CAMBRIA

ENVIRONMENTAL
PROTECTION
98 MAY 19 AM 10: 02

May 15, 1998

Mr. Alex Perez
Shell Oil Products Company
P.O. Box 8080
Martinez, California 94553

Re: **Quarterly Monitoring Report - First Quarter 1998**
Former Shell Service Station
2101 Park Boulevard
Oakland, California
WIC #204-5508-1206

Dear Mr. Perez:

This Quarterly Monitoring Report describes the recently completed activities associated with ground water monitoring and sampling at the referenced site (Plates 1 and 2). This report was prepared to meet quarterly reporting guidelines issued by the Regional Water Quality Control Board, San Francisco Bay Region and the Alameda County Health Care Services Agency (ACHCSA).

Quarterly Monitoring & Sampling Summary

Ground water monitoring and sampling for the first quarter of 1998 are summarized below:

- Blaine Tech Services Inc. (Blaine), of San Jose, California measured ground water levels and collected ground water samples from Wells S-1, S-2, and S-3 on March 12, 1998. The samples were transported to Sequoia Analytical of Redwood City, California for chemical analysis.

- Ground water level measurement data were evaluated and used to prepare a ground water contour map (Plate 2). The ground water flow direction appears to be southeasterly at an approximate hydraulic gradient of 0.067.

- The ground water sample from Well S-3 contained 2,800 ppb TPPH, 260 ppb benzene, and no detectable MTBE. Wells S-1 and S-2 did not contain detectable levels of TPPH, benzene, and MTBE.

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
270 PERKINS STREET,

Quarterly Sampling

Monitoring Wells S-1, S-2, and S-3 were sampled and analyzed for Total Purgeable Petroleum Hydrocarbons quantitated as gasoline (TPPH) according to EPA Method 8015 (Modified) and benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl-tertiary-butyl-ether (MTBE) according to EPA Method 8020. Monitoring Well S-1 was also analyzed for Total Extractable Petroleum Hydrocarbons quantitated as diesel (TEPH) according to EPA Method 8015 (Modified). Additionally, a duplicate sample was taken and analyzed for quality control purposes.

Field monitoring data and chemical analytical data have been included in Table 1. A ground water contour/chemical concentration map is presented as Plate 2. Blaine's ground water monitoring report is presented in Appendix A.

Quarterly monitoring, sampling, and reporting will continue on the established schedule for the next quarter. Oxygen Releasing Compound (ORC) was installed in wells S-2 and S-3 on March 3, 1998. The results of additional ground water sample analysis performed this quarter are presented in Appendix A.

If you have any questions regarding the contents of this document, please call.

Sincerely,
Cambria Environmental Technology, Inc.

Mike Prinz
Staff Engineer

Diane M. Lundquist, P.E.
Senior Engineer
C46725

REGISTERED PROFESSIONAL ENGINEER
DIANE M. LUNDQUIST
NO. C46725
CIVIL
STATE OF CALIFORNIA

Attachments

Table 1. Well Concentrations

Plate 1. Vicinity Map
Plate 2. Ground Water Contour/Chemical Concentration Map

Appendix A

Blaine Tech Services Inc. - Ground Water Monitoring Report

cc: Mr. Barney Chan, Alameda County Health Care Services Agency
Mr. Frank J. Schlessinger, Schlessinger & Associates
Mr. Steve Makara, Goodyear Tire & Rubber Company

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
2101 Park Boulevard
Oakland, California
WIC #204-5508-1206

