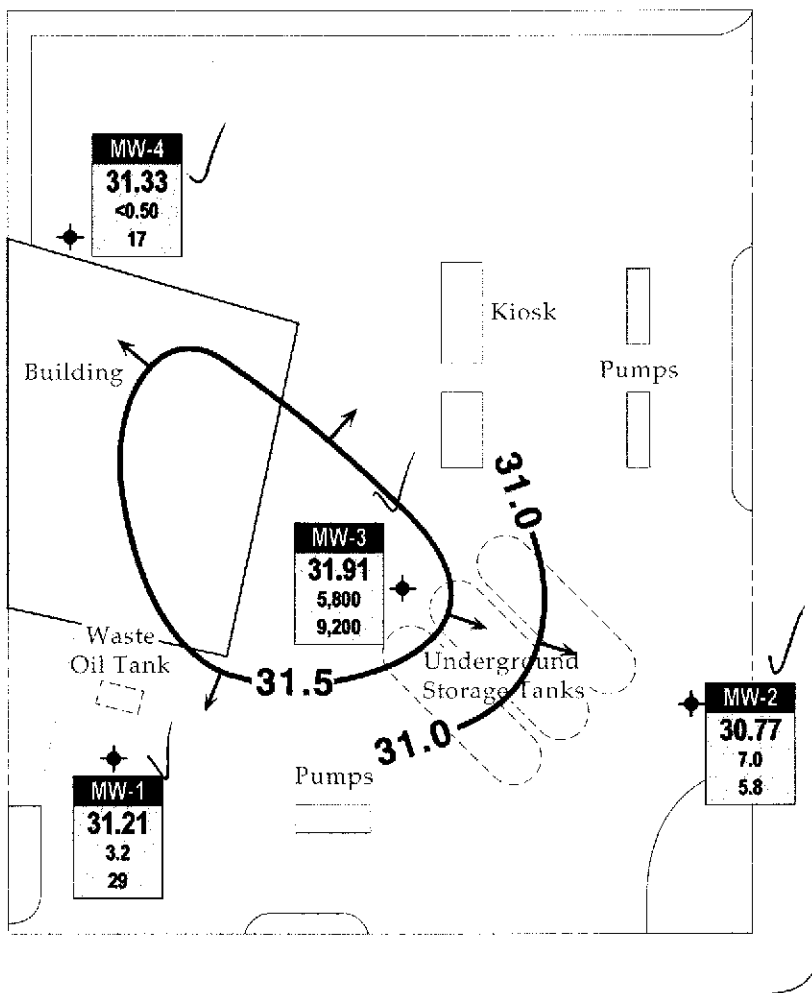
Diane M. Lundquist, P.E.  
Principal Engineer



Attachment : A - Blaine Ground Water Monitoring Report

cc: Karen Petryna, Equiva Services LLC, P.O. Box 6249 Carson, California 90749-6249  
Mike Bakaldin, City of San Leandro, 835 East 14<sup>th</sup> Street, San Leandro, CA 94577

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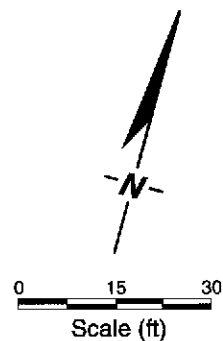
ESTUDILLO AVENUE

BANCROFT AVENUE

**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	Well designation
ELEV	Ground water elevation (msl)
Benzene MTBE	Benzene and MTBE concentrations are measured in parts per billion (ppb)



**FIGURE 1**

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**Shell-branded Service Station**  
 1285 Bancroft Avenue  
 San Leandro, California  
 Incident #98996067



