



July 18, 1996

Kevin Graves  
Regional Water Quality Control Board-  
San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, CA 94612

PROJECT COPY

Re: **Second Quarter 1996**  
Shell Service Station  
WIC #204-6138-0501  
3790 Hopyard Road  
Pleasanton, California  
WA Job #81-0795-104

Dear Mr. Graves:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Division 3, Chapter 16, Article 5, Section 2652.d.

**Activities This Quarter:**

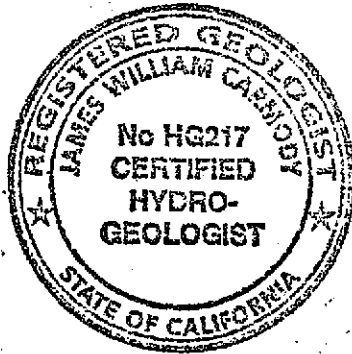
- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the site wells (Figures 1 and 2). BTS' report describing these activities and the analytical report for the ground water samples are included as Attachment A.
- Weiss Associates (WA) calculated ground water elevations and compiled the analytic data (Table 1), and prepared a ground water elevation contour map (Figure 2).



**Anticipated Activities Next Quarter:**

WA will submit a report presenting a summary of activities for the upcoming quarter. Please call if you have any questions.

Sincerely,  
Weiss Associates



*Grady S. Glasser*  
Grady S. Glasser  
Technical Assistant

*James W. Carmody*  
James W. Carmody, C.E.G.  
Senior Project Hydrogeologist

Attachments: A - BTS Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, California 94524