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	O & G by 5520 B (ug/L)	O & G by 5520 B/F (ug/L)	dO (ppm)	dO Method	Comments
S-1	Top casing elevation (ft):		11.93												
20-Jun-95	4.67	7.26	0.00	160	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	
12-Sep-95	4.19	7.74	0.00	<50	250	3.0	<0.5	<0.5	<0.5	NA	<5000	<5000	NA	NA	
28-Dec-95	5.30	6.63	0.00	70	160	1.1	<0.5	<0.5	1.3	NA	<5000	<5000	NA	NA	
25-Mar-96	3.44	8.49	0.00	70	220	<0.5	<0.5	<0.5	<0.5	<2.0	NA	NA	NA	NA	
27-Jun-96	3.15	8.78	0.00	<50	140	0.59	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
26-Sep-96	3.90	8.03	0.00	<50	190	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
10-Dec-96	2.46	9.47	0.00	<50	84	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
10-Mar-97	2.93	9.00	0.00	<50	200	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
26-Jun-97	3.91	8.02	0.00	<50	99	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
30-Sep-97	4.00	7.93	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
15-Dec-97	2.83	9.10	0.00	<50	99	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
12-Mar-98	1.73	10.20	0.00	<50	100	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	2.7	YSI Meter	Nitrate: 5.9 ppm
S-2	Top casing elevation (ft):		12.06												
20-Jun-95	5.80	6.26	0.00	180	NA	1.1	<0.5	<0.5	0.6	NA	NA	NA	NA	NA	
12-Sep-95	5.78	6.28	0.00	190	NA	18	<0.5	1.2	0.6	NA	NA	NA	NA	NA	
28-Dec-95	4.02	8.04	0.00	200	NA	11	1.0	1.0	4.0	NA	NA	NA	NA	NA	
25-Mar-96	5.56	6.50	0.00	180	NA	12	0.8	1.4	1.0	<2.0	NA	NA	NA	NA	
27-Jun-96	6.00	6.06	0.00	150	NA	7.7	0.79	0.93	0.5	<2.5	NA	NA	NA	NA	
26-Sep-96	5.73	6.33	0.00	83	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
10-Dec-96	4.57	7.49	0.00	78	NA	1.4	<0.50	0.57	<0.50	<2.5	NA	NA	NA	NA	
10-Mar-97	5.38	6.68	0.00	61	NA	1.6	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
26-Jun-97	5.68	6.38	0.00	90	NA	1.5	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
30-Sep-97	5.75	6.31	0.00	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
15-Dec-97	5.35	6.71	0.00	<50	NA	4.1	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
12-Mar-98	4.71	7.35	0.00	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	4.3	YSI Meter	Nitrate: 16 ppm
S-2 (DUP)															
10-Mar-97	NA	NA	NA	77	NA	2.0	<0.50	0.69	<0.50	<2.5	NA	NA	NA	NA	

TABLE 1

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Shell Oil Products Company
2101 Park Boulevard
Oakland, California
WIC #204-5508-1206

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	O & G by 5520 B (ug/L)	O & G by 5520 B/F (ug/L)	dO (ppm)	dO Method	Comments
26-Jun-97	3 91	8 02	0.00	<50	99	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
30-Sep-97	5 75	6 31	0.00	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	
S-3	Top casing elevation (ft):		**13.54**												
20-Jun-95	4 90	8 64	0.00	5500	NA	240	34	120	840	NA	NA	NA	NA	NA	
12-Sep-95	5 37	8 17	0.00	5200	NA	690	14	290	280	NA	NA	NA	NA	NA	
28-Dec-95	3 90	9 64	0.00	13000	NA	670	34	960	1400	NA	NA	NA	NA	NA	
25-Mar-96	4 30	9 24	0.00	7300	NA	560	65	540	820	<200	NA	NA	NA	NA	
27-Jun-96	5 00	8 54	0.00	17000	NA	1100	83	1200	2700	<250	NA	NA	NA	NA	
26-Sep-96	5 23	8 31	0.00	8900	NA	920	43	400	1100	<125	NA	NA	NA	NA	
10-Dec-96	3 88	9 66	0.00	6100	NA	470	25	290	640	<100	NA	NA	NA	NA	
10-Mar-97	4 10	9 44	0.00	7000	NA	720	29	340	620	110	NA	NA	NA	NA	
26-Jun-97	5 23	8 31	0.00	11000	NA	1100	63	470	1300	150	NA	NA	NA	NA	
30-Sep-97	5 36	8 18	0.00	25000	NA	970	170	1200	4600	<50	NA	NA	NA	NA	
30-Sep-97	5 36	8 18	0.00	25000	NA	970	170	1200	4600	<50	NA	NA	NA	NA	
15-Dec-97	3 81	9 73	0.00	9800	NA	840	55	420	1100	350	NA	NA	NA	NA	
12-Mar-98	4 79	8 75	0.00	2800	NA	260	21	140	600	<12	NA	NA	4.8	YSI Meter	Nitrate: 7.9 ppm
S-3 (DUP)															
20-Jun-95	NA	NA	NA	6300	NA	270	37	120	1100	NA	NA	NA	NA	NA	
12-Sep-95	NA	NA	NA	4700	NA	620	13	260	240	NA	NA	NA	NA	NA	
28-Dec-95	NA	NA	NA	13000	NA	800	34	1000	1600	NA	NA	NA	NA	NA	
25-Mar-96	NA	NA	NA	7400	NA	580	19	620	670	<20	NA	NA	NA	NA	
27-Jun-96	NA	NA	NA	1903	NA	13	1.0	14	34	7.2	NA	NA	NA	NA	
26-Sep-96	NA	NA	NA	9800	NA	960	41	450	1300	120	NA	NA	NA	NA	MTBE by 8260: <16 ppb (a)
10-Dec-96	NA	NA	NA	7700	NA	550	33	380	880	120	NA	NA	NA	NA	
26-Jun-97	NA	NA	NA	12000	NA	1100	62	480	1400	<100	NA	NA	NA	NA	
15-Dec-97	NA	NA	NA	9800	NA	850	56	420	1100	360	NA	NA	NA	NA	MTBE by 8260: <20 ppb
12-Mar-98	NA	NA	NA	2100	NA	200	15	110	450	<12	NA	NA	NA	NA	Nitrate: 8.9 ppm

