CAMBRIA

October 15, 1996

Jennifer Eberle
Alameda County
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: **Third Quarter 1996**
Shell Service Station
WIC #204-5510-0204
350 Grand Avenue
Oakland, California

Dear Ms. Eberle:

On behalf of Shell Oil Products Company, Cambria Environmental Technology, Inc. (Cambria) is submitting this quarterly monitoring report for the site referenced above in accordance with the requirements specified in 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 (Figure 1). The BTS report describing these activities and the analytical report for the ground water samples are included as Attachment A.
- Cambria calculated ground water elevations (Table 1), compiled the analytic data (Table 2) and prepared a ground water elevation contour map (Figure 1).

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
SUITE B
OAKLAND,
CA 94608
PH: (510) 420-0700
FAX: (510) 420-9170

Anticipated Activities Next Quarter:

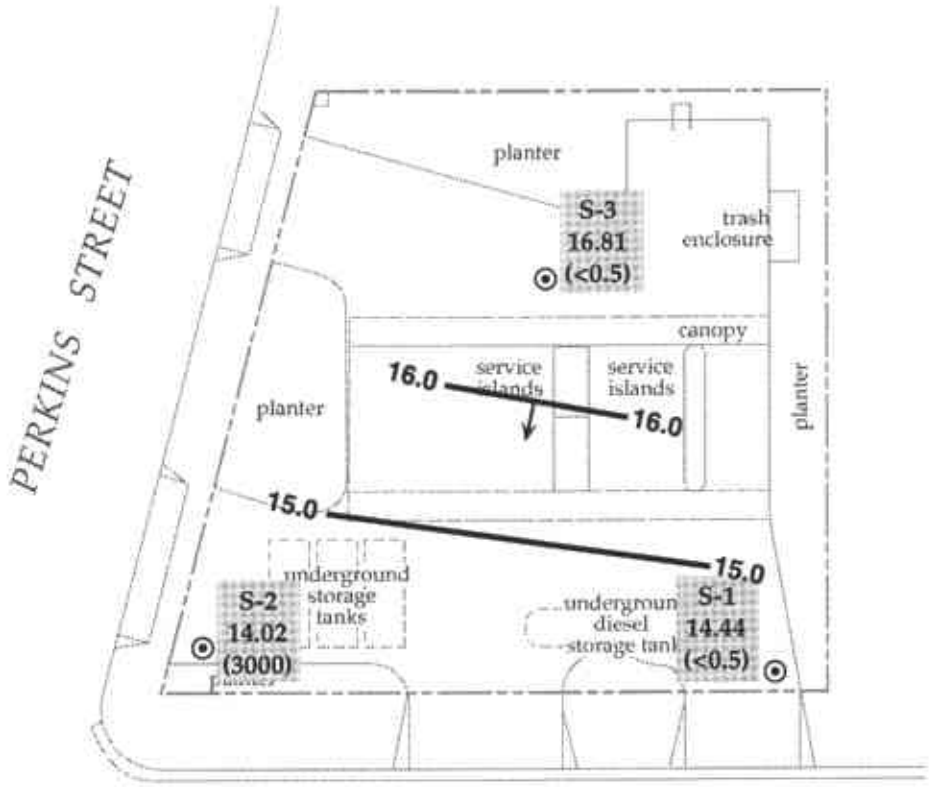
Cambria will submit a report presenting a summary of activities for the upcoming quarter. Please call if you have any questions.

Sincerely,
Cambria Environmental Technology, Inc

N. Scott MacLeod, R.G.
Principal Geologist

Attachments: A - BTS Ground Water Monitoring Report

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



EXPLANATION

- ⊙S-3 Monitoring well
- *xx.xx* / *(xx.xx)* Ground water elevation, ft above mean sea level (msl) (Benzene Concentration in ppb.)
- –xx.x– Ground water elevation contour, ft above msl, approximately located, dashed where inferred
- → Inferred ground water flow direction

N

0 40 ft

Base map from GeoStrategies Inc.