GSG/JWC:all  
H:\BTL\WWW\KMO\GZL.DOC

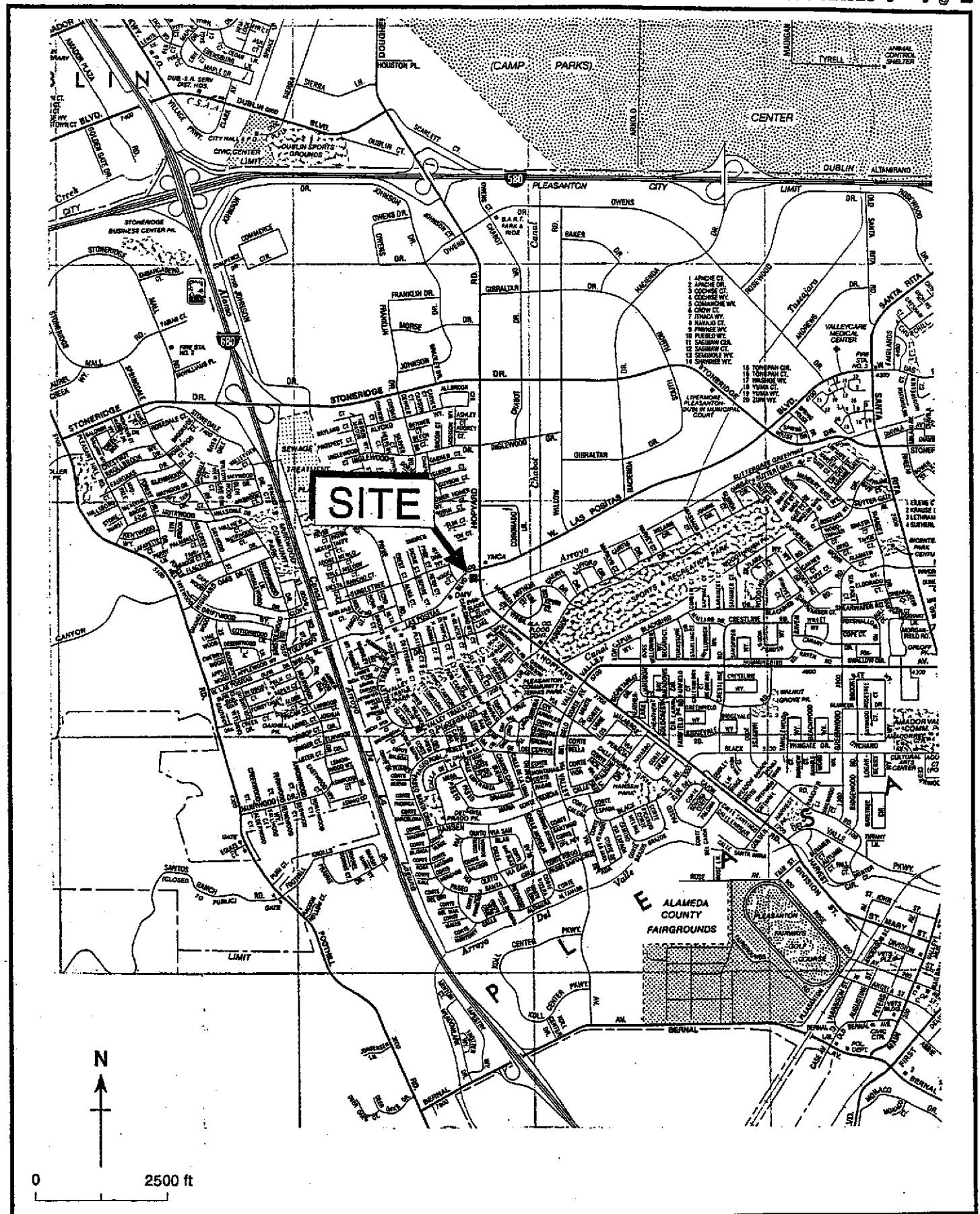


Figure 1. Site Location Map - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California