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
2101 Park Boulevard
Oakland, California
WIC #204-5508-1206

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	O & G by 5520 B (ug/L)	O & G by 5520 B/F (ug/L)	dO (ppm)	dO Method	Comments

Abbreviations:
TPPH = Total Purgeable Petroleum Hydrocarbons carbon range C6 to C12 by EPA Method 8015 (Modified)
(previously reported as Total Petroleum Hydrocarbons as Gasoline)
TEPH = Total Extractable Petroleum Hydrocarbons carbon range C9 to C24 by EPA Method 8015 (Modified)
(previously reported as Total Petroleum Hydrocarbons as Diesel)
O&G = Oil and Grease
BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether by EPA Method 8020
NA = Not analyzed or not available
< x = Not detected at detection limit of x
(DUP) = Duplicate sample

Note:
(a) = The MTBE was analyzed by EPA method 8260 one day past hold time. The MTBE value did not confirm therefore, all MTBE results at this site should be considered estimated.
All wells surveyed to Mean Sea Level

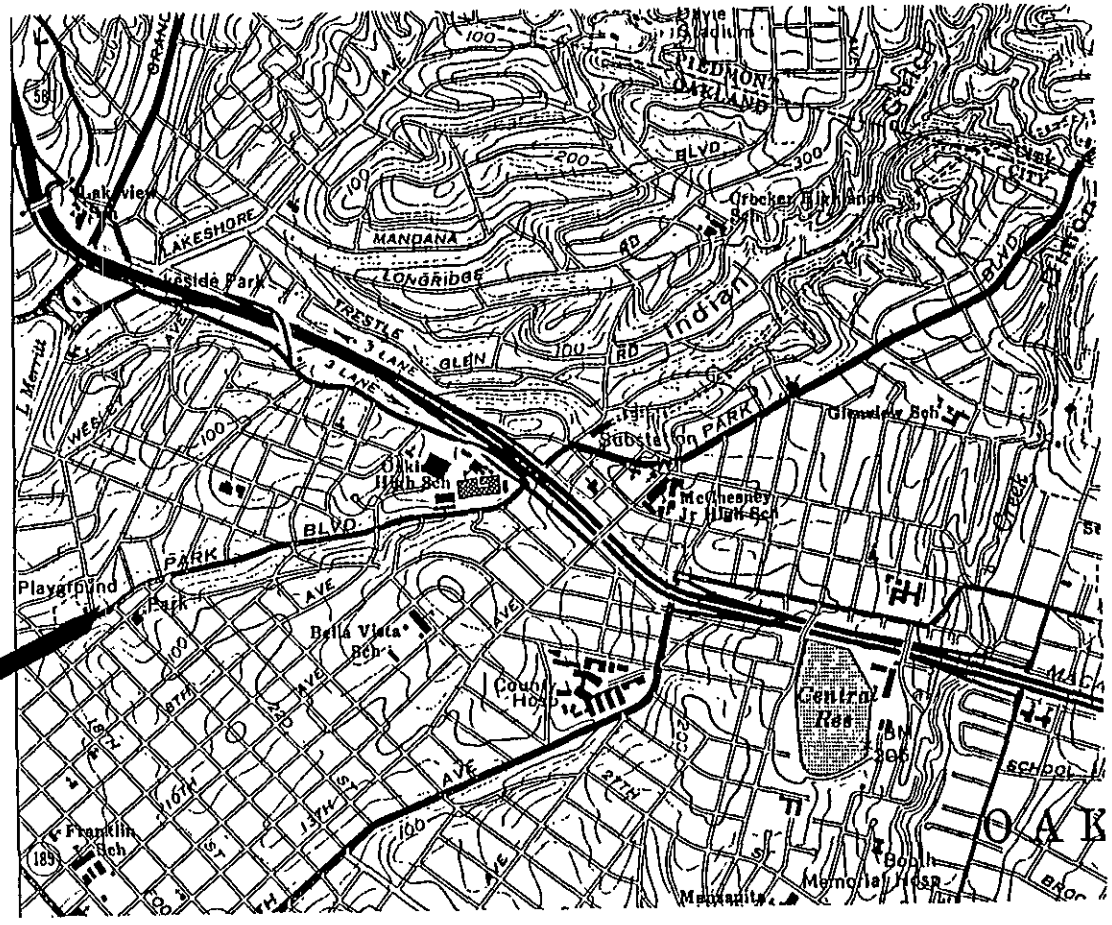

PLATE	VICINITY MAP	CAMBRIA
1	Former Shell Service Station 2101 Park Boulevard Oakland, California	240-0865
Drawn By: GLV	Date: 2-24-95	Approved By: _____ Date: 5-13-98