C A M B R I A

**Ground Water Elevation Contour Map**

October 13, 1998

**Table 1. Ground Water Elevation Data – Shell-branded Service Station  
WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC)	Ground Water Elevation (ft above msl)	
MW-1	03/13/90	66.29	42.65	23.64	
	06/12/90		43.14	23.15	
	09/13/90		44.71	21.58	
	12/18/90		45.23	21.06	
	03/07/91		43.32	22.97	
	06/07/91		42.18	24.11	
	09/17/91		44.85	21.44	
	03/01/92		41.56	24.73	
	06/03/92		40.74	25.55	
	09/01/92		43.05	23.24	
	12/07/92		44.19	22.10	
	03/01/93		34.96	31.33	
	06/22/93		36.75	29.54	
	09/09/93		39.36	26.93	
	12/13/93		40.74	25.55	
	03/03/94		38.40	27.89	
	07/27/94		66.90 <sup>a</sup>	40.49	26.41
	08/09/94			40.84	26.06
	10/05/94			41.98	24.92
	11/11/94			41.34	25.56
	12/29/94	42.06		24.84	
	01/04/95	39.90		27.00	
	04/14/95	31.02		35.88	
	07/12/95	34.61		32.29	
	12/14/95	39.24		27.66	
	01/10/96	38.34		28.56	
	04/25/96	31.95	34.95		
	07/09/96	34.45	32.45		
	10/02/96	37.72	29.18		
	01/09/97	32.25	34.65		
	04/09/97	32.90	34.00		
07/02/97	36.65	30.25			
10/24/97	39.75	27.15			
01/08/98	36.31	30.59			
04/14/98	26.37	40.53			
07/15/98	31.23	35.67			
10/13/98		35.69	31.21		
MW-2	03/01/92	66.91	41.57	25.34	
	06/03/92		40.56	26.35	
	09/01/92		42.94	23.97	
	12/07/92		44.13	22.78	
	03/01/93		34.82	32.09	
	06/22/93		36.64	30.27	
	09/09/93		39.24	27.67	
	12/13/93		40.64	26.27	

**Table 1. Ground Water Elevation Data – Shell-branded Service Station**  
**WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC)	Ground Water Elevation (ft above msl)
	03/03/94		38.98	27.93
	07/27/94	66.91 <sup>a</sup>	40.40	26.51
	08/09/94		40.71	26.20
	10/05/94		41.89	25.02
	11/11/94		41.22	25.69
	12/29/94		41.99	24.92
	01/04/95		39.81	27.10
	04/14/95		30.83	36.08
	07/12/95		34.50	32.41
	12/14/95		39.22	27.69
	01/10/96		38.22	28.69
	04/25/96		31.78	35.13
	07/09/96		34.35	32.56
	10/02/96		37.56	29.35
	01/09/97		32.07	34.84
	04/09/97		32.78	34.13
	07/02/97		36.56	30.35
	10/24/97		39.74	27.17
	01/08/98		36.13	30.78
	04/14/98		26.15	40.76
	07/15/98		31.14	35.77
	<b>10/13/98</b>		<b>36.14</b>	<b>30.77</b>
MW-3	03/01/92	66.31	42.00	24.31
	06/03/92		44.30	22.01
	09/01/92		43.62	22.69
	12/07/92		44.77	21.54
	03/01/93		35.50	30.81
	06/22/93		37.30	29.01
	09/09/93		39.90	26.41
	12/13/93		41.30	25.01
	03/03/94		38.32	27.99
	07/27/94	67.52 <sup>a</sup>	41.07	26.45
	08/09/94		41.37	26.15
	10/05/94		42.55	24.97
	11/11/94		41.86	25.66
	12/29/94		42.59	24.93
	01/04/95		40.54	26.98
	04/14/95		31.50	36.02
	07/12/95		35.14	32.38
	12/14/95		39.86	27.66
	01/10/96		39.98	27.54
	04/25/96		32.38	35.14
	07/09/96		34.93	32.59
	10/02/96		38.20	29.32
	01/09/97		32.81	34.71

**Table 1. Ground Water Elevation Data – Shell-branded Service Station  
WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC)	Ground Water Elevation (ft above msl)
	04/09/97		33.42	34.10
	07/02/97		37.22	30.30
	10/24/97		40.75	26.77
	01/08/98		36.90	30.62
	04/14/98		26.92	40.60
	07/15/98		31.74	35.78
	<b>10/13/98</b>		<b>35.61</b>	<b>31.91</b>
MW-4	07/27/94	68.08	41.78	26.30
	08/09/94		42.09	25.99
	10/05/94		43.25	24.83
	11/11/94		42.54	25.54
	12/29/94		43.34	24.74
	01/04/95		41.57	26.51
	04/14/95		32.24	35.84
	07/12/95		35.88	32.20
	12/14/95		40.54	27.54
	01/10/96		39.59	28.49
	04/25/96		33.22	34.86
	07/09/96		35.70	32.38
	10/02/96		38.95	29.13
	01/09/97		33.04	35.04
	04/09/97		34.15	33.93
	07/02/97		37.92	30.16
	10/24/97		41.00	27.08
	01/08/98		37.54	30.54
	04/14/98		27.75	40.33
	07/15/98		32.47	35.61
	<b>10/13/98</b>		<b>36.75</b>	<b>31.33</b>

**Abbreviations and Notes:**

ft = Feet  
msl = Mean sea level  
TOC = Top of casing  
a = TOC elevation resurveyed March 29, 1994

**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California**

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	MTBE	DO (mg/L)
MW-1	09/17/91	44.85	50 <sup>a</sup>	160 <sup>b</sup>	<0.5	<0.5	<0.5	<0.5	---	---
	03/01/92	41.56	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	06/03/92	40.74	<50	---	0.8	<0.5	0.9	<0.5	---	---
	09/01/92	43.05	<50	---	<0.5	5.8	5.3	7.2	---	---
	12/07/92	44.19	68	---	<0.5	0.8	<0.5	1.2	---	---
	03/01/93	34.96	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	03/01/93 <sup>dup</sup>	34.96	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/22/93	36.75	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	09/09/93	39.36	200 <sup>c</sup>	---	16	5.2	2.0	<0.5	---	---
	12/13/93	40.74	89 <sup>d</sup>	---	3.4	<0.5	<0.5	<0.5	---	---
	03/03/94	38.40	65 <sup>d</sup>	---	2.6	<0.5	<0.5	<0.5	---	---
	07/27/94	40.49	180	---	30	1.8	2.6	5.0	---	---
	07/27/94 <sup>dup</sup>	40.49	240	---	25	2.2	2.2	4.0	---	---
	10/05/94	41.98	<50	---	<0.3	<0.3	<0.3	<0.6	---	---
	01/04/95	39.90	<50	---	2.4	<0.5	<0.5	<0.5	---	---
	01/04/95 <sup>dup</sup>	39.90	<50	---	2.5	<0.5	<0.5	<0.5	---	---
	04/14/95	35.88	<50	---	<0.5	0.5	<0.5	<0.5	---	---
	04/14/95 <sup>dup</sup>	35.88	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/12/95	34.61	<50	---	1.2	0.8	<0.5	<0.5	---	---
	12/14/95	39.24	380	---	230	9.0	1.1	49	---	---
	01/10/96	38.34	60	---	3.5	<0.5	<0.5	0.5	---	---
	04/25/96	31.95	<50	---	3.3	2.4	1.2	5.4	---	---
	07/09/96	34.45	810	---	29	7.3	<5.0	11	1,800	---
	10/02/96	37.72	<125	---	3.1	<1.2	<1.2	<1.2	960	---
	01/09/97	32.25	<250	---	<2.5	<2.5	<2.5	<2.5	510	---
	04/09/97	32.90	<50	---	<0.5	<0.5	<0.5	<0.5	130	---
	07/02/97	36.65	<250	---	60	7.6	4.2	18	1,300	---
	10/24/97	39.75	<500	---	140	<5.0	12	40	2,600	4.5
	01/08/98	36.31	<50	---	<0.50	<0.50	<0.50	<0.50	170	4.0
	04/14/98 <sup>e</sup>	26.37	72	---	0.82	4.9	1.8	13	2.7	2.2
	07/15/98	31.23	<50	---	2.5	1.5	<0.50	<0.50	12	2.4
	10/13/98	35.69	<50	---	3.2	0.69	<0.50	1.1	29	1.3



**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	(Concentrations in µg/L)				MTBE	DO (mg/L)
						T	E	X			
MW-2	03/01/92	41.57	910	<50	11	5.2	50	140	---	---	
	06/03/92	40.56	1,400	---	33	16	150	240	---	---	
	09/01/92	42.94	230	---	5.2	4.1	15	19	---	---	
	09/01/92 <sup>dup</sup>	42.94	320	---	5.6	5	18	220	---	---	
	12/07/92	44.13	240	---	1.5	1.3	9.5	9.9	---	---	
	12/07/92 <sup>dup</sup>	44.13	<50	---	1.7	1	13	12	---	---	
	03/01/93	34.82	230	---	260	310	27	66	---	---	
	06/22/93	36.64	220	---	18	3.4	3.6	5.2	---	---	
	06/22/93 <sup>dup</sup>	36.64	320	---	29	4.8	4.2	6.1	---	---	
	09/09/93	39.24	260	---	18	4.6	16	12	---	---	
	09/09/93 <sup>dup</sup>	39.24	210	---	16	3.9	14	9.1	---	---	
	12/13/93	40.64	1,300 <sup>c</sup>	---	82	34	73	15	---	---	
	12/13/93 <sup>dup</sup>	40.64	1,400 <sup>c</sup>	---	110	45	72	19	---	---	
	03/03/94	38.98	9,600	---	1,200	600	390	710	---	---	
	03/03/94 <sup>dup</sup>	38.98	10,000	---	930	500	330	590	---	---	
	07/27/94	40.40	190	---	<0.5	1.0	<0.5	<0.5	---	---	
	08/09/94	40.71	1,500	---	53.5	12.4	46.2	44.0	---	---	
	10/05/94	41.89	<485	---	<0.3	<0.3	<0.3	<0.6	---	---	
	01/04/95	39.81	1,300	---	150	35	23	51	---	---	
	04/14/95	30.83	5,000	---	1,000	340	400	810	---	---	
	07/12/95	34.50	4,500	---	440	170	170	290	---	---	
	07/12/95 <sup>dup</sup>	34.50	4,300	---	430	160	160	280	---	---	
	12/14/95	39.22	37,000	---	1,800	7,600	1,000	6,700	---	---	
	12/14/95 <sup>dup</sup>	39.22	34,000	---	1,800	6,600	1,000	6,500	---	---	
	01/10/96	38.22	69,000	---	1,000	3,200	510	3,300	---	---	
	01/10/96 <sup>dup</sup>	38.22	78,000	---	1,100	3,500	560	3,600	---	---	
	04/25/96	31.78	11,000	---	820	880	210	1,400	---	---	
	04/25/96 <sup>dup</sup>	31.78	9,300	---	690	710	160	1,200	---	---	
	07/09/96	34.35	100,000	---	15,000	24,000	1,700	9,900	70,000	---	
	07/09/96 <sup>dup</sup>	34.35	86,000	---	12,000	19,000	1,400	7,500	32,000	---	
	10/02/96	37.56	82,000	---	20,000	32,000	1,800	9,100	40,000	---	
	10/02/96 <sup>dup</sup>	37.56	89,000	---	19,000	31,000	1,700	8,900	42,000	---	

**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	MTBE	DO (mg/L)
	01/09/97	32.07	17,000	---	710	2,300	350	2,200	4,000	---
	01/09/97 <sup>dup</sup>	32.07	12,000	---	490	1,300	260	1,800	2,800	---
	04/09/97	32.78	20,000	---	970	3,500	330	2,000	3,200	---
	07/02/97	36.56	28,000	---	1,700	8,700	550	3,000	5,500	---
	07/02/97 <sup>dup</sup>	36.56	32,000	---	2,000	11,000	680	3,800	6,400	---
	10/24/97	39.74	14,000	---	460	1,000	300	2,000	3,000	3.2
	10/24/97 <sup>dup</sup>	39.74	14,000	---	420	980	270	2,000	2,800	3.2
	01/08/98	36.13	180	---	2.8	1.6	<0.50	<0.50	7.6	3.6
	04/14/98 <sup>c</sup>	26.15	12,000	---	92	1,500	260	1,900	110	4.6
	07/15/98	31.14	36,000	---	250	5,600	830	6,000	6,800	4.8
	07/15/98 <sup>dup</sup>	31.14	35,000	---	230	5,600	860	600	570	4.8
	<b>10/13/98</b>	<b>36.14</b>	<b>100</b>	<b>---</b>	<b>7.0</b>	<b>12</b>	<b>3.7</b>	<b>10</b>	<b>5.8</b>	<b>0.8</b>
MW-3	03/01/92	42.00	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	06/03/92	44.30	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	09/01/92	43.62	<50	---	<0.5	<0.5	1.1	3.2	---	---
	12/07/92	44.77	52	---	<0.5	<0.5	<0.5	0.5	---	---
	03/01/93	35.50	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/22/93	37.30	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	09/09/93	39.90	50 <sup>c</sup>	---	5.0	<0.5	<0.5	<0.5	---	---
	12/13/93	41.30	120 <sup>d</sup>	---	7.5	<0.5	1.6	6.3	---	---
	03/03/94	38.32	<50	---	0.81	<0.5	<0.5	<0.5	---	---
	07/27/94	41.07	<50	---	3.5	<0.5	<0.5	<0.5	---	---
	10/05/94	42.55	<57	---	<0.3	<0.3	<0.3	<0.6	---	---
	01/04/95	40.54	<50	---	6.0	<0.5	<0.5	<0.5	---	---
	04/14/95	31.50	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/12/95	35.14	90	---	16	<0.5	<0.5	<0.5	---	---
	12/14/95	39.86	4,600	---	460	390	34	1,000	---	---
	01/10/96	39.98	11,000	---	470	460	68	670	---	---
	04/25/96	32.38	5,500	---	830	910	<50	460	---	---
	07/09/96	34.93	72,000	---	7,600	14,000	970	5,900	59,000	---
	10/02/96	38.20	77,000	---	15,000	24,000	2,000	9,600	94,000 (71,000)	---