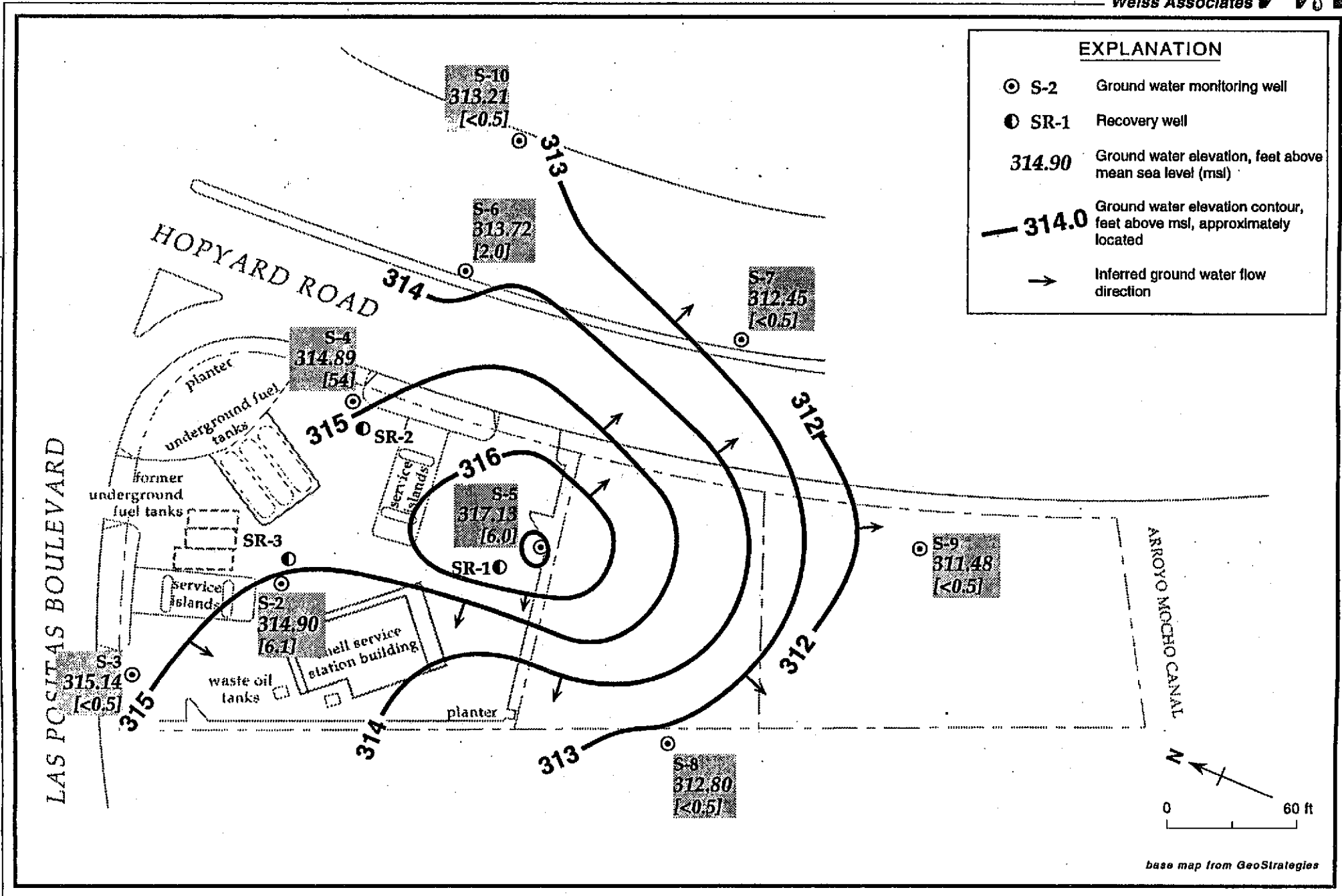


Figure 2. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentrations in Ground Water - May 31, 1996 - Shell Service Station WIC# 204-6138-0501 3790 Hopyard Road, Pleasanton, California



Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Casing (ft/msl)	Depth to Water (ft)	Ground Water Elevation (ft/msl)	TPH-G	TPH-D	B	T	E	X	MTBE	parts per billion (µg/L)					
	12/09/93		---	---	---	---	---	---	---	---	---						
	09/13/94		15.17	312.50	---	---	---	---	---	---	---						
	06/21/95		12.49	315.18	50	---	4.1	<0.5	20	1.2	---						
	06/12/96		12.53	315.14	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5						
S-4 (Annually, Second Quarter)	03/20/91	328.53	---	---	1,200	---	100	<2.0	210	130	---						
	06/26/91		---	---	220	---	14	<0.5	34	17	---						
	09/05/91		---	---	580	---	31	0.8	53	26	---						
	12/13/91		---	---	370	---	24	0.9	1.3	46	---						
	03/11/92		---	---	1,600	---	23	1.2	12	20	---						
	06/15/92		---	---	480	---	48	<1.0	95	22	---						
	09/17/92		---	---	260	---	35	1.2	51	7.8	---						
	12/11/92		---	---	270	---	34	0.8	28	4.5	---						
	02/04/93		---	---	1,100	---	12	<5.0	89	100	---						
	06/03/93		---	---	210	---	48	1.1	42	4.0	---						
	09/15/93		---	---	700	---	21	<1.0	110	91	---						
	12/09/93		14.16		314.37	250	---	39	<0.5	3.8	2.6	---					
	03/04/94		14.17		314.36	150	---	25	1.4	6.8	2.8	---					
	03/04/94 <sup>dup</sup>		14.17		314.36	140	---	28	0.8	7.9	3.2	---					
	06/16/94		14.14		314.39	90	---	12	<0.5	1.8	2.4	---					
	06/16/94 <sup>dup</sup>		14.14		314.39	80	---	5.9	<0.5	1.5	0.9	---					
	09/13/94		14.42		314.11	<50	---	23	<0.5	4.9	2.4	---					
	09/13/94 <sup>dup</sup>		14.42		314.11	<50	---	23	<0.5	4.0	2.3	---					
	06/21/95		13.82		314.71	270	---	34	1.4	25	7.6	---					
	06/21/95 <sup>dup</sup>		13.82		314.71	280	---	35	2.1	26	8.4	---					
06/12/96		13.64		314.89	360	---	52	<0.5	<0.5	<0.5	92						
06/12/96 <sup>dup</sup>		13.64		314.89	430	---	54	<1.2	72	21	96						



Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Casing (ft/msl)	Depth to Water (ft)	Ground Water Elevation (ft/msl)	TPH-G	TPH-D	B	T	E	X	MTBE	
					←————— parts per billion (µg/L) —————→							
S-5 (Annually, Second Quarter)	03/20/91	329.66	---	---	310	---	39	12	18	30	---	
	06/26/91		---	---	1,300	---	250	62	120	180	---	
	09/05/91		---	---	4,700	---	660	150	170	280	---	
	12/13/91		---	---	1,400	---	580	19	110	80	---	
	03/11/92		---	---	<30	---	<0.3	<0.3	<0.3	<0.3	---	
	06/15/92		---	---	1,800	---	380	52	120	180	---	
	09/17/92		---	---	2,200	---	750	91	170	170	---	
	12/11/92		---	---	8,700	---	1,600	66	48	340	---	
	02/04/93		---	---	150	---	156	0.7	4.7	4.0	---	
	06/03/93		---	---	480	---	140	3.4	17	14	---	
	09/15/93		---	---	80	---	2.4	0.5	1.4	2.9	---	
	12/09/93			16.26	313.40	120	---	0.56	<0.5	2.2	1.2	---
	03/04/94			16.25	313.41	70	---	<0.5	<0.5	<0.5	<0.5	---
	06/16/94			16.04	313.62	<50	---	<0.5	<0.5	<0.5	<0.5	---
	09/13/94			11.52	318.14	<50	---	<0.5	<0.5	<0.5	<0.5	---
	06/21/95			14.50	315.16	<50	---	<0.5	<0.5	<0.5	<0.5	---
06/12/96			12.53	317.13	<500	---	6.0	<5.0	<5.0	<5.0	1,400	
S-6 (Annually, Second Quarter)	03/20/91	327.62	---	---	130 <sup>a</sup>	---	606	0.6	0.7	3.0	---	
	06/26/91		---	---	120 <sup>a</sup>	---	3.8	0.8	<0.5	1.7	---	
	09/05/91		---	---	60	---	<0.5	0.8	<0.5	0.5	---	
	12/13/91		---	---	150	---	2.3	<0.5	<0.5	150	---	
	03/11/92		---	---	<30	---	<0.3	<0.3	<0.5	<0.3	---	
	06/15/92		---	---	170	---	<0.5	<0.5	<0.5	<0.5	---	
	09/17/92		---	---	190	---	<0.5	1.6	<0.5	1.2	---	
	12/11/92		---	---	180	---	<0.5	0.8	<0.5	0.7	---	
	02/04/93		---	---	290	---	<0.5	<0.5	<0.5	0.7	---	
06/03/93		---	---	100	---	1.2	<0.5	<0.5	<0.5	---		

Weiss Associates



Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Casing (ft/msl)	Depth to Water (ft)	Ground Water Elevation (ft/msl)	TPH-G	TPH-D	parts per billion (µg/L)					MTBE
							B	T	E	X		
	09/15/93		---	---	160	---	1.4	<0.5	0.9	2.0	---	
	12/09/93		14.68	312.94	130	---	2.3	2.6	5.1	6.2	---	
	03/04/94		14.42	313.20	220	---	<0.5	<0.5	<0.5	<0.5	---	
	06/16/94		14.92	312.70	60	---	<0.5	<0.5	<0.5	<0.5	---	
	09/13/94		14.72	312.90	<50	---	<0.5	6.0	<0.5	<0.5	---	
	06/21/95		13.86	313.76	270	---	<0.5	<0.5	<0.5	<0.5	---	
	06/12/96		13.90	313.72	200	---	2.0	<0.5	<0.5	<0.5	12	
S-7	03/20/91	328.67	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	06/26/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	09/05/91		---	---	<50	---	<0.5	0.6	<0.5	<0.5	---	
	12/13/91		---	---	<50	---	<0.6	<0.5	<0.5	<0.5	---	
	03/11/92		---	---	<50	---	<0.3	<0.3	<0.3	<0.3	---	
	06/15/92		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	09/17/92		---	---	<50	---	0.6	0.6	<0.5	<0.5	---	
	12/11/92		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	02/04/93		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	06/03/93		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	09/15/93		---	---	---	---	---	---	---	---	---	
	12/09/93		---	---	---	---	---	---	---	---	---	
	09/13/94		16.83	311.84	---	---	---	---	---	---	---	
	06/21/95		15.88	312.79	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	06/12/96		16.22	312.45	<50	---	<0.5	<0.5	<0.5	<0.5	<2.5	
S-8 (Annually, Second Quarter)	03/20/91	327.00	---	---	<50 <sup>a</sup>	---	0.8	1.8	2.6	5.2	---	
	06/26/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	09/05/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	12/13/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---	
	03/11/92		---	---	<30	---	<0.3	<0.3	<0.3	<0.3	---	





Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Casing (ft/msl)	Depth to Water (ft)	Ground Water Elevation (ft/msl)	parts per billion (µg/L)						
					TPH-G	TPH-D	B	T	E	X	MTBE
S-10 (Annually, Second Quarter)	03/20/91	326.55	---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	06/26/91		---	---	50	---	1.8	5.8	1.9	13	---
	09/05/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	12/13/91		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	03/11/92		---	---	<30	---	<0.3	<0.3	<0.3	<0.3	---
	06/15/92		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	09/17/92		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	12/11/92		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	02/04/93		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	06/03/93		---	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	09/15/93		---	---	---	---	---	---	---	---	---
	12/09/93		---	---	---	---	---	---	---	---	---
	09/13/94			13.84	312.71	---	---	---	---	---	---
	06/21/95			13.08	313.47	---	---	---	---	---	---
	06/12/96		13.34	313.21	<50	---	<0.5	<0.5	<0.5	<0.5	<2.5
SR-1	03/04/94	329.78	16.34	313.44	---	---	---	---	---	---	---
	06/16/94		16.72	313.06	---	---	---	---	---	---	---
SR-2	03/04/94	328.35	14.39	313.96	---	---	---	---	---	---	---
	06/16/94		14.48	313.87	---	---	---	---	---	---	---
SR-3	03/04/94	329.11	14.66	314.45	---	---	---	---	---	---	---
	06/16/94		14.96	314.15	---	---	---	---	---	---	---
Trip Blank	06/16/94				<50	<50	<0.5	<0.5	<0.5	<0.5	<50
	09/13/94				<50	---	<0.5	<0.5	<0.5	<0.5	---
	06/21/95				<50	---	<0.5	<0.5	<0.5	<0.5	---

Table 1. Ground Water Elevations and Analytic Results - Shell Service Station WIC# 204-6138-0501, 3790 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Casing (ft/msl)	Depth to Water (ft)	Ground Water Elevation (ft/msl)	TPH-G	TPH-D	B	T	E	X	MTBE
					←————— parts per billion (µg/L) —————→						
DTSC MCLs					NE	NE	1	100 <sup>c</sup>	680	1,750	NE

**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  
 E = Ethylbenzene by EPA Method 8020  
 T = Toluene by EPA Method 8020  
 X = Xylenes by EPA Method 8020  
 DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water  
 NE = Not established  
 --- = Not analyzed  
 < n = Not detected at detection limits of n ppb  
 dup = Duplicate sample

**Notes:**

a = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern  
 b = The result for gasoline is an unknown hydrocarbon which consists of a single peak  
 c = DTSC recommended action level; MCL not established



**ATTACHMENT A**

**GROUND WATER MONITORING REPORT AND ANALYTIC REPORT**



# BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE  
SAN JOSE, CA 95133  
(408) 995-5535  
FAX (408) 293-8773

July 1, 1996

Shell Oil Company  
P.O. Box 4023  
Concord, CA 94524

Attn: R. Jeff Granberry

Shell WIC #204-6138-0501  
3790 Hopyard Road  
Pleasanton, California

2nd Quarter 1996

## Quarterly Groundwater Monitoring Report 960612-J-1

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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) 995-5535 ext. 201.