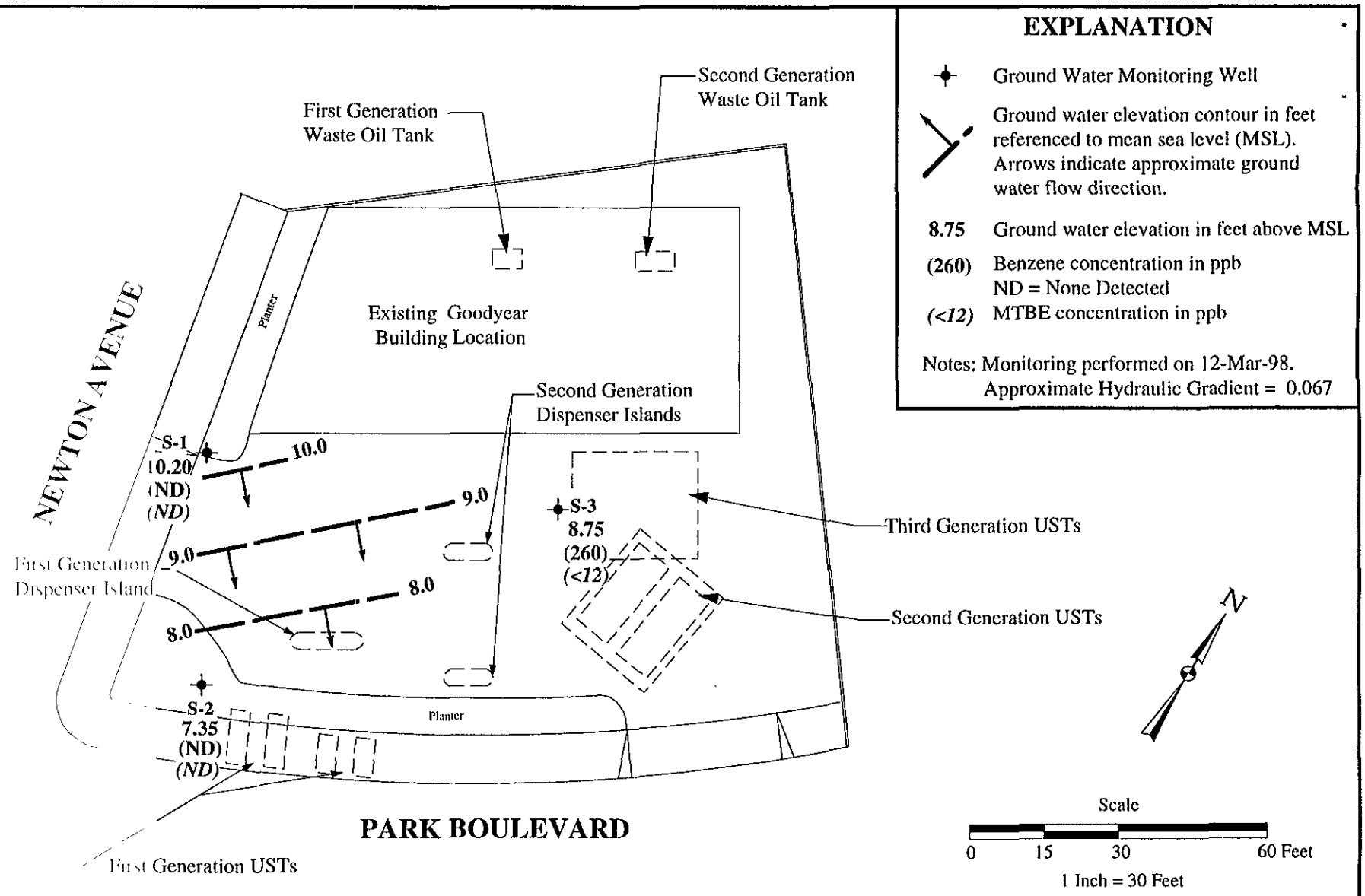

PLATE
2

GROUND WATER CONTOUR/CHEMICAL CONCENTRATION MAP
Former Shell Service Station
2101 Park Boulevard
Oakland, California

CAMBRIA
240-0865

Drawn By MDP

Date: 7-May-98

Approved By: mk

Date: 5-13-98

Appendix A

Blaine Tech Services Inc.
Ground Water Monitoring Report

BLAINE
TECH SERVICES INC.

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

April 13, 1998

Shell Oil Company
P.O. Box 8080
Martinez, CA 94553

Attn: Alex Perez

Shell WIC #204-5508-1206
2101 Park Blvd.
Oakland, California

1st Quarter 1998

Groundwater Monitoring Report 980312-K-3

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling 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.
P.O. Box 259
Sonoma, CA 95476-0259
Attn: Joe Neely

(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)
S-1	03/12/98	TOC	--	NONE	--	--	1.73	16.88
S-2	03/12/98	TOC	--	NONE	--	--	4.71	17.30
S-3*	03/12/98	TOC	ODOR	NONE	--	--	4.79	16.83

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

Table of Additional Analysis

DATE	Notes	D.O. (YSI)	ORP (mv)	pH	Conduct-ivity	Temperature (deg. F)	Alkalinity (grams/gal)	Ferrous Iron (mg/L)	Turbidity
S-1									
03/12/98		2.7	182	7.3	1350	61.6	22.5	0.6	>200
S-2									
03/12/98		4.3	193	7.2	1779	62.4	22.5	0.3	79
S-3									
03/12/98		--	182	8.4	2332	63.5	45.0	0.2	>200