Figure 1. Monitoring Well Location and Ground Water Elevation Contour Map, July 30, 1996 - Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

Well ID	Date	Top-of-Vault Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
S-1	01/23/91	20.84	9.73	11.11
	04/25/91		7.37	13.47
	07/19/91		8.92	11.92
	10/09/91		9.62	11.22
	01/23/92		8.94	11.90
	04/27/92		7.06	13.78
	07/10/92		8.31	12.53
	10/06/92		9.55	11.29
	01/06/93		9.86	10.98
	04/26/93		6.30	14.54
	07/20/93		8.78	12.06
	10/18/93		9.20	11.64
	01/07/94		9.53	11.31
	04/11/94		8.50	12.34
	07/14/94		8.45	12.39
	07/19/94		9.07	11.77
	10/06/94		11.68	9.16
	01/04/95		8.51	12.33
	04/12/95		6.66	14.18
	07/07/95		6.95	13.89
	10/05/95		8.50	12.34
	01/12/96		8.02	12.82
	04/02/96		4.98	15.86
	07/30/96		6.40	14.44
S-2	01/23/91	21.24	10.55	10.69
	04/25/91		8.24	13.00
	07/19/91		9.55	11.69
	10/09/91		10.26	10.98
	01/23/92		9.51	11.73
	04/27/92		7.83	13.41
	07/10/92		8.57	12.67
	10/06/92		9.49	11.75
	01/06/93		8.56	12.68
	04/26/93		6.84	14.40
	07/20/93		8.52	12.72
	10/18/93		9.36	11.88
	01/07/94		8.37	12.87
	04/11/94		6.96	14.28
	07/14/94		7.49	13.75
	07/19/94		8.02	13.22
	10/06/94		11.00	10.24
	01/04/94		8.07	13.17

Table 1. Ground Water Elevations - Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Vault Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	04/12/95		6.12	15.12
	07/07/95		6.35	14.89
	10/05/95		7.36	13.88
	01/12/96		7.64	13.60
	04/02/96		6.18	15.06
	07/30/96		**7.22**	**14.02**
S-3	01/23/91	22.70	14.67	8.03
	04/25/91		12.96	9.74
	07/19/91		12.45	10.25
	10/09/91		12.98	9.72
	01/23/92		13.06	9.64
	04/27/92		7.25	15.45
	07/10/92		8.46	14.24
	10/06/92		11.77	10.93
	01/06/93		12.53	10.17
	04/26/93		4.28	18.42
	07/20/93		5.70	17.00
	10/18/93		10.30	12.40
	01/07/94		12.40	10.30
	04/11/94		10.94	11.76
	07/14/94		7.90	14.80
	07/19/94		8.12	14.58
	10/06/94		12.15	10.55
	01/04/95		11.18	11.52
	04/12/95		3.76	18.94
	07/07/95		4.72	17.98
	10/05/95		5.80	16.90
	01/12/96		7.00	15.70
	04/02/96		3.42	19.28
	07/30/96		**5.89**	**16.81**

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

Sample ID	Date	Depth to Water (ft)	TPH-D	TPH-G	B	E	T	X	MTBE
			← parts per billion (µg/L) →						
WELLS									
S-1	01/23/91	9.73	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/25/91	7.37	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	07/19/91	8.92	<50	<50	6.8	<0.5	<0.5	<0.5	---
	10/09/91	9.62	260[a]	120	10	<0.5	<0.5	<0.5	---
	01/23/92	8.94	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/27/92	7.06	70[b]	<50	1.2	<0.5	<0.5	<0.5	---
	07/10/92	8.31	930	<50	13	<0.5	<0.5	<0.5	---
	10/06/92	9.55	110	62	<0.5	<0.5	<0.5	<0.5	---
	01/06/93	9.86	81	85	1.1	<0.5	<0.5	<0.5	---
	04/26/93	6.30	53[c]	<50	<0.5	<0.5	<0.5	<0.5	---
	04/26/93[dup]	6.30	53[c]	<50	<0.5	<0.5	<0.5	<0.5	---
	07/20/93	8.78	140	<50	<0.5	<0.5	<0.5	<0.5	---
	10/18/93	9.20	210	<50	<0.5	<0.5	<0.5	<0.5	---
	01/07/94	9.53	<50	<50	1.4	0.55	1.5	2.8	---
	01/07/94[dup]	9.53	53	<50	1.2	<0.5	1.5	2.7	---
	04/11/94	8.50	320	<50	2.8	<0.5	<0.5	<0.5	---
	04/11/94[dup]	8.50	220	<50	2.6	<0.5	<0.5	<0.5	---
	07/19/94	9.07	110	<50	<0.5	<0.5	<0.5	<0.5	---
	10/06/94	11.68	370	110	1.4	<0.5	<0.5	<0.5	---
	01/04/95	8.51	1,000	120	2.5	1.5	<0.5	1.7	---
	04/12/95	6.66	290	<50	2.1	<0.5	<0.5	<0.5	---
	04/12/95[dup]	6.66	480	<50	<0.5	<0.5	<0.5	<0.5	---
	07/07/95	6.95	370	<50	5.5	<0.5	<0.5	<0.5	---
	07/07/95[dup]	6.95	450	<50	6.5	<0.5	<0.5	<0.5	---
	10/05/95	8.50	200	<50	3.9	<0.5	1.2	2.4	---
	01/12/96	8.02	1,500	230	2.5	0.9	<0.5	0.6	---
	04/02/96	4.98	2,000	95	0.91	<0.5	<0.5	<0.5	---
	07/30/96	**6.40**	**510**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**67**
	07/30/96[dup]	**6.40**	**380**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**68**