**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	MTBE	DO (mg/L)
	01/09/97	32.81	130	---	15	16	2.0	9.7	80	---
	04/09/97	33.42	24,000	---	2,900	5,300	420	2,200	4,100	---
	04/09/97 <sup>dup</sup>	33.42	24,000	---	3,000	5,600	450	2,300	4,700	---
	07/02/97	37.22	68,000	---	7,400	18,000	1,600	8,700	16,000	---
	10/24/97	40.75	93,000	---	1,800	8,500	2,300	14,000	3,100	1.8
	01/08/98	36.90	16,000	---	140	870	22	5,000	120	2.1
	01/08/98 <sup>dup</sup>	36.90	24,000	---	100	840	26	5,600	<100	2.1
	04/14/98 <sup>c</sup>	26.92	100,000	---	270	5,000	2,100	17,000	890	1.8
	04/14/98 <sup>dup, e</sup>	26.92	49,000	---	230	3,200	1,200	8,900	790	1.8
	07/15/98	31.74	31,000	---	1,100	3,300	300	2,800	3,700	2.0
	<b>10/13/98</b>	<b>35.61</b>	<b>51,000</b>	<b>---</b>	<b>3,100</b>	<b>12,000</b>	<b>7,630</b>	<b>6,800</b>	<b>6,200</b>	<b>2.1</b>
	<b>10/13/98<sup>dup</sup></b>	<b>35.61</b>	<b>88,000</b>	<b>---</b>	<b>5,800</b>	<b>21,000</b>	<b>1,400</b>	<b>12,000</b>	<b>9,200</b>	<b>2.1</b>
MW-4	07/27/94	41.78	120	---	3.4	3.9	0.6	4.9	---	---
	10/05/94	43.25	<50	---	<0.3	<0.3	<0.3	<0.6	---	---
	10/05/94 <sup>dup</sup>	43.25	<50	---	<0.3	<0.3	<0.3	<0.6	---	---
	01/04/95	41.57	<50	---	1.4	<0.5	<0.5	<0.5	---	---
	04/14/95	32.24	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/12/95	35.88	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	12/14/95	40.54	70	---	0.6	<0.5	<0.5	<0.5	---	---
	01/10/96	39.59	280	---	3.7	1.0	<0.5	0.8	---	---
	04/25/96	33.22	<500	---	63	<5.0	<5.0	<5.0	---	---
	07/09/96	35.70	<2000	---	160	<20	<20	<20	5,300	---
	10/02/96	38.95	<5,000	---	480	<50	<50	<50	19,000	---
	01/09/97	33.04	<2,000	---	43	<20	<20	<20	7,000	---
	04/09/97	34.15	<2,500	---	120	<25	<25	<25	8,100	---
	07/02/97	37.92	<2,000	---	81	<20	<20	<20	6,600	---
	10/24/97	41.00	<500	---	90	<5.0	11	6.3	3,200	2.1
	01/08/98	37.54	<50	---	3.9	<0.50	<0.50	<0.50	1,800	2.2
	04/14/98 <sup>e</sup>	27.75	920	---	<0.50	<0.50	<0.50	<0.50	27	1.2
	07/15/98	32.47	2,100	---	160	76	120	190	2,600	1.8
	<b>10/13/98</b>	<b>36.75</b>	<b>&lt;50</b>	<b>---</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>17</b>	<b>1.1</b>

**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	MTBE	DO (mg/L)
Bailer	09/01/92		<50	---	<0.5	<0.5	<0.5	1	---	---
Blank	12/07/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	01/04/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/12/95		<50	---	0.6	0.7	<0.5	<0.5	---	---
	12/14/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
Trip	09/17/91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
Blank	03/01/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/03/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	09/01/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	12/07/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	03/01/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/22/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	09/09/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	12/13/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	03/03/94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/27/94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	08/09/94		<500	---	<0.3	<0.3	<0.3	<0.6	---	---
	10/05/94		<50	---	<0.3	<0.3	<0.3	<0.6	---	---
	01/04/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	04/14/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	07/12/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	12/14/95		<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MCLs			NE	NE	1	150	700	1,750	NE	

**Table 2A. Analytical Results for Ground Water - Fuel Compounds – Shell-branded Service Station WIC# 204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

**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  
B = Benzene by EPA Method 8020  
T = Toluene by EPA Method 8020  
E = Ethylbenzene by EPA Method 8020  
X = Xylenes by EPA Method 8020  
MTBE = Methyl tert-butyl ether by EPA Method 8020. Result in parentheses indicates MTBE by EPA Method 8260  
DO = Dissolved oxygen  
 $\mu\text{g/L}$  = Micrograms per liter  
 $\text{mg/L}$  = Milligrams per liter  
dup = Duplicate sample  
MCLs = California primary maximum contaminant levels for drinking water (22 CCR 64444)  
NE = MCLs not established

**Notes:**

a = Result due to a non-gasoline hydrocarbon compound  
b = Result due to a non-diesel hydrocarbon compound  
c = The concentrations reported as TPH-G are primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline  
d = The concentrations reported as TPH-G are primarily due to the presence of a discrete peak not indicative of gasoline  
e = Equipment blank contained 80  $\mu\text{g/L}$  TPH-G, 1.2  $\mu\text{g/L}$  benzene, 17  $\mu\text{g/L}$  toluene, 3.2  $\mu\text{g/L}$  ethylbenzene, 16  $\mu\text{g/L}$  xylenes, and 15  $\mu\text{g/L}$  MTBE  
--- = Not analyzed/Not available  
<n = Below detection limits of n  $\mu\text{g/L}$

**Table 2B. Analytical Results for Ground Water - Non-Fuel Compounds -- Shell-branded Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California**

Well ID	Date Sampled	Depth to Water (ft)	TCE	TOG	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE
			←----- (Concentrations in µg/L) -----→					
MW-1	03/08/90	42.65	---	<10,000	35	6.3	---	---
	06/12/90	43.14	---	<10,000	1.9	63	---	---
	09/13/90	44.71	---	<10,000	26	9	---	---
	12/18/90	45.23	---	<10,000	<0.4	5.3	---	---
	03/07/91	43.32	---	---	23	3.7	---	---
	06/07/91	42.18	---	---	21	6.6	---	---
	09/17/91	44.85	---	---	23	7.4	---	---
	03/01/92	41.56	<0.4	---	21	6.3	---	<0.4
	06/03/92	40.74	17	---	<0.5	6.7	<0.5	<0.5
	09/01/92	43.05	12	---	<0.5	5.8	<0.5	<0.5
	12/07/92	44.19	<0.5	---	17	9	<0.5	<0.5
	03/01/93	34.96	<0.5	---	22	13	<0.5	<0.5
	03/01/93 <sup>dup</sup>	34.96	<0.5	---	22	13	<0.5	<0.5
	06/23/93	36.75	<0.5	---	18	8	<0.5	<0.5
	09/09/93	39.36	<0.5	---	17	6.5	<0.5	<0.5
	12/13/93	40.74	---	---	---	---	---	---
04/14/95	31.02	---	---	---	---	---	---	
MW-2	03/01/92	41.57	<0.4	---	11	8.9	---	<0.4
	06/03/92	40.56	7.4	---	<0.5	<0.5	0.76	6.3
	09/01/92	42.94	8.4	---	<0.5	9.1	<0.5	<0.5
	09/01/92 <sup>dup</sup>	42.94	8.4	---	<0.5	8.1	<0.5	<0.5
	12/07/92	44.13	<0.5	---	10	10	<0.5	<0.5
	12/07/92 <sup>dup</sup>	44.13	<0.5	---	10	9	<0.5	<0.5
	03/01/93	34.82	<0.5	---	<0.5	<0.5	<0.5	<0.5
	06/22/93	36.64	<0.5	---	13	7.9	<0.5	<0.5
	06/22/93 <sup>dup</sup>	36.64	<0.5	---	12	6.9	<0.5	<0.5
	09/09/93	39.24	<0.5	---	11	5.9	1.9	<0.5
	09/09/93	39.24	<0.5	---	12	7.3	1.1	<0.5
	12/13/93	40.64	---	---	---	---	---	---
	07/27/94	40.40	<0.4	---	<0.4	7.5	---	<0.4
08/09/94	40.71	<0.1	---	10.1	5.8	<0.1	<0.3	

# CAMBRIA

**Table 2B. Analytical Results for Ground Water – Non-Fuel Compounds – Shell-branded Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

Well ID	Date Sampled	Depth to Water (ft)	TCE	TOG	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE
			←————— (Concentrations in µg/L) —————→					
	10/05/94 <sup>a</sup>	41.89	<5	---	9	5	<5	<5
	01/04/95	39.81	<0.4	---	12	3.8	---	<0.4
	04/14/95	30.83	<0.4	---	8.4	2.3	<0.4	---
MW-3	03/01/92	42.00	<0.4	---	8.8	2.4	---	<0.4
	06/03/92	44.30	3	---	<0.5	1.5	<0.5	<0.5
	09/01/92	43.62	8.8	---	<0.5	2.3	<0.5	<0.5
	12/07/92	44.77	<0.5	---	10	3	<0.5	<0.5
	03/01/93	35.50	<0.5	---	9.2	9.4	<0.5	<0.5
	06/22/93	37.30	<0.5	---	7.8	9.6	<0.5	<0.5
	09/09/93	39.90	<0.5	---	7.9	7.3	<0.5	<0.5
	12/13/93	41.30	---	---	---	---	---	---
Bailer	09/01/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
Blank	12/07/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
Trip	09/01/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
Blank	12/07/92 <sup>b</sup>		<0.5	---	<0.5	<0.5	<0.5	<0.5
	03/01/93		<0.5	---	<0.5	<0.5	<0.5	<0.5
	06/22/93 <sup>c</sup>		<0.5	---	<0.5	<0.5	<0.5	<0.5
MCLs			5.0	NE	5.0	100	6.0	10.0

**Table 2B. Analytical Results for Ground Water – Non-Fuel Compounds – Shell-branded Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)**

**Abbreviations:**

TCE = Trichloroethene by EPA Method 601  
 TOG = Total non-polar oil and grease by American Public Health Association Standard Method 503A&E  
 PCE = Tetrachloroethene by EPA Method 601  
 cis-1,2-DCE = cis-1,2-Dichloroethene by EPA Method 601  
 trans-1,2-DCE = trans-1,2-Dichloroethene by EPA Method 601  
 --- = Not analyzed  
 dup = Duplicate sample  
 MCLs = California primary maximum contaminant levels for drinking water (22 CCR 64444)  
 NE = MCL not established  
 µg/L = Micrograms per liter  
 <n = Below detection limit of n µg/L  
 ft = Feet

**Notes:**

a = Results this date represent third month of third quarter 1994  
 b = Sample contained 14 µg/L of 1,3-Dichlorobenzene  
 c = Although 1.4 µg/L methylene chloride was detected in one of the ground water samples from well MW-2, the laboratory indicated that this was within normal laboratory background concentrations

Chloroform by EPA Method 601



**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

November 13, 1998

Equiva Services, L.L.C.  
P.O. Box 6249  
Carson, CA 90749-6249

Attn: Karen Petryna

Shell WIC #204-6852-0703  
1285 Bancroft Avenue  
San Leandro, California

4th Quarter 1998

## Groundwater Monitoring Report 981013-Y-1

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Blaine Tech Services, Inc. performs environmental monitoring and documentation as an independent third party. Copies of our Monitoring Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 573-0555 ext. 201.

Yours truly,



Francis Thie

attachments: Table of Well Gauging Data  
Chain of Custody  
Field Data Sheets  
Certified Analytical Report

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

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

## TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1	10/13/98	TOC	—	NONE	—	—	35.69	59.08
MW-2	10/13/98	TOC	—	NONE	—	—	36.14	58.95
MW-3*	10/13/98	TOC	<del>QBOR</del>	NONE	—	—	35.61	57.92
MW-4	10/13/98	TOC	—	NONE	—	—	36.75	54.60

\* Sample DUP was a duplicate sample taken from well MW-3.



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

**CHAIN OF CUSTODY RECORD**

Serial No: 981013 71

Date: \_\_\_\_\_  
Page ) of /

Silo Address: 1285 Bancroft Ave., San Leandro, CA

WIC#: 204-6852-0703

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

Consultant Name & Address: Blaine Tech Services, Inc.  
1680 Rogers Ave., San Jose, CA 95112

Consultant Contact: Fran Thie  
Phone No.: (408) 573-0555  
Fax #: 573-7771

Comments:

Sampled by: *[Signature]*

Printed Name: BROOKS TAYLOR

**Analysis Required**

LAB: SEP

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 <i>f m t b a</i>	Asbestos	Container Size	Preparation Used	Composite Y/N
-------------------------	----------------------------	---------------------	------------------------------	-------------------	---	----------	----------------	------------------	---------------

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 Classify/Disposal <input type="checkbox"/>	4442	16 days <input checked="" type="checkbox"/> (Normal)
Water Classify/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"/>		

UST AGENCY: 9810A06

Sample ID	Date	Sludge	Soil	Water	Air	No. of conls.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
01 MW1 x	10/13			x		3						x							0 13 6 30
02 MW2 x																			
03 MW3 x																			
04 MW4 x																			
05 EB x																			
06 DVP x																			

Relinquished By (signature): <i>[Signature]</i>	Printed Name: <u>BROOKS TAYLOR</u>	Date: <u>10/13/98</u>	Time: <u>9:15</u>	Received (signature): <i>[Signature]</i>	Printed Name: <u>Fulcher</u>	Date: <u>10/13/98</u>	Time: <u>5:10</u>
Relinquished By (signature): <i>[Signature]</i>	Printed Name:	Date: <u>10/13/98</u>	Time:	Received (signature): <i>[Signature]</i>	Printed Name:	Date:	Time:
Relinquished By (signature): <i>[Signature]</i>	Printed Name:	Date:	Time:	Received (signature): <i>[Signature]</i>	Printed Name: <u>William Tano</u>	Date: <u>10/13/98</u>	Time: <u>13:32</u>

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



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

laine Tech Services  
680 Rogers Avenue  
San Jose, CA 95112  
Attention: Fran Thie

Project: Shell 1285 Bancroft

Enclosed are the results from samples received at Sequoia Analytical on October 13, 1998.  
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
B10A06 -01	LIQUID, MW-1	10/13/98	Purgeable TPH/BTEX/MTBE
B10A06 -02	LIQUID, MW-2	10/13/98	Purgeable TPH/BTEX/MTBE
B10A06 -03	LIQUID, MW-3	10/13/98	Purgeable TPH/BTEX/MTBE
B10A06 -04	LIQUID, MW-4	10/13/98	Purgeable TPH/BTEX/MTBE
B10A06 -05	LIQUID, EB	10/13/98	Purgeable TPH/BTEX/MTBE
B10A06 -06	LIQUID, DUP	10/13/98	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





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Shell 1285 Bancroft Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-01	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
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.
Methyl t-Butyl Ether	2.5	29
Benzene	0.50	3.2
Toluene	0.50	0.69
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.1
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	111

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 Attention: Fran Thie	Client Proj. ID: Shell 1285 Bancroft Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-02	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
--	--	---

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	100
Methyl t-Butyl Ether	2.5	5.8
Benzene	0.50	7.0
Toluene	0.50	12
Ethyl Benzene	0.50	3.7
Xylenes (Total)	0.50	10
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	103

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 1285 Bancroft Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-03	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
Attention: Fran Thie		

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	51000
Methyl t-Butyl Ether	250	6200
Benzene	50	3100
Toluene	50	12000
Ethyl Benzene	50	7630
Xylenes (Total)	50	6800
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	104

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 1285 Bancroft Sample Descript: MW-4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-04	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
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.
Methyl t-Butyl Ether	2.5	17
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	100

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Client Proj. ID: Shell 1285 Bancroft Sample Descript: EB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-05	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
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.
Methyl t-Butyl Ether	2.5	N.D.
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	105

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





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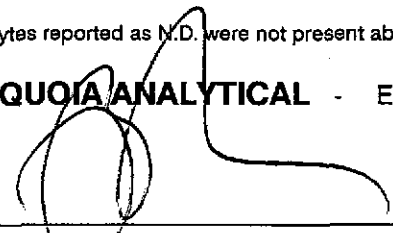
Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Shell 1285 Bancroft Sample Descript: DUP Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9810A06-06	Sampled: 10/13/98 Received: 10/13/98 Analyzed: 10/23/98 Reported: 11/05/98
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**Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE**

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	88000
Methyl t-Butyl Ether	250	9200
Benzene	50	5800
Toluene	50	21000
Ethyl Benzene	50	1400
Xylenes (Total)	50	12000
Chromatogram Pattern:		C6-C12
<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 Fenner  
Project Manager





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

Client Project ID: Shell 1285 Bancroft  
Matrix: Liquid

Work Order #: 9810A06 -01-06

Reported: Nov 9, 1998

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	8100414	8100414	8100414	8100414
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 8015M	EPA 8015M	EPA 8015M	EPA 8015M

Analyst:	-	-	-	-
MS/MSD #:	P810284-03	P810284-03	P810284-03	P810284-03
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/23/98	10/23/98	10/23/98	10/23/98
Analyzed Date:	10/23/98	10/23/98	10/23/98	10/23/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
Result:	96.9	94.5	94	284
MS % Recovery:	96.9	94.5	94	94.7
Dup. Result:	96.2	94	93	282
MSD % Recov.:	96.2	94	93	94
RPD:	0.725	0.531	1.07	0.707
RPD Limit:	0-5	0-6	0-4	0-5

LCS #:	LCS102398	LCS102398	LCS102398	LCS102398
Prepared Date:	10/23/98	10/23/98	10/23/98	10/23/98
Analyzed Date:	10/23/98	10/23/98	10/23/98	10/23/98
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	100 µg/L	100 µg/L	100 µg/L	300 µg/L
LCS Result:	104	102	101	306
LCS % Recov.:	104	102	101	102

MS/MSD	82-119	80-117	66-125	73-119
LCS	84-116	81-117	79-115	80-114
Control Limits				

**SEQUOIA ANALYTICAL**  
Elap #2245

Peggy Penner  
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

9810A06.BLA <1>





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Blaine Tech Services  
1680 Rogers Avenue  
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Attention: Fran Thie

Client Proj. ID: Shell 1285 Bancroft

Received: 10/13/98

Lab Proj. ID: 9810A06

Reported: 11/05/98

### LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 9 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