04/08/98		4.8	--	--	--	--	--	--	--

SHELL OIL PRODUCTS COMPANY *CHAIN OF CUSTODY RECORD*

WIC OR FACILITY ID: 204-5508-1206	Date: 03/12/98	Results to: ◉ Consult. ○ Shell	Page 01 of 01

Site Address: 2101 Park Blvd. Oakland
Consultant/Contact: BTS
Address: 1680 Rogers Ave SJ
Phone: 573-0555
Shell Engineer: Alex Perez

Lab: SEQR - CA

TURN AROUND TIME *Select one only*
○ 24 hrs. ○ 48 hrs. ◉ 15 days (Normal) ○ Other

CLASS TYPE/DETAIL TYPE *Select one only*
○ Site Invest (4441) ○ Wtr Rem/Sys (4453)
○ Soil Clas/Disp (4442) ◉ G.W. Monitor (4461)
○ Wtr Clas/Disp (4443) ○ Other
○ Soil/Air Rem/Sys (4452)

SAMPLE MATRIX *Select one only*
◉ Water ○ NAPL ○ Sludge ○ Sediment
○ Soil ○ Vapor ○ Bedrock ○ Other

Waste Protocol Number:
Start Time (military): 11:15
Sampled by: Mark Spandler
UST Agency:

9803971

Analysis Required

Field Sample ID	Sample Time (military)	Composite?	Acid pres.	Cnt.Sz.(40ml)	Cnt.Sz.-Other	Total No. Containers	TPH-P/MBTEX(8015/8021)	TPH-P/BTEX (8015/8021)	MBTEX (8021)	BTEX (8021)	TPH-P (8015m)	TPH-E (8015m)	TPH-xx (8015m)	TRPH (418.1)	MBTEX (8260)	VOCs (8260) (specify)	SVOCs (8270) (specify)	Lead (specify)	Test for Disposal	Other (specify)
S-1	11:32		●	●	●	07	●					●								●
S-2	11:52		●	●	●	05	●													●
S-3	12:14		●	●	●	05	●													●
DUP			●	●	●	05	●													●