Yours truly,



Francis Thie

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

cc: Weiss Associates  
5500 Shellmound Street  
Emeryville, CA 94608-2411  
Attn: Grady Glasser

(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-2	6/12/96	TOB	ODOR	NONE	-	-	14.31	35.16
S-3	6/12/96	TOB	-	NONE	-	-	12.53	34.95
S-4 *	6/12/96	TOB	ODOR	NONE	-	-	13.64	36.02
S-5	6/12/96	TOB	-	NONE	-	-	12.53	35.88
S-6	6/12/96	TOB	-	NONE	-	-	13.90	34.72
S-7	6/12/96	TOB	-	NONE	-	-	16.22	34.90
S-8	6/12/96	TOB	-	NONE	-	-	14.20	34.50
S-9	6/12/96	TOB	-	NONE	-	-	16.76	34.88
S-10	6/12/96	TOB	-	NONE	-	-	13.34	34.40

\* Sample DUP was a duplicate sample taken from well S-4.



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

**CHAIN OF CUSTODY RECORD**

Serial No: 960612-51

Date: 6/13/96  
Page 1 of 2

Site Address: 3790 Hopyard Rd., Pleasanton

WIC#: 204-6138-0501

Shell Engineer: Dan Kirk Phone No.: (510) 675-6168  
Fax #: 675-6160

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

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

Comments:

Sampled by: [Signature]

Printed Name: Math Squos

**Analysis Required**

LAB: SEQ

CHECK ONE (1) BOX ONLY	CT/DI	TURN AROUND TIME
Quantity Monitoring <input checked="" type="checkbox"/>	6441	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	6441	48 hours <input type="checkbox"/>
Soil Classfy/Disposal <input type="checkbox"/>	6442	15 days <input checked="" type="checkbox"/> (Normal)
Water Classfy/Disposal <input type="checkbox"/>	6443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	6442	
Water Rem. or Sys. O & M <input type="checkbox"/>	6443	
Other <input type="checkbox"/>		

960612-51

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
1 - S-2	6/12			W		3						X	X					
2 - S-3						3						X	X					
3 - S-4						3						X	X					
4 - S-5						3						X	X					
5 - S-6						3						X	X					
6 - S-7						3						X	X					
7 - S-8						3						X	X					
8 - S-9						3						X	X					

Relinquished By (Signature): <u>[Signature]</u>	Printed Name: <u>Math Squos</u>	Date: <u>6/13/96</u>	Time: <u>9:30</u>	Received (Signature): <u>[Signature]</u>	Printed Name: <u>S. WRIGHT</u>	Date: <u>6/13/96</u>	Time: <u>9:30</u>
Sampled By (Signature): <u>[Signature]</u>	Printed Name: <u>S. WRIGHT</u>	Date: <u>6/13/96</u>	Time: <u>11:59</u>	Received (Signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>6/13/96</u>	Time: <u>11:10</u>
Washed By (Signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>6/13/96</u>	Time: <u>11:10</u>	Received (Signature): <u>[Signature]</u>	Printed Name: <u>TONY M. MATHON</u>	Date: <u>6/13/96</u>	Time: <u>11:10</u>

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



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

**CHAIN OF CUSTODY RECORD**

Serial No: 960672-51

Date: \_\_\_\_\_  
 Page 2 of 2

Site Address: 3790 Hopyard Rd., Pleasanton

WIC#: 204-6138-0501

Shell Engineer: Dan Kirk  
 Phone No.: (510) 675-6168  
 Fax #: 675-6160

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

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

Comments:

Sampled by: [Signature]

Printed Name: Matt James

**Analysis Required**

LAB: SEQ

9606767

CHECK ONE (1) BOX ONLY	CI/DI	TURN AROUND TIME
Quarterly Monitoring <input checked="" type="checkbox"/>	6441	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	6441	48 hours <input type="checkbox"/>
Soil Classfy/Disposal <input type="checkbox"/>	6442	16 days <input checked="" type="checkbox"/> (Normal)
Water Classfy/Disposal <input type="checkbox"/>	6443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	6442	
Water Rem. or Sys. O & M <input type="checkbox"/>	6443	
Other <input type="checkbox"/>		

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/COMMENTS	
7 - S10	6/12			W		3						X							
0 - DUP	↓			↓		3						X							
11 - EB	↓			↓		3						X							

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Matt James</u>	Date: <u>6/13/96</u> Time: <u>9:57</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>6/13/96</u> Time: <u>9:57</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>6/13/96</u> Time: <u>11:17</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>6/13/96</u> Time: <u>11:10</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: _____	Date: _____ Time: _____	Received (signature): <u>[Signature]</u>	Printed Name: <u>Tom McMathon</u>	Date: _____ Time: _____

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

Redwood City, CA 94063  
Walnut Creek, CA 94598  
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(415) 364-9600  
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(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

Blaine Technical Services  
985 Timothy Drive  
San Jose, CA 95133  
Attention: Jim Keller

Project: Shell Pleasanton 960612-J1

Enclosed are the results from samples received at Sequoia Analytical on June 13, 1996.  
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9606767 -01	LIQUID, S-2	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -02	LIQUID, S-3	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -03	LIQUID, S-4	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -04	LIQUID, S-5	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -05	LIQUID, S-6	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -06	LIQUID, S-7	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -07	LIQUID, S-8	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -08	LIQUID, S-9	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -09	LIQUID, S-10	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -10	LIQUID, Dup	06/12/96	TPGBMW Purgeable TPH/BTEX
9606767 -11	LIQUID, EB	06/12/96	TPGBMW Purgeable TPH/BTEX

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 Fenner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-01	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/19/96 Reported: 06/26/96
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QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

**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	48
Benzene	0.50	6.1
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.3
Xylenes (Total)	0.50	1.2
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	72

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

**SEQUOIA ANALYTICAL - ELAP #1210**



Peggy Penner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-02	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/18/96 Reported: 06/26/96
--	--	---

QC Batch Number: GC061896BTEX06A  
Instrument ID: GCHP6

**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	88

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Blaine Technical Services  
985 Timothy Drive  
San Jose, CA 95133

Client Proj. ID: Shell Pleasanton 960612-J1  
Sample Descript: S-4  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9606767-03

Sampled: 06/12/96  
Received: 06/13/96  
Analyzed: 06/19/96  
Reported: 06/26/96

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP19

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	360
Methyl t-Butyl Ether	2.5	92
Benzene	0.50	52
Toluene	0.50	N.D.
Ethyl Benzene	0.50	59
Xylenes (Total)	0.50	14
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 Renner  
Project Manager





Blaine Technical Services	Client Proj. ID: Shell Pleasanton 960612-J1	Sampled: 06/12/96
985 Timothy Drive	Sample Descript: S-5	Received: 06/13/96
San Jose, CA 95133	Matrix: LIQUID	
Attention: Jim Keller	Analysis Method: 8015Mod/8020	Analyzed: 06/19/96
	Lab Number: 9606767-04	Reported: 06/26/96

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	N.D.
Methyl t-Butyl Ether	25	1400
Benzene	5.0	6.0
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	78

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-05	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/19/96 Reported: 06/26/96
Attention: Jim Keller		

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	200
Methyl t-Butyl Ether	2.5	12
Benzene	0.50	2.0
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		C6-C8
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70                      130	78

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Renner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-06	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/18/96 Reported: 06/26/96
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QC Batch Number: GC061896BTEX06A  
Instrument ID: GCHP06

**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	85

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-07	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/18/96 Reported: 06/26/96
Attention: Jim Keller		

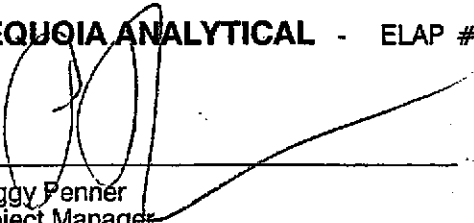
QC Batch Number: GC061896BTEX06A  
Instrument ID: GCHP06

**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	0.50
Chromatogram Pattern:		
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	88

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager







Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: S-9 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-08	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/18/96 Reported: 06/26/96
--	--	---

QC Batch Number: GC061896BTEX06A  
Instrument ID: GCHP06

**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	87

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Blaine Technical Services  
985 Timothy Drive  
San Jose, CA 95133

Client Proj. ID: Shell Pleasanton 960612-J1  
Sample Descript: S-10  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9606767-09

Sampled: 06/12/96  
Received: 06/13/96  
Analyzed: 06/19/96  
Reported: 06/26/96

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

**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	83

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Peggy Renner  
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Pleasanton 960612-J1 Sample Descript: Dup Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9606767-10	Sampled: 06/12/96 Received: 06/13/96  Analyzed: 06/18/96 Reported: 06/26/96
Attention: Jim Keller		

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	125	430
Methyl t-Butyl Ether	6.2	96
Benzene	1.2	54
Toluene	1.2	N.D.
Ethyl Benzene	1.2	72
Xylenes (Total)	1.2	21
Chromatogram Pattern:		C6-C12
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
Trifluorotoluene	70 130	88

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Peggy Penner  
Project Manager





Blaine Technical Services  
985 Timothy Drive  
San Jose, CA 95133

Client Proj. ID: Shell Pleasanton 960612-J1  
Sample Descript: EB  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9606767-11

Sampled: 06/12/96  
Received: 06/13/96  
Analyzed: 06/19/96  
Reported: 06/26/96

QC Batch Number: GC061996BTEX07A  
Instrument ID: GCHP07

**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	83

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.  
985 Timothy Drive  
San Jose, CA 95133  
Attention: Jim Keller

Client Project ID: Shell, Pleasanton / 960612-J1  
Matrix: Liquid

Work Order #: 9606767 -01, 03-05, 09-11

Reported: Jun 27, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061996BTEX07A	GC061996BTEX07A	GC061996BTEX07A	GC061996BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	960657201	960657201	960657201	960657201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/19/96	6/19/96	6/19/96	6/19/96
Analyzed Date:	6/19/96	6/19/96	6/19/96	6/19/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.2	8.3	8.5	25
MS % Recovery:	82	83	85	83
Dup. Result:	8.3	8.3	8.6	25
MSD % Recov.:	83	83	86	83
RPD:	1.2	0.0	1.2	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK061996	BLK061996	BLK061996	BLK061996
Prepared Date:	6/19/96	6/19/96	6/19/96	6/19/96
Analyzed Date:	6/19/96	6/19/96	6/19/96	6/19/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.8	8.8	9.0	27
LCS % Recov.:	88	88	90	90

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

**SEQUOIA ANALYTICAL**

*Peggy Penner*  
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

9606767.BLA <1>





Blaine Tech Services, Inc.  
985 Timothy Drive  
San Jose, CA 95133  
Attention: Jim Keller

Client Project ID: Shell, Pleasanton / 960612-J1  
Matrix: Liquid

Work Order #: 9606767-02, 06-08

Reported: Jun 27, 1996

**QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061896BTEX06A	GC061896BTEX06A	GC061896BTEX06A	GC061896BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	960646105	960646105	960646105	960646105
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/18/96	6/18/96	6/18/96	6/18/96
Analyzed Date:	6/18/96	6/18/96	6/18/96	6/18/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	7.8	7.9	7.9	24
MS % Recovery:	78	79	79	80
Dup. Result:	8.9	8.9	8.9	27
MSD % Recov.:	89	89	89	90
RPD:	13	12	12	12
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK061896	BLK061896	BLK061896	BLK061896
Prepared Date:	6/18/96	6/18/96	6/18/96	6/18/96
Analyzed Date:	6/18/96	6/18/96	6/18/96	6/18/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.7	9.8	30
LCS % Recov.:	97	97	98	100

MS/MSD	60-140	60-140	60-140	60-140
LCS	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

9606767.BLA <2>