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0204, 350 Grand Avenue, Oakland, California (continued)

Sample ID	Date	Depth to Water (ft)	TPH-D	TPH-G	B	E	T	X	MTBE
			← parts per billion (µg/L) →						
S-2	01/23/91	10.55	1,200	2,500	550	33	15	42	---
	04/25/91	8.24	20,000[b]	32,000	2,900	1,400	480	2,300	---
	07/19/91	9.55	30,000[b]	21,000	4,700	1,200	430	2,400	---
	10/09/91	10.26	32,000[b]	29,000	6,300	1,700	510	2,400	---
	01/23/92	9.51	36,000[b]	31,000	5,800	2,000	480	2,700	---
	04/27/92	7.83	12,000[b]	21,000[d]	4,800	1,600	320	1,400	---
	07/10/92	8.57	3,700[e]	31,000	7,500	3,400	940	3,500	---
	10/06/92	9.49	4,500[e]	57,000	9,300	4,000	1,200	4,900	---
	01/06/93	8.56	5,600	55,000	5,600	3,000	360	3,000	---
	04/26/93	6.84	9,400[e]	32,000	10,000	4,400	500	3,600	---
	07/20/93	8.52	8,400[e]	25,000	5,800	2,700	300	1,400	---
	07/20/93[dup]	8.52	8,900[e]	25,000	5,900	2,800	310	1,400	---
	10/18/93	9.36	18,000[e]	23,000	3,700	2,100	200	1,600	---
	10/18/93[dup]	9.36	14,000[e]	28,000	3,700	2,100	210	1,600	---
	01/07/94	8.37	22,000[e]	120,000	6,900	3,100	400	2,600	---
	04/11/94	6.96	17,000[e]	34,000	4,800	1,900	170	880	---
	07/19/94	8.02	---	23,000	4,300	1,100	210	1,000	---
	07/19/94[dup]	8.02	---	29,000	4,700	1,200	270	1,200	---
	10/06/94	11.00	---	61,000	4,600	1,900	290	1,900	---
	10/06/94[dup]	11.00	---	52,000	5,200	2,100	270	1,900	---
	01/04/95	8.07	---	23,000	4,500	1,300	49	500	---
	01/04/95[dup]	8.07	---	18,000	3,800	1,100	33	390	---
	04/12/95	6.12	---	29,000	4,300	990	210	700	---
	07/07/95	6.35	---	26,000	4,200	1,100	180	730	---
	10/05/95	7.36	10,000	26,000	3,500	1,100	150	640	---
	10/05/95[dup]	7.36	9,400	33,000	4,200	1,500	210	850	---
	01/12/96	7.64	13,000	36,000	4,100	1,400	240	790	---
	01/12/96[dup]	7.64	11,000	40,000	4,100	1,400	260	860	---

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0204, 350 Grand Avenue, Oakland, California (continued)

Sample ID	Date	Depth to Water (ft)	TPH-D	TPH-G	B	E	T	X	MTBE
			← parts per billion (µg/L) →						
	04/02/96	6.18	7,300	12,000	1,300	460	120	150	--- by 8020
	04/02/96[dup]	6.18	---	17,000	1,800	590	29	140	by 8260
	07/30/96	**7.22**	**13,000**	**18,000**	**3,000**	**1,200**	**100**	**420**	**17,000*** 19,000
S-3	01/23/91	14.67	---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/25/91	12.96	---	<50	<0.5	<0.5	<0.5	<0.5	---
	07/19/91	12.45	---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/09/91	12.98	---	<50	<0.5	<0.5	<0.5	<0.5	---
	01/23/92	13.06	---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/27/92	7.25	100	<50	<0.5	<0.5	<0.5	<0.5	---
	07/10/92	8.46	68	<50	<0.5	<0.5	<0.5	<0.5	---
	10/06/92	11.77	<10	<50	<0.5	<0.5	<0.5	<0.5	---
	01/06/93	12.53	<10	<50	<0.5	<0.5	<0.5	<0.5	---
	04/26/93	4.28	69	<50	<0.5	<0.5	<0.5	<0.5	---
	07/20/93	5.70	120	<50	<0.5	<0.5	0.6	<0.5	---
	10/18/93	10.30	160	<50	<0.5	<0.5	<0.5	<0.5	---
	01/07/94[f]	12.40	58	160	59	4.9	26	22	---
	04/11/94	10.94	<50	<50	<0.52	<0.5	<0.5	<0.5	---
	07/19/94	8.12	110[a]	<50	<0.5	<0.5	<0.5	<0.5	---
	10/06/94	12.15	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	01/04/95	11.18	<50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/12/95	3.76	110	<50	<0.5	<0.5	<0.5	<0.5	---
	07/07/95	4.72	410	<50	<0.5	<0.5	<0.5	<0.5	---
	10/05/95	5.80	160	<50	<0.5	<0.5	<0.5	<0.5	---
	01/12/96	7.00	<50	100	<0.5	<0.5	<0.5	<0.5	---
	04/02/96	3.42	170	<50	<0.5	<0.5	<0.5	<0.5	---
	07/30/96	**5.89**	**92**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**4.3**
HP-1	01/27/93		14,000	22,000	2,500	1,400	130	140	---

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0204, 350 Grand Avenue, Oakland, California (continued)

Sample ID	Date	Depth to Water (ft)	TPH-D	TPH-G	B	E	T	X	MTBE
			← parts per billion (µg/L) →						
HP-2	01/27/93		---	<50	<0.5	<0.5	4.4	<0.5	---
HP-3	01/27/93		---	<50	<0.5	<0.5	<0.5	<0.5	---
Trip Blank	01/23/91		---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/25/91		---	---	---	---	---	---	---
	07/19/91		---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/09/91		---	---	---	---	---	---	---
	01/23/92		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/26/93		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	07/20/93		---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/18/93		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	01/07/94		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	04/11/94		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	07/19/94		<50	<50	<0.5	<0.5	<0.5	<0.5	---
	10/06/94		---	<50	<0.5	<0.5	<0.5	<0.5	---
	01/04/95		---	<50	<0.5	<0.5	<0.5	<0.5	---
	04/12/95		---	<50	<0.5	<0.5	<0.5	<0.5	---
	07/07/95		---	<50	<0.5	<0.5	<0.5	<0.5	---
	10/05/95		---	<50	<0.5	<0.5	<0.5	<0.5	---
	01/12/96		---	<50	<0.5	<0.5	<0.5	<0.5	---
DTSC MCLs				NE	1	680	100[g]	1,750	NE

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-5510-0303, 5755 Broadway, Oakland, 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
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
--- = Not analyzed
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = Not established
<n = Not detected at detection limits of n ppb
dup = Duplicate sample
HP = Hydropunch ground water sample

Notes:

a = compounds detected and calculated as diesel are not characteristic of the standard diesel chromatographic pattern
b = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline
c = Concentration reported as diesel primarily due to the presence of a heavier petroleum product, possibly motor oil
d = Compounds detected and calculated as gasoline are not characteristic of the standard gasoline chromatographic pattern
e = Concentration reported as diesel is primarily due to the presence of lighter petroleum product, possibly gasoline
f = TPH-G/BETX concentrations anomalous with historical data. Lab verified concentrations.
g = DTSC recommended action level for drinking water; MCL not established
* = MTBE confirmed by EPA Method 8260

BLAINE
TECH SERVICES INC.

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

August 20, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-5510-0204
350 Grand Avenue
Oakland, California

3rd Quarter 1996

Quarterly Groundwater Monitoring Report 960730-J-1

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-1 *	7/30/96	TOB	--	NONE	--	--	6.40	17.71
S-2.	7/30/96	TOB	SHEEN/ODOR	--	--	--	7.22	15.01
S-3	7/30/96	TOB	--	NONE	--	--	5.89	15.02

* Sample DUP was a duplicate sample taken from well S-1.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960730-51

Date:
Page 1 of 1

Site Address: 350 Grand Avenue, Oakland

WIC#: 204-5510-0204

Shell Engineer: ~~Dan Kirk~~ R. Jeff Granberry — Phone No.: (510) 675-6168 Fax #: 675-6172

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:

Printed Name: Matt Sqares

LAB: ~~Anametrix~~ SEQ

CHECK ONE (1) BOX ONLY	C1/D1	TURN AROUND TIME
Quarterly Monitoring	X 6441	24 hours
Site Investigation	6441	48 hours
Soil Closure/Disposal	6442	15 days X (Normal)
Water Closure/Disposal	6443	Other
Soil/Air Rem. or Sys. O & M	6462	NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.
Water Rem. or Sys. O & M	6463	
Other		

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	MTBE *	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
1 S-1	7/30			W		5		X				X	X						* Confirm
2 S-2						5		X				X	X						Highest MTBE
3 S-3						5		X				X	X						Hit by
4 EB						5		X				X	X						EPA 8260
5 Dup						5		X				X	X						

960730538

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
		7-31-96	1035		Dawn Howe	7-31-96	1035
	Dawn Howe	7-31-96	1150				
					Rich Hertling	7/31/96	1150

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Project: Shell, Oakland, 960730-J1

Enclosed are the results from samples received at Sequoia Analytical on July 31, 1996. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9607J38 -01	LIQUID, S-1	07/30/96	TPHD_W Extractable TPH
9607J38 -01	LIQUID, S-1	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J38 -02	LIQUID, S-2	07/30/96	TPHD_W Extractable TPH
9607J38 -02	LIQUID, S-2	07/30/96	MTBEMW Methyl t-Butyl Ethe
9607J38 -02	LIQUID, S-2	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J38 -03	LIQUID, S-3	07/30/96	TPHD_W Extractable TPH
9607J38 -03	LIQUID, S-3	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J38 -04	LIQUID, EB	07/30/96	TPHD_W Extractable TPH
9607J38 -04	LIQUID, EB	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J38 -05	LIQUID, Dup	07/30/96	TPHD_W Extractable TPH
9607J38 -05	LIQUID, Dup	07/30/96	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 Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-1	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 08/06/96
	Analysis Method: EPA 8015 Mod	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J38-01	Reported: 08/16/96

QC Batch Number: GC080696OHBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**510**
Chromatogram Pattern:		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	135

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-1	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J38-01	Reported: 08/16/96

QC Batch Number: GC080696BTEX07A
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**	**67**
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	81

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-2	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 08/06/96
	Analysis Method: EPA 8015 Mod	Analyzed: 08/13/96
Attention: Jim Keller	Lab Number: 9607J38-02	Reported: 08/16/96

QC Batch Number: GC080696OHBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**250**	**13000**
Chromatogram Pattern:		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	167 Q

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: G-2	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8260	Analyzed: 08/14/96
Attention: Jim Keller	Lab Number: 9607J38-02	Reported: 08/16/96

QC Batch Number: MS0808968260H6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	200	[illegible]

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	100
Toluene-d8	88	110	101
4-Bromofluorobenzene	86	115	99

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-2	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J38-02	Reported: 08/16/96

QC Batch Number: GC080696BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**5000**	**18000**
Methyl t-Butyl Ether	**250**	**17000**
Benzene	**50**	**3000**
Toluene	**50**	**100**
Ethyl Benzene	**50**	**1200**
Xylenes (Total)	**50**	**420**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-3	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 08/06/96
	Analysis Method: EPA 8015 Mod	Analyzed: 08/08/96
Attention: Jim Keller	Lab Number: 9607J38-03	Reported: 08/16/96

QC Batch Number: GC080696OHBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	92
Chromatogram Pattern:		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	107

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: S-3	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/07/96
Attention: Jim Keller	Lab Number: 9607J38-03	Reported: 08/16/96

QC Batch Number: GC080796BTEX07A
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**	**4.3**
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	79

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: EB	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 08/06/96
	Analysis Method: EPA 8015 Mod	Analyzed: 08/08/96
Attention: Jim Keller	Lab Number: 9607J38-04	Reported: 08/16/96

QC Batch Number: GC080696OHBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	111

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: EB	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J38-04	Reported: 08/16/96

QC Batch Number: GC080696BTEX18A
Instrument ID: GCHP18

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	80

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: Dup	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	Extracted: 08/06/96
	Analysis Method: EPA 8015 Mod	Analyzed: 08/08/96
Attention: Jim Keller	Lab Number: 9607J38-05	Reported: 08/16/96