LAB USE ONLY
Lab Tracking No.:
Sample Condition/Comments
Cooler Temperature:
Material Description

Comments: other = nitrate + sulfate by method EPA 300.0

Relinquished By (signature)	Printed Name	Date/Time	Received By (signature)	Printed Name	Date/Time
[signature]	Mark Spandler	Date: 3/13 Time: 10:30	[signature]	Ray Scroggin	Date: 3/13/98 Time: 10:30
[signature]	R. Scroggin	Date: 3/13/98 Time:	[signature]		Date: Time:
		Date: Time:	J. Downs	DOWNS	Date: 3-13-98 Time: 1216

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Project: Shell 2101 Park Blvd.

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

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9803971 -01	LIQUID, S-1	03/12/98	Nitrate as Nitrate
9803971 -01	LIQUID, S-1	03/12/98	Sulfate
9803971 -01	LIQUID, S-1	03/12/98	Purgeable TPH/BTEX/MTBE
9803971 -01	LIQUID, S-1	03/12/98	TPHD_W Extractable TPH
9803971 -02	LIQUID, S-2	03/12/98	Nitrate as Nitrate
9803971 -02	LIQUID, S-2	03/12/98	Sulfate
9803971 -02	LIQUID, S-2	03/12/98	Purgeable TPH/BTEX/MTBE
9803971 -03	LIQUID, S-3	03/12/98	Nitrate as Nitrate
9803971 -03	LIQUID, S-3	03/12/98	Sulfate
9803971 -03	LIQUID, S-3	03/12/98	Purgeable TPH/BTEX/MTBE
9803971 -04	LIQUID, DUP	03/12/98	Nitrate as Nitrate
9803971 -04	LIQUID, DUP	03/12/98	Sulfate
9803971 -04	LIQUID, DUP	03/12/98	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, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell 2101 Park Blvd.

Lab Proj. ID: 9803971

Sampled: 03/12/98
Received: 03/13/98
Analyzed: see below

Reported: 03/26/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9803971-01				
Sample Desc : **LIQUID,S-1**				
Nitrate as Nitrate	**mg/L**	**03/24/98**	**1.0**	**5.9**
Sulfate	**mg/L**		**See**	**Narrative**
Lab No: 9803971-02				
Sample Desc : **LIQUID,S-2**				
Nitrate as Nitrate	**mg/L**	**03/24/98**	**1.0**	**16**
Sulfate	**mg/L**		**See**	**Narrative**
Lab No: 9803971-03				
Sample Desc : **LIQUID,S-3**				
Nitrate as Nitrate	**mg/L**	**03/23/98**	**1.0**	**7.9**
Sulfate	**mg/L**		**See**	**Narrative**
Lab No: 9803971-04				
Sample Desc : **LIQUID,DUP**				
Nitrate as Nitrate	**mg/L**	**03/24/98**	**1.0**	**8.9**
Sulfate	**mg/L**		**See**	**Narrative**

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, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell 2101 Park Blvd.	Sampled: 03/12/98
1680 Rogers Avenue	Sample Descript: S-1	Received: 03/13/98
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/24/98
Attention: Fran Thie	Lab Number: 9803971-01	Reported: 03/26/98

QC Batch Number: GC032498BTEX02A
Instrument ID: GCHP02

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:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell 2101 Park Blvd.	Sampled: 03/12/98
1680 Rogers Avenue	Sample Descript: S-1	Received: 03/13/98
San Jose, CA 95112	Matrix: LIQUID	Extracted: 03/19/98
	Analysis Method: EPA 8015 Mod	Analyzed: 03/25/98
Attention: Fran Thie	Lab Number: 9803971-01	Reported: 03/26/98

QC Batch Number: GC0319980HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	100
Chromatogram Pattern:		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell 2101 Park Blvd.	Sampled: 03/12/98
1680 Rogers Avenue	Sample Descript: S-2	Received: 03/13/98
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/24/98
Attention: Fran Thie	Lab Number: 9803971-02	Reported: 03/26/98

