enviros®

March 5, 1996

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

RE: **Quarterly Monitoring Report - First Quarter 1996**
Former Shell Service Station
461 8th Street
Oakland, California
WIC #204-5508-6205

Dear Mr. Granberry:

This Quarterly Monitoring Report describes the recently completed activities associated with groundwater 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 Alameda County Health Care Services Agency (ACHCSA).

Quarterly Monitoring & Sampling Summary

Groundwater monitoring and sampling for the first quarter of 1996 are summarized below:

- Blaine Tech Services, Inc. (Blaine) of San Jose, California measured groundwater levels in the Wells S-4 through S-6, S-8, and S-10 and collected groundwater samples from Wells S-4, S-6, S-8, and S-10 on January 3, 1996. The samples were transported to National Environmental Testing (NET) of Santa Rosa, California for chemical analysis. Well S-9 was inaccessible this quarter.

- Enviros, Inc. (Enviros) evaluated water-level measurement data and prepared a groundwater contour map (Plate 2). Groundwater flow direction appears to be southerly with an approximate hydraulic gradient of 0.007.

- TPH-G concentration in groundwater samples collected the wells ranged from ND to 52,000 ppb. Benzene concentrations ranged from 0.6 to 9,100 ppb. A benzene concentration map was prepared and is presented on Plate 2.

- Hydrocarbon absorbent booms have been installed in Well S-5 to collect separate phase (SP) hydrocarbons.

Quarterly Sampling

Monitoring Wells S-4, S-6, S-8, and S-10 were sampled and analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-G) according to EPA Method 8015 (Modified) and benzene, toluene, ethylbenzene and xylenes (BTEX) according to EPA Method 8020. Additionally, a duplicate sample and a rinsate blank were prepared and analyzed for quality control purposes.

SP hydrocarbon removal data are summarized in Table 1. Field monitoring data and chemical analytical data for TPH-G and BTEX are summarized in Table 2. Blaine's quarterly groundwater sampling report is presented in Appendix A.

Quarterly monitoring, sampling, and reporting will continue on the established schedule.

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

Sincerely,

Enviros, Inc.

J. Wander for

Matthew E. Donohue
Project Engineer

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

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

Attachments

Table 1. Separate Phase Hydrocarbon Recovery
Table 2. Well Concentrations

Plate 1. Vicinity Map
Plate 2. Groundwater Contour/Benzene Concentration Map

Appendix A

Blaine - Quarterly Groundwater Sampling Report

cc: Ms. Jennifer Eberle, Alameda County Health Care Services Agency
Mr. Rory Campbell, Hanson, Bridgett, Marcus, Vlahos & Rudy

TABLE 1

SEPARATE PHASE HYDROCARBON RECOVERY

FORMER SHELL SERVICE STATION
461 8TH STREET
OAKLAND, CALIFORNIA
WIC #204-5508-6205

WELL NO.	MONT. DATE	PRODUCT THICKNESS (FEET)	VOLUME REMOVED (GAL)	RECOVERY TO DATE (GAL)
S-5	13-May-93	0.27	0	0
	22-Jul-93	0.25	200	200
	20-Oct-93	0.23	200	400
	25-Jan-94	0.18	150	550
	25-Apr-94	0.35	36	586
	26-May-94	0.35	130	716
	16-Jun-94	0.32	50	766
	21-Jul-94	0.47	50	816
	25-Aug-94	0.44	80	896
	22-Sep-94	0.15	45	941
	24-Oct-94	0.56	40	981
	29-Nov-94	1.13	85	1066
	22-Dec-94	0.99	0	1066
	3-Jan-95	1.21	40	1106
	22-Feb-95	0.60	60	1166
	31-Mar-95	0.02	40	1206
	20-Apr-95	0.33	60	1266
	26-May-95	0.28	50	1316
	30-Jun-95*	0.02	60	1376
	4-Oct-95	0	0	1376
	3-Jan-96	[illegible]	0	1376

Notes:
1. "Volume Removed" and "Recovery to Date" refer to a mixture of separate phase hydrocarbon and groundwater.
2. * = Product removal by pumping discontinued after 30-Jun-95. Product recovery boom subsequently installed in well.

TABLE 2

WELL CONCENTRATIONS
Shell Oil Products Company
461 8th Street
Oakland, California
WIC# 204-5508-6205

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPH-G (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	dO (ppm)	dO method	Comments
S-4		**Top casing elevation (ft):**		**93.51**								
26-Oct-88	NA	NA	NA	130	NA	3.8	13	4	30	NA	NA	
14-Feb-89	12.82	80.69	0.00	<50	NA	0.5	<1	<1	3	NA	NA	
01-May-89	16.48	77.03	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
27-Jul-89	15.84	77.67	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
05-Oct-89	15.98	77.53	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
09-Jan-90	15.86	77.65	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
30-Apr-90	14.48	79.03	0.00	<50	NA	<0.5	<0.5	<0.5	<1	NA	NA	
31-Jul-90	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
30-Oct-90	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
06-May-91	15.23	78.28	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
27-Jun-91	13.54	79.97	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	
24-Sep-91	15.85	77.66	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
07-Nov-91	15.60	77.91	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
13-Feb-92	14.27	79.24	0.00	<50	NA	<0.5	<0.5	<0.5	3	NA	NA	
11-May-92	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Dry Well
03-Dec-92	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
13-May-93	14.81	78.70	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
22-Jul-93	14.42	79.09	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
20-Oct-93	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
25-Jan-94	14.60	78.91	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
25-Apr-94	14.39	79.12	0.00	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
21-Jul-94	22.29	71.22	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	
24-Oct-94	22.72	70.79	0.00	<500	NA	<0.3	<0.3	<0.3	<0.6	NA	NA	
S-4		**New top casing elevation (ft):**			**25.77**							
22-Dec-94	22.25	3.52	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	
20-Apr-95	21.16	4.61	0.00	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	
04-Oct-95	22.25	3.52	0.00	<50	NA	1.2	0.7	<0.5	<0.5	NA	NA	
05-Jan-96	23.28	2.49	0.00	<50	NA	[redacted]	<0.5	<0.5	1.7	NA	NA	
S-5		**Top casing elevation (ft):**		**99.36**								
16-Apr-87	NA	NA	NA	130000	NA	15000	16000	NA	14000	NA	NA	Ethylbenzene and xylenes
26-Oct-88	NA	NA	NA	110000	NA	20000	25000	2300	10000	NA	NA	combined
14-Feb-89	19.87	79.49	0.00	94000	NA	16000	21000	1800	10000	NA	NA	
01-May-89	21.23	78.13	0.00	120000	NA	29000	35000	3100	15000	NA	NA	

TABLE 2

WELL CONCENTRATIONS
Shell Oil Products Company
461 8th Street
Oakland, California
WIC# 204-5508-6205

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPH-G (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	dO (ppm)	dO method	Comments
27-Jul-89	20.41	78.95	0.00	110000	NA	20000	29000	2400	14000	NA	NA	
05-Oct-89	20.43	78.94	0.01	NS	NS	NS	NS	NS	NS	NS	NS	
09-Jan-90	21.16	78.21	0.01	NS	NS	NS	NS	NS	NS	NS	NS	
30-Apr-90	20.96	78.40	0.00	100000	NA	13000	22000	2100	11000	NA	NA	
31-Jul-90	20.88	78.48	0.00	53000	NA	8300	14000	1200	7400	NA	NA	
30-Oct-90	21.96	77.42	0.03	NS	NS	NS	NS	NS	NS	NS	NS	
06-May-91	23.00	76.46	0.13	NS	NS	NS	NS	NS	NS	NS	NS	
27-Jun-91	20.53	78.85	0.03	NS	NS	NS	NS	NS	NS	NS	NS	
24-Sep-91	21.40	78.01	0.06	NS	NS	NS	NS	NS	NS	NS	NS	
07-Nov-91	21.33	78.23	0.25	NS	NS	NS	NS	NS	NS	NS	NS	
13-Feb-92	22.52	77.09	0.31	NS	NS	NS	NS	NS	NS	NS	NS	
11-May-92	22.46	77.36	0.58	NS	NS	NS	NS	NS	NS	NS	NS	
03-Dec-92	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	Well Inaccessible
13-May-93	22.22	77.36	0.27	NS	NS	NS	NS	NS	NS	NS	NS	
22-Jul-93	21.68	77.88	0.25	NS	NS	NS	NS	NS	NS	NS	NS	
20-Oct-93	20.51	79.03	0.23	NS	NS	NS	NS	NS	NS	NS	NS	
25-Jan-94	21.93	77.57	0.18	NS	NS	NS	NS	NS	NS	NS	NS	
25-Apr-94	21.97	77.67	0.35	NS	NS	NS	NS	NS	NS	NS	NS	
26-May-94	22.18	77.46	0.35	NS	NS	NS	NS	NS	NS	NS	NS	
10-Jun-94	NA	NA	0.32	NS	NS	NS	NS	NS	NS	NS	NS	
21-Jul-94	22.18	77.56	0.47	NS	NS	NS	NS	NS	NS	NS	NS	
25-Aug-94	NA	NA	0.44	NS	NS	NS	NS	NS	NS	NS	NS	
22-Sep-94	NA	NA	0.15	NS	NS	NS	NS	NS	NS	NS	NS	
24-Oct-94	NA	NA	0.56	NS	NS	NS	NS	NS	NS	NS	NS	
S-5		**New top casing elevation (ft):**			**22.94**							
22-Dec-94	22.88	77.27	0.99	NS	NS	NS	NS	NS	NS	NS	NS	
20-Apr-95	21.66	77.96	0.33	NS	NS	NS	NS	NS	NS	NS	NS	
04-Oct-95	22.18	77.18	0.00	NS	NS	NS	NS	NS	NS	NS	NS	
09-Jan-96	22.80	77.22	0.33	NS	NS	NS	NS	NS	NS	NS	NS	

S-6		**Top casing elevation (ft):**		**100.58**								
16-Apr-87	NA	NA	0.00	81000	NA	16000	9000	NA	6400	NA	NA	Ethylbenzene and xylenes
26-Oct-88	NA	NA	0.00	110000	NA	29000	18000	2500	8200	NA	NA	combined
14-Feb-89	20.87	79.71	0.00	54000	NA	18000	4500	1400	4000	NA	NA	
01-May-89	20.49	80.09	0.00	93000	NA	43000	9900	3000	8000	NA	NA	

TABLE 2

WELL CONCENTRATIONS
Shell Oil Products Company
461 8th Street
Oakland, California
WIC# 204-5508-6205

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPH-G (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	dO (ppm)	dO method	Comments
27-Jul-89	21.01	79.57	0.00	52000	NA	20000	3200	1700	5500	NA	NA	
05-Oct-89	21.24	79.34	0.00	55000	NA	20000	2900	1600	5500	NA	NA	
09-Jan-90	22.62	77.96	SHEEN	76000	NA	35000	9100	2300	8600	NA	NA	
30-Apr-90	22.10	78.48	0.00	39000	NA	13000	2300	900	2800	NA	NA	
31-Jul-90	22.00	78.58	0.00	48000	NA	20000	4600	1500	4900	NA	NA	
30-Oct-90	22.14	78.44	0.00	27000	NA	7400	900	600	1400	NA	NA	
06-May-91	22.40	78.18	0.00	35000	NA	3900	2700	2300	3500	NA	NA	
27-Jun-91	21.21	79.37	0.00	51000	NA	19000	5600	1700	6300	NA	NA	
24-Sep-91	22.26	78.32	0.00	42000	NA	14000	4300	1200	4000	NA	NA	
07-Nov-91	22.35	78.23	0.00	39000	NA	11000	2000	800	2300	NA	NA	
13-Feb-92	22.28	78.30	0.00	64000	NA	21000	6200	1600	5100	NA	NA	
11-May-92	22.10	78.48	0.00	57000	NA	22000	7600	2200	7700	NA	NA	
03-Dec-92	22.14	78.44	0.00	110000	NA	26000	9400	2100	8700	NA	NA	
13-May-93	22.16	78.42	0.00	58000	NA	21000	6800	2500	9800	NA	NA	
22-Jul-93	21.64	78.94	0.00	70000	NA	31000	14000	3000	13000	NA	NA	
20-Oct-93	21.62	78.96	0.00	48000	NA	28000	9800	3200	12000	NA	NA	
25-Jan-94	21.80	78.78	0.00	70000	NA	23000	7500	2500	8000	NA	NA	
25-Apr-94	21.68	78.90	0.00	61000	NA	16000	4000	1800	5100	NA	NA	
21-Jul-94	21.78	78.80	0.00	44000	NA	8200	3600	1400	3900	NA	NA	
24-Oct-94	22.06	78.52	0.00	2936	NA	1184	440.6	163.4	648.4	NA	NA	
S-6		**New top casing elevation (ft):**			**22.08**							
22-Dec-94	21.91	0.17	0.00	32000	NA	7000	2900	790	2400	NA	NA	
20-Apr-95	21.38	0.70	0.00	56000	NA	15000	3800	1900	4900	NA	NA	
04-Oct-95	21.80	0.28	0.00	49000	NA	8400	4700	1800	4800	NA	NA	
09-Jan-96	21.70	0.38	0.00	52000	NA	7100	7100	1800	5800	NA	NA	

S-6 (DUP)		**Top casing elevation : 22.08**										
21-Jul-94	21.78	0.30	0.00	32000	NA	7800	3400	1300	3700	NA	NA	
24-Oct-94	22.06	0.02	0.00	2968	NA	770.8	325.3	144.1	622	NA	NA	
22-Dec-94	21.91	0.17	0.00	32000	NA	8,000	3,800	1,100	3,400	NA	NA	
20-Apr-95	21.38	0.70	0.00	49000	NA	13000	3500	1800	4700	NA	NA	
04-Oct-95	21.80	0.28	0.00	41000	NA	8400	4100	1400	4400	NA	NA	

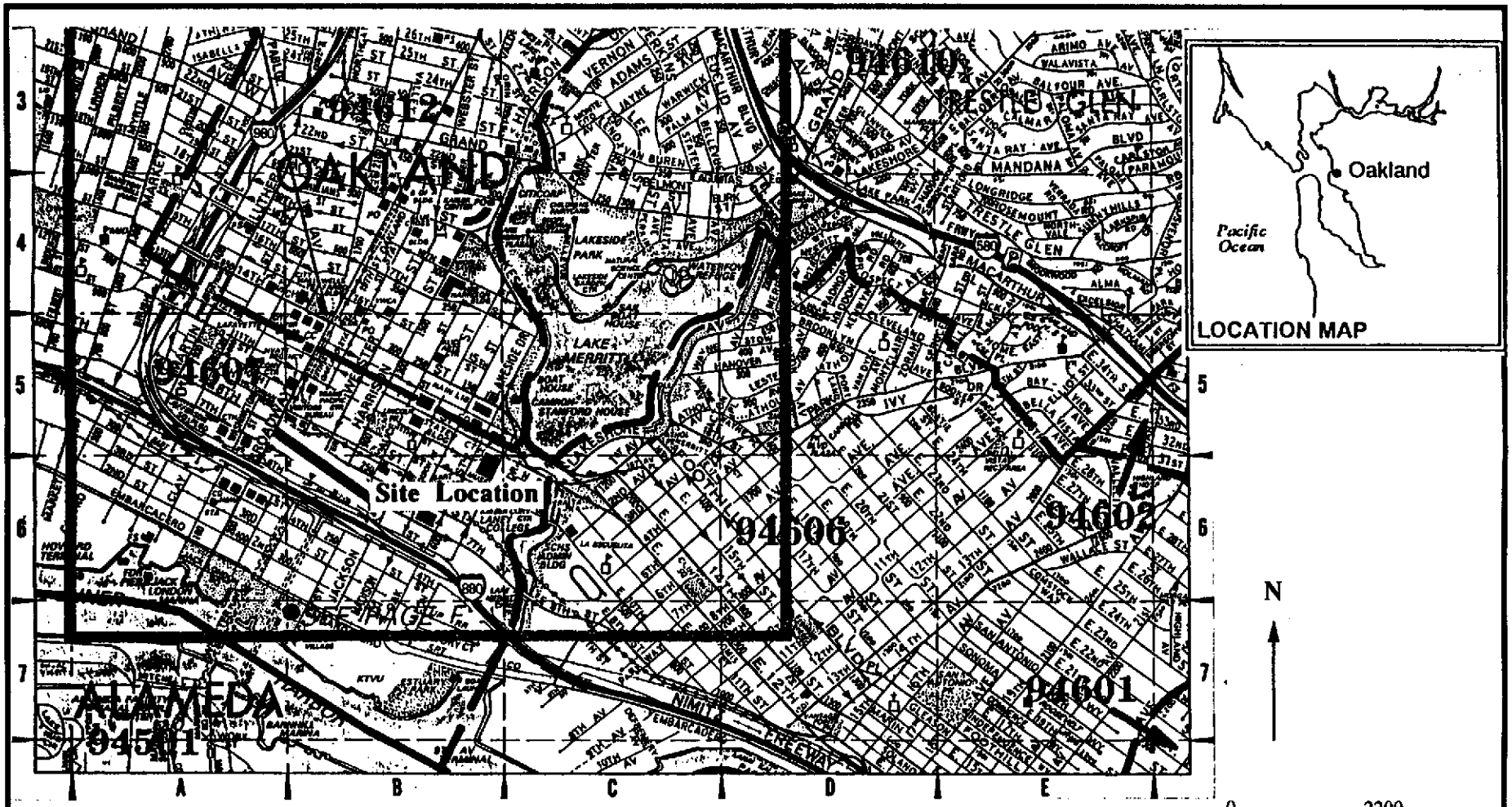
TABLE 2

WELL CONCENTRATIONS
Shell Oil Products Company
461 8th Street
Oakland, California
WIC# 204-5508-6205

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPH-G (ug/L)	TPH-D (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	dO (ppm)	dO method	Comments
onsite wells												
S-8		**Top casing elevation (ft):**		**27.21**								
22-Dec-94	24.87	2.34	0.00	600	NA	120	32	5.2	34	NA	NA	
20-Apr-95	23.90	3.31	0.00	460	NA	180	23	5.2	21	NA	NA	
04-Oct-95	24.48	2.73	0.00	830	NA	210	38	11	42	NA	NA	
09-Jan-96	24.62	2.59	0.00	950	NA	81	12	2.5	12	NA	NA	
S-8 (DUP)		**Top casing elevation (ft):**		**27.21**								
03-Jan-96	24.62	2.59	0.00	340	NA	54	12	2.4	12	NA	NA	
S-9		**Top casing elevation (ft):**		**26.06**								
22-Dec-94	24.37	1.69	0.00	2600	NA	400	150	42	310	NA	NA	
20-Apr-95	23.49	2.57	0.00	1900	NA	400	130	51	200	NA	NA	
04-Oct-95	24.01	2.05	0.00	3200	NA	590	260	68	280	NA	NA	
09-Jan-96	NA	NA	0.00	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccesible
S-10		**Top casing elevation (ft):**		**28.04**								
22-Dec-94	25.84	2.20	0.00	420	NA	27	8.0	18	45	NA	NA	
20-Apr-95	24.92	3.12	0.00	820	NA	49	3.7	97	52	NA	NA	
04-Oct-95	25.47	2.57	0.00	240	NA	6.5	1.1	16	12	NA	NA	
09-Jan-96	25.60	2.44	0.00	1100	NA	17	4.9	110	70	NA	NA	

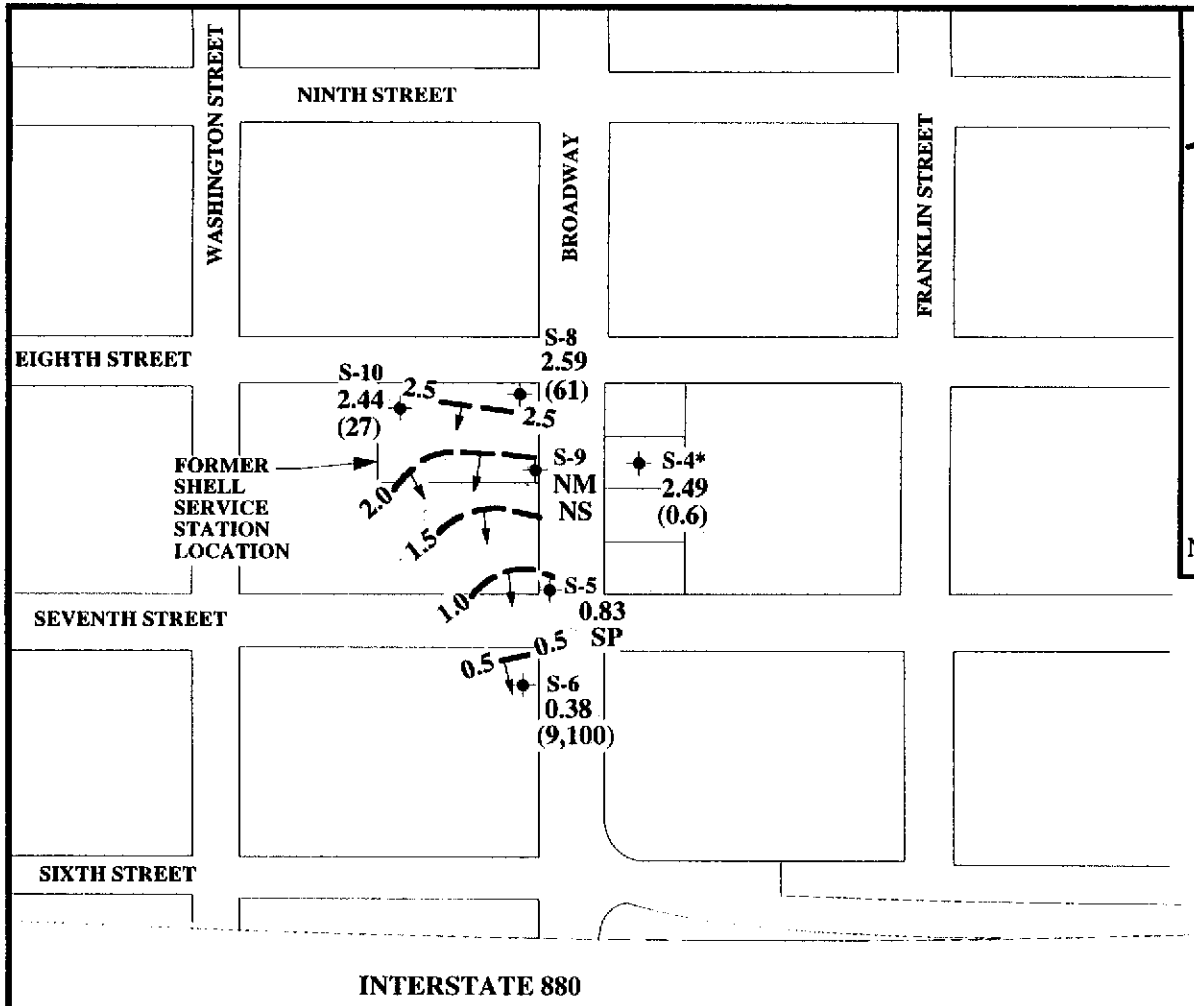
Abbreviations:
NA = Not analyzed or not available
NS = Not Sampled
SP = Separate Phase Product
<x = Not detected at detection limit of x
DUP = Duplicate sample

Notes:
*=0.8 used for hydrocarbon specific gravity



Base Map: 1993 Thomas Guide

Plate 1	VICINITY MAP Former Shell Service Station 461 Eighth Street Oakland, California	***enviros***® E494216.03
Drawn By: JWN	Date: 10/3/94	Approved By: _____ Date: 3-5-96



EXPLANATION

- Groundwater MonitoringWell
- 2.0 — Groundwater Elevation Contour in Ft. Referenced to Mean Sea Level (MSL). Arrows Indicate Approximate Groundwater Flow Direction.
- 0.83 — Groundwater Elevation in feet MSL
- (0.6) — Benzene Concentration in ppb.
- SP — Separate Phase Hydrocarbon
- NS — Not Sampled
- NM — Not Measured

* Well S-4 Not Used in Groundwater Contouring

Approximate Hydrulic Gradient = 0.007

Note: Quarterly Monitoring performed on 3-Jan-96

N

0 200

Scale in Feet

Note: Base Map taken from GeoStrategies Inc. Report dated 10-4-93.

PLATE **2**

GROUNDWATER CONTOUR/BENZENE CONCENTRATION MAP
Former Shell Service Station
461 Eighth Street
Oakland, California

enviros®
96216

Drawn By: MED

Date: 23-Feb-96

Approved By: [signature] Date: 3-5-96

Appendix A

BLAINE
Quarterly Groundwater Sampling Report

BLAINE
TECH SERVICES INC.

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

January 22, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-5508-6200
461 8th Street
Oakland, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960103-Z-2

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: Enviros, Inc.
P.O. Box 259
Sonoma, CA 95476-0259
Attn: Diane Lundquist

(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 (gal.)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
S-4	1/3/96	TOB	--	NONE	--	--	23.28	29.10
S-5	1/3/96	TOB	FREE PRODUCT	21.97	0.83	--	22.80	--
S-6	1/3/96	TOB	ODOR	NONE	--	--	21.70	36.74
S-8 *	1/3/96	TOB	--	NONE	--	--	24.62	29.36
S-9	1/3/96	INACCESSIBLE						
S-10	1/3/96	TOB	--	NONE	--	--	25.60	36.60

* Sample DUP was a duplicate sample taken from well S-8.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960103-Z2

Date: 1-3-96
Page 1 of 1

Site Address: 461 8th Street, Oakland, CA

WIC#: 204-5508-6200

Shell Engineer: Lynn Walker
Phone No.: (510) 675-6169
Fax #: 675-6160

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

Consultant Contact: Fran Thie
Phone No.: (408) 99505535
Fax #: 293-8773

Comments:

Sampled by: [signature]

Printed Name: BRETT BLEAN

LAB: NET

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	XX	4481
Site Investigation		4441
Soil Classify/Disposal		4442
Water Classify/Disposal		4443
Soil/Air Rem. or Sys. O & M		4452
Water Rem. or Sys. O & M		4453
Other		

TURN AROUND TIME
- 24 hours
- 48 hours
- 15 days XX (Normal)
- Other

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

UST AGENCY:

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	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-4	1-3			X		3						X						
S-6	"			X		3						X						
S-8	"			X		3						X						
S-10	"			X		3						X						
EB	"			X		3						X						
DUP	"			X		3						X						
TB	"			X		2						X						

CUSTODY SEALED
Date 1-4-96 Time 1445 Initials [signature]
SEAL INTACT?
Yes ___ No ___ Initials [signature]

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
[signature]	BRETT BLEAN	1-4-96	1045	[signature]	P. Smart	1-4-96	1045
[signature]	P. Smart	1-4-96	1115				
				[signature]	THAL PROSSER	1/5/96	0830

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

VIA NCS

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 01/15/1996
NET Client Acct. No: 1821
NET Job No: 96.00031
Received: 01/05/1996

Client Reference Information

Shell 461 8th Street, Oakland, CA./960103-Z2

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. All positive results have been confirmed as required. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Ginger Brinlee

Ginger Brinlee
Project Coordinator

Enclosure(s)

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00031

Date: 01/15/1996
ELAP Cert: 1386
Page: 2

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: S-4
Date Taken: ~~01/03/1996~~
Time Taken:
NET Sample No: 258135

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						01/09/1996	3456
Purgeable TPH	ND		50	ug/L	5030/M8015		01/09/1996	3456
Carbon Range: C6 to C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	0.6		0.5	ug/L	8020		01/09/1996	3456
Toluene	ND		0.5	ug/L	8020		01/09/1996	3456
Ethylbenzene	ND		0.5	ug/L	8020		01/09/1996	3456
Xylenes (Total)	1.7		0.5	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	91			% Rec.	8020		01/09/1996	3456

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: S-6
Date Taken: 01/03/1996
Time Taken:
NET Sample No: 258136

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	100						01/09/1996	3456
Purgeable TPH	52,000		5,000	ug/L	5030/M8015		01/09/1996	3456
Carbon Range: C6 tc C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	9,100	FI	500	ug/L	8020		01/10/1996	3461
Toluene	7,100	FI	500	ug/L	8020		01/10/1996	3461
Ethylbenzene	1,800		50	ug/L	8020		01/09/1996	3456
Xylenes (Total)	5,800		50	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	92			% Rec.	8020		01/09/1996	3456

FI : Compound quantitated at a 1000X dilution factor.

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: S-8
Date Taken: 01/03/1996
Time Taken:
NET Sample No: 258137

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						01/09/1996	3456
Purgeable TPH	350		50	ug/L	5030/M8015		01/09/1996	3456
Carbon Range: C6 to C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	61	FC	5	ug/L	8020		01/10/1996	3461
Toluene	12		0.5	ug/L	8020		01/09/1996	3456
Ethylbenzene	2.5		0.5	ug/L	8020		01/09/1996	3456
Xylenes (Total)	12		0.5	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	92			% Rec.	8020		01/09/1996	3456

FC : Compound quantitated at a 10X dilution factor.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00031

Date: 01/15/1996
ELAP Cert: 1386
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Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: S-10
Date Taken: 01/03/1996
Time Taken:
NET Sample No: 258138

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						01/09/1996	3456
Purgeable TPH	1,100		50	ug/L	5030/M8015		01/09/1996	3456
Carbon Range: C6 to C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	27		0.5	ug/L	8020		01/09/1996	3456
Toluene	4.9		0.5	ug/L	8020		01/09/1996	3456
Ethylbenzene	110	FC	5	ug/L	8020		01/10/1996	3461
Xylenes (Total)	70		0.5	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	100			% Rec.	8020		01/09/1996	3456

FC : Compound quantitated at a 10X dilution factor.

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: EB
Date Taken: 01/03/1996
Time Taken:
NET Sample No: 258139

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						01/09/1996	3456
Purgeable TPH	ND		50	ug/L	5030/M8015		01/09/1996	3456
Carbon Range: C6 to C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	ND		0.5	ug/L	8020		01/09/1996	3456
Toluene	ND		0.5	ug/L	8020		01/09/1996	3456
Ethylbenzene	ND		0.5	ug/L	8020		01/09/1996	3456
Xylenes (Total)	ND		0.5	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	83			% Rec.	8020		01/09/1996	3456

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00031

Date: 01/15/1996
ELAP Cert: 1386
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Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

SAMPLE DESCRIPTION: DUP
Date Taken: 01/03/1996
Time Taken:
NET Sample No: 258140

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						01/09/1996	3456
Purgeable TPH	340		50	ug/L	5030/MB015		01/09/1996	3456
Carbon Range: C6 to C12	--						01/09/1996	3456
METHOD 8020 (GC, Liquid)	--						01/09/1996	3456
Benzene	54		0.5	ug/L	8020		01/09/1996	3456
Toluene	12		0.5	ug/L	8020		01/09/1996	3456
Ethylbenzene	2.4		0.5	ug/L	8020		01/09/1996	3456
Xylenes (Total)	12		0.5	ug/L	8020		01/09/1996	3456
SURROGATE RESULTS	--						01/09/1996	3456
Bromofluorobenzene (SURR)	90			% Rec.	8020		01/09/1996	3456

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)							
Purgeable TPH	104.0	0.52	0.50	mg/L	01/09/1996	aal	3456
Benzene	93.6	4.68	5.00	ug/L	01/09/1996	aal	3456
Toluene	95.8	4.79	5.00	ug/L	01/09/1996	aal	3456
Ethylbenzene	94.8	4.74	5.00	ug/L	01/09/1996	aal	3456
Xylenes (Total)	95.3	14.3	15.0	ug/L	01/09/1996	aal	3456
Bromofluorobenzene (SURR)	95.0	95	100	% Rec.	01/09/1996	aal	3456
METHOD 5030/8015-M (Shell)							
Purgeable TPH	102.0	0.51	0.50	mg/L	01/10/1996	dld	3461
Benzene	92.8	4.64	5.00	ug/L	01/10/1996	dld	3461
Toluene	94.6	4.73	5.00	ug/L	01/10/1996	dld	3461
Ethylbenzene	94.2	4.71	5.00	ug/L	01/10/1996	dld	3461
Xylenes (Total)	95.3	14.3	15.0	ug/L	01/10/1996	dld	3461
Bromofluorobenzene (SURR)	95.0	95	100	% Rec.	01/10/1996	dld	3461

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	01/09/1996	aal	3456
Benzene	ND	0.5	ug/L	01/09/1996	aal	3456
Toluene	ND	0.5	ug/L	01/09/1996	aal	3456
Ethylbenzene	ND	0.5	ug/L	01/09/1996	aal	3456
Xylenes (Total)	ND	0.5	ug/L	01/09/1996	aal	3456
Bromofluorobenzene (SURR)	89		% Rec.	01/09/1996	aal	3456
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	01/10/1996	dld	3461
Benzene	ND	0.5	ug/L	01/10/1996	dld	3461
Toluene	ND	0.5	ug/L	01/10/1996	dld	3461
Ethylbenzene	ND	0.5	ug/L	01/10/1996	dld	3461
Xylenes (Total)	ND	0.5	ug/L	01/10/1996	dld	3461
Bromofluorobenzene (SURR)	91		% Rec.	01/10/1996	dld	3461

Ref: Shell 461 8th Street, Oakland, CA./960103-Z2

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
METHOD 5030/8015-M (Shell)											258135
Purgeable TPH	104.0	102.0	1.9	0.50	ND	0.52	0.51	mg/L	01/09/1996	3456	258135
Benzene	97.6	92.7	5.1	7.79	0.6 C	8.20	7.82	ug/L	01/09/1996	3456	258135
Toluene	99.2	96.5	2.8	25.5	ND	25.3	24.6	ug/L	01/09/1996	3456	258135
METHOD 5030/8015-M (Shell)											258230
Purgeable TPH	100.0	98.0	1.9	0.50	ND	0.50	0.49	mg/L	01/10/1996	3461	258230
Benzene	100.4	96.3	4.1	7.52	ND	7.55	7.24	ug/L	01/10/1996	3461	258230
Toluene	100.0	97.6	2.3	24.9	ND	24.9	24.3	ug/L	01/10/1996	3461	258230

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

COOLER RECEIPT FORM

Project: 960103-72 Log No: 9775
Cooler received on: 1/5/96 and checked on 1/5/96 by
(signature)

Were custody papers present?.....~~YES~~ NO

Were custody papers properly filled out?.....~~YES~~ NO

Were the custody papers signed?.....~~YES~~ NO

Was sufficient ice used?.....~~YES~~ NO TEMP.: 0°C.

Did all bottles arrive in good condition (unbroken)?.....~~YES~~ NO

Did bottle labels match COC?.....~~YES~~ NO

Were proper bottles used for analysis indicated?.....~~YES~~ NO

Correct preservatives used?.....~~YES~~ NO

VOA vials checked for headspace bubbles?.....~~YES~~ NO
Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:

*All VOAs with headspace bubbles have been set aside so they will not be used for analysis.....YES NO

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)