QC Batch Number: GC080696OHBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**380**
Chromatogram Pattern:		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	107

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, (415) 364-9600, FAX (415) 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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J1	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: Dup	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/07/96
Attention: Jim Keller	Lab Number: 9607J38-05	Reported: 08/16/96

QC Batch Number: GC080796BTEX07A
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**	**68**
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	77

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, (415) 364-9600, FAX (415) 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, Inc.	Client Project ID:	Shell, Oakland / 960730-J1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9607J38 -02	Reported: Aug 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N/A	N/A	N/A	N/A	N/A
Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	960805201	960805201	960805201	960805201	960805201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	-	-	-	-	-
Analyzed Date:	8/8/96	8/8/96	8/8/96	8/8/96	8/8/96
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	47	48	50	48	48
MS % Recovery:	94	96	100	96	96
Dup. Result:	45	46	50	47	48
MSD % Recov.:	90	92	100	94	96
RPD:	4.3	4.3	0.0	2.1	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	VDB081496	VDB081496	VDB081496	VDB081496	VDB081496
Prepared Date:	8/13/96	8/13/96	8/13/96	8/13/96	8/13/96
Analyzed Date:	8/14/96	8/14/96	8/14/96	8/14/96	8/14/96
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	45	47	47	49	49
LCS % Recov.:	90	94	94	98	98
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	65-135	70-130	70-130	70-130	70-130

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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, Inc.	Client Project ID:	Shell, Oakland / 960730-J1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9607J38-01-05	Reported: Aug 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0806960HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	J. Minkel
MS/MSD #:	9607J3801
Sample Conc.:	510
Prepared Date:	8/6/96
Analyzed Date:	8/7/96
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
Result:	1400
MS % Recovery:	89
Dup. Result:	1400
MSD % Recov.:	89
RPD:	0.0
RPD Limit:	0-50

LCS #:	BLK080696
Prepared Date:	8/6/96
Analyzed Date:	8/7/96
Instrument I.D.#:	GCHP4
Conc. Spiked:	1000 µg/L
LCS Result:	1000
LCS % Recov.:	100

MS/MSD	50-150
LCS	60-140
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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Shell, Oakland / 960730-J1
Matrix: Liquid
Work Order #: 9607J38-02, 04

Reported: Aug 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080696BTEX18A	GC080696BTEX18A	GC080696BTEX18A	GC080696BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Heider	J. Heider	J. Heider	J. Heider
MS/MSD #:	9607G4903	9607G4903	9607G4903	9607G4903
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.4	8.4	8.3	25
MS % Recovery:	84	84	83	84
Dup. Result:	8.6	8.6	8.5	26
MSD % Recov.:	86	86	85	85
RPD:	2.4	2.4	2.4	1.6
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.1	9.1	9.0	27
LCS % Recov.:	91	91	90	91
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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, Inc.	Client Project ID:	Shell, Oakland / 960730-J1	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9607J38-01	Reported: Aug 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080696BTEX07A	GC080696BTEX07A	GC080696BTEX07A	GC080696BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Heider	J. Heider	J. Heider	J. Heider
MS/MSD #:	9607G4901	9607G4901	9607G4901	9607G4901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	8.4	8.5	25
MS % Recovery:	85	84	85	84
Dup. Result:	8.1	8.0	8.0	24
MSD % Recov.:	81	80	80	80
RPD:	4.8	4.9	6.1	5.3
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.4	8.3	8.3	25
LCS % Recov.:	84	83	83	83
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Shell, Oakland / 960730-J1
Matrix: Liquid
Work Order #: 9607J38-03, 05

Reported: Aug 16, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080796BTEX07A	GC080796BTEX07A	GC080796BTEX07A	GC080796BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Heider	J. Heider	J. Heider	J. Heider
MS/MSD #:	9607G4901	9607G4901	9607G4901	9607G4901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/7/96	8/7/96	8/7/96	8/7/96
Analyzed Date:	8/7/96	8/7/96	8/7/96	8/7/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.0	8.0	8.1	24
MS % Recovery:	80	80	81	80
Dup. Result:	8.0	7.9	8.1	24
MSD % Recov.:	80	79	81	80
RPD:	0.0	1.3	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/7/96	8/7/96	8/7/96	8/7/96
Analyzed Date:	8/7/96	8/7/96	8/7/96	8/7/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.2	8.2	8.4	25
LCS % Recov.:	82	82	84	83
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

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