QC Batch Number: GC032498BTEX02A
Instrument ID: GCHP02

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:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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	Client Proj. ID: Shell 2101 Park Blvd.	Sampled: 03/12/98
1680 Rogers Avenue	Sample Descript: S-3	Received: 03/13/98
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/24/98
Attention: Fran Thie	Lab Number: 9803971-03	Reported: 03/26/98

QC Batch Number: GC032498BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	2800
Methyl t-Butyl Ether	12	N.D.
Benzene	2.5	260
Toluene	2.5	21
Ethyl Benzene	2.5	140
Xylenes (Total)	2.5	600
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	143 Q

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	Client Proj. ID: Shell 2101 Park Blvd.	Sampled: 03/12/98
1680 Rogers Avenue	Sample Descript: DUP	Received: 03/13/98
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/24/98
Attention: Fran Thie	Lab Number: 9803971-04	Reported: 03/26/98

QC Batch Number: GC032498BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**2100**
Methyl t-Butyl Ether	12	N.D.
Benzene	**2.5**	**200**
Toluene	**2.5**	**15**
Ethyl Benzene	**2.5**	**110**
Xylenes (Total)	**2.5**	**450**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
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, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell 2101 Park Blvd.
Matrix: Liquid
Work Order #: 9803971 -01-04
Reported: Apr 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Nitrate
QC Batch#:	IN0324983000ACA
Analy. Method:	EPA 300.0
Prep. Method:	N.A.
Analyst:	P. Sandrock
MS/MSD #:	9803C0401
Sample Conc.:	54
Prepared Date:	3/24/98
Analyzed Date:	3/24/98
Instrument I.D.#:	INIC1
Conc. Spiked:	100 mg/L
Result:	98
MS % Recovery:	98
Dup. Result:	97
MSD % Recov.:	97
RPD:	1.0
RPD Limit:	0-20

LCS #:	LCS032498
Prepared Date:	3/24/98
Analyzed Date:	3/24/98
Instrument I.D.#:	INIC1
Conc. Spiked:	10 mg/L
LCS Result:	9.4
LCS % Recov.:	94

MS/MSD	75-125
LCS	80-120
Control Limits	

SEQUOIA ANALYTICAL

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

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Blaine Tech Services, Inc.	Client Project ID:	Shell 2101 Park Blvd.	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9803971-01-04	Reported: Apr 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC032498BTEX02A	GC032498BTEX02A	GC032498BTEX02A	GC032498BTEX02A	GC032498BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9803C4202	9803C4202	9803C4202	9803C4202	9803C4202
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/24/98	3/24/98	3/24/98	3/24/98	3/24/98
Analyzed Date:	3/24/98	3/24/98	3/24/98	3/24/98	3/24/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.8	9.7	11	33	64
MS % Recovery:	88	97	110	110	107
Dup. Result:	8.7	9.6	11	33	63
MSD % Recov.:	87	96	110	110	105
RPD:	1.1	1.0	0.0	0.0	1.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK032498	BLK032498	BLK032498	BLK032498	BLK032498
Prepared Date:	3/24/98	3/24/98	3/24/98	3/24/98	3/24/98
Analyzed Date:	3/24/98	3/24/98	3/24/98	3/24/98	3/24/98
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.8	9.8	11	33	63
LCS % Recov.:	88	98	110	110	105
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

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

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Blaine Tech Services, Inc.	Client Project ID:	Shell 2101 Park Blvd.	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9803971-01	Reported: Apr 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0319980HBPEXZ
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520
Analyst:	G. Fish
MS/MSD #:	9803A6204
Sample Conc.:	410
Prepared Date:	3/19/98
Analyzed Date:	3/21/98
Instrument I.D.#:	GCHP19
Conc. Spiked:	1000 µg/L
Result:	1300
MS % Recovery:	89
Dup. Result:	1200
MSD % Recov.:	79
RPD:	8.0
RPD Limit:	0-50

LCS #:	BLK031998
Prepared Date:	3/19/98
Analyzed Date:	3/21/98
Instrument I.D.#:	GCHP19
Conc. Spiked:	1000 µg/L
LCS Result:	840
LCS % Recov.:	84

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

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Project Manager

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Shell 2101 Park Blvd. Lab Proj. ID: 9803971	Received: 03/13/98 Reported: 03/26/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Sulfate Note: For method 300.0, SO4 determination was not possible because no unpreserved samples were submitted for analysis. All samples were preserved with H2SO4.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager