



April 4, 1996

Susan Hugo
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, Second Floor
Alameda, CA 94502-6577

Re: **First Quarter 1996**
Shell Service Station
WIC #204-0079-0109
999 San Pablo Avenue
Albany, California
WA Job #81-0699-206

Dear Ms. Hugo:

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.

First Quarter 1996 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the site wells scheduled to be sampled this quarter (Figures 1 and 2). Well S-5 located immediately adjacent to the ARCO station across Marin Avenue contained 0.13 ft of separate-phase hydrocarbons, probably originating from the ARCO station, and was therefore not sampled. BTS' report describing these activities and the analytic report for the ground water samples are included as Attachment A.
- Weiss Associates (WA) calculated ground water elevations and compiled the analytic data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 2).

Anticipated Second Quarter 1996 Activities:

WA will submit a report presenting the results of the second quarter 1996 ground water sampling and ground water depth measurements. The report will include tabulated chemical

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analytic results and ground water elevations, a ground water elevation contour map and plotted benzene concentrations in ground water.

Conclusions and Recommendations:

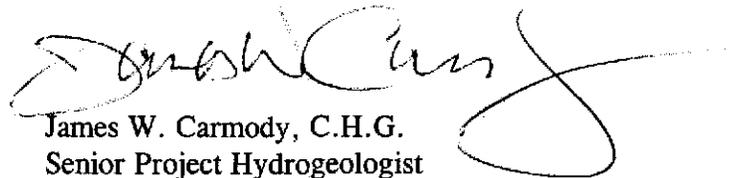
- Since the separate-phase hydrocarbons measured in monitoring well S-5 appear to originate from the ARCO Station across Marin Avenue south of the Shell site, Shell does not intend to install a hydrocarbon skimmer or bail separate-phase hydrocarbons from this well.
- Hydrocarbon degrading microbes were previously detected and are likely to remain active in the subsurface at the site.
- WA recommends continued monitoring at this time according to the sampling frequency schedule originally proposed in our first quarter 1994 quarterly monitoring report.

Please call if you have any questions.

Sincerely,
Weiss Associates



Grady S. Glasser
Technical Assistant



James W. Carmody, C.H.G.
Senior Project Hydrogeologist

Attachments: A - Blaine Tech's Ground Water Monitoring Report

cc: R. Jeff Granberry, Shell Oil Products Company, P.O. Box 4023, Concord, California 94524
Kevin Graves, Regional Water Quality Control Board - San Francisco Bay Region, 2101
Webster Street, Suite 500, Oakland, California 94612

GSG/JWC:all
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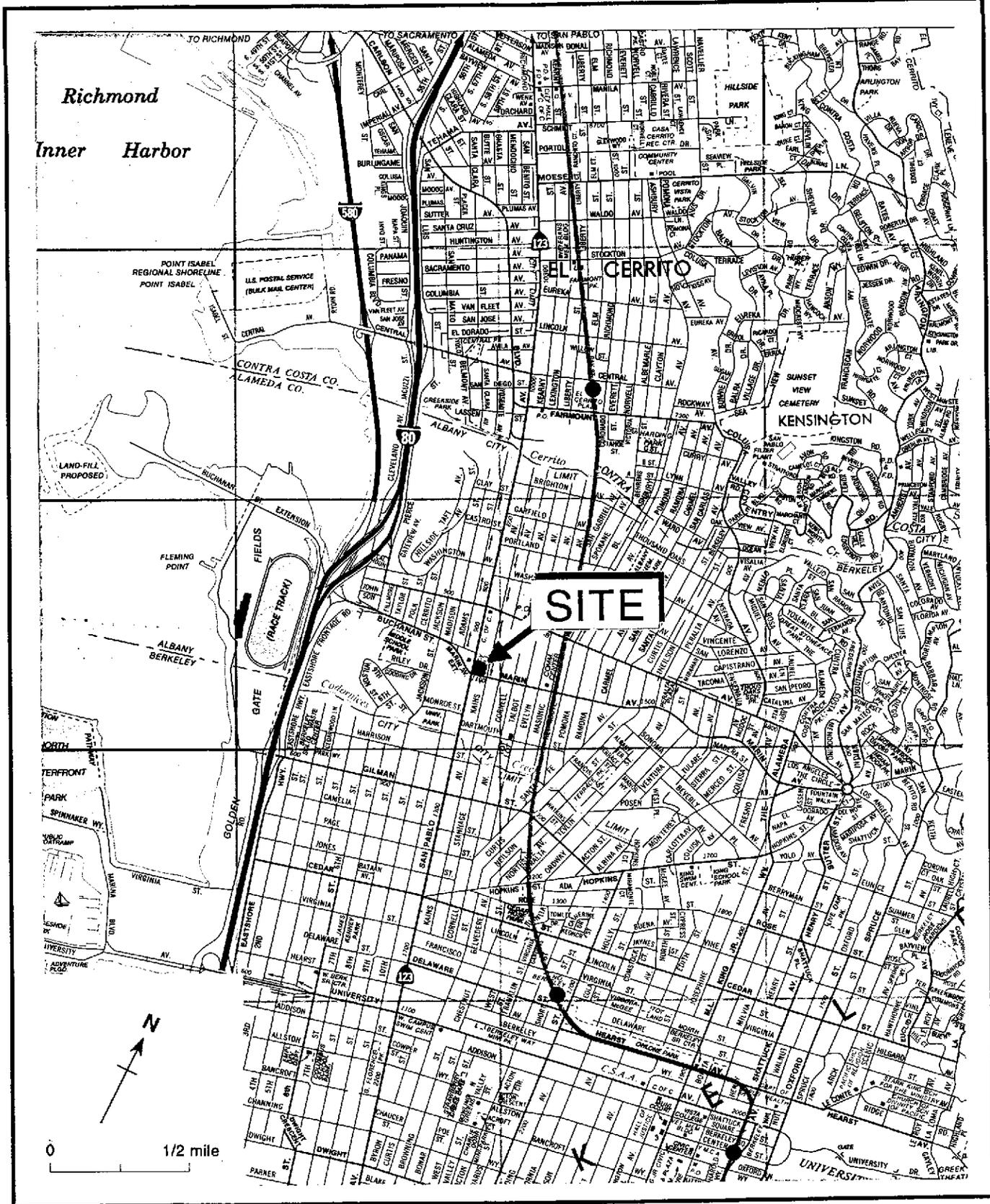
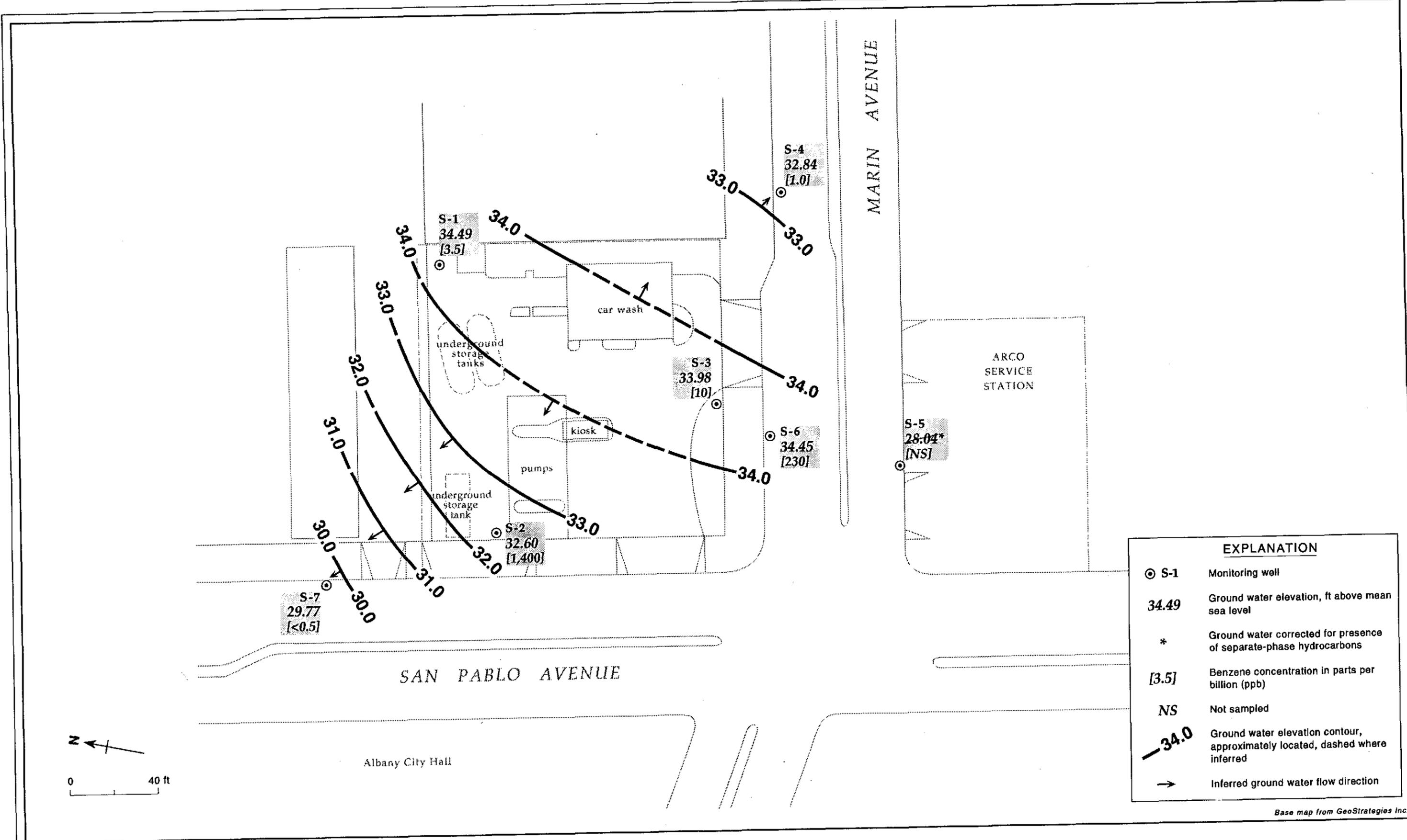


Figure 1. Site Location Map - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California



Base map from GeoStrategies Inc.

Figure 2. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentrations in Ground Water - January 10, 1996- Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California



Table 1. Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
S-1	05/13/91	42.73	8.24	---	34.49
	08/23/91		8.37	---	34.36
	11/07/91		8.30	---	34.43
	01/28/92		7.84	---	34.89
	05/06/92		7.95	---	34.78
	08/26/92		8.24	---	34.49
	10/28/92		8.52	---	34.21
	01/19/93		6.54	---	36.19
	04/29/93		7.93	---	34.80
	07/22/93		8.09	---	34.64
	10/21/93		9.43	---	33.30
	01/04/94		8.25	---	34.48
	04/13/94		8.02	---	34.71
	07/25/94		8.22	---	34.51
	10/10/94		8.29	---	34.44
	01/26/95		6.88	---	35.85
	04/21/95		7.65	---	35.08
	07/28/95		7.90	---	34.83
10/31/95	7.72	---	35.01		
01/10/96			8.24	---	34.49
S-2	05/13/91	40.73	8.50	---	32.23
	08/23/91		8.80	---	31.93
	11/07/91		8.61	---	32.12
	01/28/92		7.80	---	32.93
	05/06/92		8.10	---	32.63
	08/26/92		8.37	---	32.36
	10/28/92		8.64	---	32.09
	01/19/93		5.82	---	34.91
	04/29/93		7.70	---	33.03
	07/22/93		8.38	---	32.35
	10/21/93		8.58	---	32.15
	01/04/94		7.70	---	33.03
	04/13/94		7.62	---	33.11
	07/25/94		7.86	---	32.87
	10/10/94		8.12	---	32.61
	01/26/95		6.38	---	34.35
	04/21/95		7.01	---	33.72
	07/28/95		7.82	---	32.91
10/31/95	7.57	---	33.16		
01/10/96			8.13	---	32.60

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G ←-----	B parts per billion (µg/L)	T -----→	E	X	DO (ppm)	HDM Units units/L
S-1 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.24	1,500	20	2.6	86	74	---	---
	08/23/91	8.37	2,900	27	<2.5	75	18	---	---
	11/07/91	8.30	2,900	8	2.5	46	26	---	---
	01/28/92	7.84	2,000	11	<2.5	60	20	---	---
	05/06/92	7.95	1,200	5.5	<2.5	80	36	---	---
	07/29/93	8.24	2,000	9.4	<2.5	130	<2.5	---	---
	10/28/92	8.52	1,300	27	3.2	72	13	---	---
	01/19/93	6.54	1,500	13	3	29	31	---	---
	04/29/93	7.93	2,000	15	<2.5	82	<65	---	---
	07/22/93	8.09	620	1.1	4.2	3.5	13	---	---
	10/21/93	9.43	1,200	34	25	15	9.5	---	---
	01/04/94	8.25	860	<2.5	<2.5	5.7	5.3	---	---
	07/25/94	8.22	1,200	8.3	7.4	15	20	---	---
	01/26/95	6.88	1,000	12	0.6	12	420	---	---
	07/28/95	7.90	660	7.2	1.0	11	8.9	4.0	---
01/10/96	8.24	1,100	3.5	7.0	5.1	9.4	7.4	---	
S-2 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.50	23,000	3,900	230	1,100	3,200	---	---
	08/23/91	8.80	23,000	4,400	260	1,900	2,400	---	---
	11/07/91	8.61	40,000	4,000	160	1,020	3,400	---	---
	01/28/92	7.80	22,000	1,600	70	420	1,700	---	---
	05/06/92	8.10	20,000	2,600	110	860	1,900	---	---
	07/29/92	8.37	42,000	5,000	160	1,100	3,500	---	---
	10/28/92	8.64	34,000	4,800	330	1,600	2,900	---	---
	01/19/93	5.82	20,000	2,300	370	660	1,300	---	---
	04/29/93	7.70	40,000	2,000	67	900	1,900	---	---
	07/22/93	8.38	22,000	3,000	120	1,000	1,600	---	---
07/22/93 ^{dup}	8.38	17,000	3,000	110	1,000	1,500	---	---	
10/21/93	8.58	14,000	2,800	74	870	1,100	---	---	



Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	parts per billion (µg/L)				DO (ppm)	HDM Units units/L
				B	T	E	X		
	10/21/93 ^{dup}	8.58	13,000	3,200	53	960	820	---	---
	01/04/94	7.70	21,000	2,100	67	990	770	---	---
	01/04/94 ^{dup}	7.70	22,000	2,000	64	910	750	---	---
	07/25/94	7.86	43,000	2,600	490	990	1,300	---	---
	01/26/95	6.38	21,000	790	12	290	570	5.5	10 ⁴ to 10 ⁵ ab
	07/28/95	7.82	14,000	2,400	360	960	370	4.0	---
	01/10/96	8.13	17,000	1,400	<50	480	170	7.2	---
S-3	05/13/91	7.90	3,300	30	3.6	26	13	---	---
(Bi-annually,	08/23/91	8.14	2,000	25	4	9.3	4.5	---	---
1st & 3rd	11/07/91	7.91	4,000	20	3.9	5	4.9	---	---
Qtrs)	01/28/92	7.53	2,100	21	7.6	6.7	15	---	---
	01/28/92 ^{dup}	7.53	2,100	18	6.1	7.1	14	---	---
	05/06/92	7.55	6,600	38	51	45	65	---	---
	07/29/92	7.53	5,800	18	12	29	60	---	---
	10/28/92	7.95	3,000	55	11	16	32	---	---
	01/19/93	6.12	3,100	<5	5.1	11	16	---	---
	04/29/93	7.27	3,000	31	22	<5	14	---	---
	07/22/93	7.62	2,600	3.1	43	23	53	---	---
	10/21/93	7.81	2,500	73	14	16	32	---	---
	01/04/94	7.49	4,800	13	21	<12.5	33	---	---
	07/25/94	7.66	2,600	6.1	4.0	3.8	12	---	---
	01/26/95	6.50	3,600	30	6.8	5.6	19	---	---
	01/26/95 ^{dup}	6.50	2,200	9.9	15	14	22	---	---
	07/28/95	7.28	3,700	27	9.3	20	34	4.0	---
	01/10/96	7.48	4,000	10	<0.5	13	28	6.1	---

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	parts per billion (µg/L)				DO (ppm)	HDM Units units/L
				B	T	E	X		
S-4 (Annually 1st Qtr)	05/13/91	7.44	<50	<0.5	<0.5	<0.5	<0.5	---	---
	08/23/91	8.32	<50	<0.5	<0.5	<0.5	<0.5	---	---
	11/07/91	8.32	260	<0.5	<0.5	<0.5	<0.5	---	---
	01/28/92	7.40	110 ^c	<0.5	<0.5	<0.5	<0.5	---	---
	05/06/92	7.21	54	<0.5	<0.5	<0.5	<0.5	---	---
	07/29/92	8.13	67	<0.5	<0.5	<0.5	<0.5	---	---
	10/28/92	8.73	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/19/93	5.86	86	1.2	0.7	2.7	15	---	---
	04/29/93	7.02	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/29/93 ^{dup}	7.02	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/22/93	7.76	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/21/93	8.53	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/04/94	7.92	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/26/95	5.73	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/28/95	7.80	---	---	---	---	---	---	---
		01/10/96	8.26	<50	1.0	2.8	<0.5	2.1	2.8
S-5 (Quarterly)	05/13/91 ^{SPH}	14.60	---	---	---	---	---	---	---
	08/23/91 ^{SPH}	15.14	---	---	---	---	---	---	---
	11/07/91 ^{SPH}	15.10	---	---	---	---	---	---	---
	01/28/92 ^{SPH}	14.05	---	---	---	---	---	---	---
	05/06/92 ^{SPH}	14.31	---	---	---	---	---	---	---
	07/29/92 ^{SPH}	14.26	---	---	---	---	---	---	---
	10/28/92 ^{SPH}	14.22	---	---	---	---	---	---	---
	01/19/93 ^{SPH}	12.36	---	---	---	---	---	---	---
	04/29/93 ^{SPH}	9.64	---	---	---	---	---	---	---
	07/22/93 ^{SPH}	9.55	---	---	---	---	---	---	---
	10/21/93 ^{SPH}	11.23	---	---	---	---	---	---	---
01/04/94 ^{SPH}	11.69	---	---	---	---	---	---	---	

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B	T	E	X	DO (ppm)	HDM Units units/L
			←————— parts per billion (µg/L) —————→						
	07/25/94 ^{SPH}	12.01	---	---	---	---	---	---	---
	10/10/94 ^{SPH}	12.05	---	---	---	---	---	---	---
	01/26/95 ^{SPH}	9.80	---	---	---	---	---	---	---
	04/21/95 ^{SPH}	10.03	---	---	---	---	---	---	---
	07/28/95 ^{SPH}	11.42	---	---	---	---	---	---	---
	10/31/95 ^{SPH}	---	---	---	---	---	---	---	---
	01/10/96 ^{SPH}	12.05	---	---	---	---	---	---	---
S-6 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	7.82	13,000	600	140	210	310	---	---
	08/23/91	9.58	9,800	480	80	120	150	---	---
	11/07/91	10.86	6,200	240	23	25	27	---	---
	01/28/92	8.97	5,600	250	15	41	36	---	---
	05/06/92	8.27	7,100	330	29	110	210	---	---
	07/29/92	9.57	13,000	240	<50	56	780	---	---
	10/28/92	8.90	10,000	470	210	67	170	---	---
	01/19/93	4.84	4,800	100	26	27	45	---	---
	04/29/93	5.61	7,000	430	20	<12.5	42	---	---
	07/22/93	6.56	5,800	260	120	65	150	---	---
	10/21/93	8.73	5,500	270	69	120	140	---	---
	01/04/94	7.14	7,100	180	58	63	62	---	---
	07/25/94	6.85	12,000	190	52	30	39	---	---
	07/25/94 ^{dup}	6.85	7,200	170	32	31	34	---	---
	01/26/95	4.89	5,800	120	23	24	44	---	---
	07/28/95	5.30	4,400	210	23	34	60	3.0	---
	07/28/95 ^{dup}	5.30	6,100	230	20	38	59	3.0	---
	01/10/96	5.67	6,800	170	87	35	105	2.2	---
	01/10/96 ^{dup}	5.67	7,800	230	120	50	210	2.2	---

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	parts per billion (µg/L)					DO (ppm)	HDM Units units/L
			TPH-G	B	T	E	X		
S-7 (Quarterly)	05/13/91	10.56	<50	<0.5	<0.5	<0.5	<0.5	---	---
	08/23/91	11.16	<50	<0.5	<0.5	<0.5	<0.5	---	---
	11/07/91	11.48	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/28/92	10.72	<50	<0.5	<0.5	<0.5	<0.5	---	---
	05/06/92	10.34	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/29/92	11.13	160	<0.5	<0.5	<0.5	<0.5	---	---
	10/28/92	11.52	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/19/93	8.68	50	1.1	0.6	1.9	9.2	---	---
	04/29/93	9.90	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/22/93 ^d	---	---	---	---	---	---	---	---
	10/21/93	11.10	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/04/94	10.40	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/13/94	10.20	<50	1.4	0.61	<0.5	0.64	---	---
	04/13/94 ^{dup}	10.20	<50	1.4	0.61	<0.5	0.66	---	---
	07/25/94	10.48	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/10/94 ^e	10.64	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/26/95	7.75	<50	<0.5	<0.5	<0.5	<0.5	4.6	10 ³ to 10 ⁵ ab
	04/21/95	8.51	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/28/95	10.20	<50	<0.5	<0.5	<0.5	<0.5	3.0	---
	10/31/95	10.86	<50	<0.5	<0.5	<0.5	<0.5	4.9	---
01/10/96	10.33	<50	<0.5	2.0	<0.5	2.6	7.6	---	
Trip Blank	01/28/92		<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/29/93		<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/22/93		<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/21/93		<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/04/94		<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/13/94		<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/25/94		<50	<0.5	<0.5	<0.5	<0.5	---	---

Table 2. Analytic Results for Ground Water, Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G				DO (ppm)	HDM Units units/L
			B	T	E	X		
	10/10/94		<50	<0.5	<0.5	<0.5	<0.5	---
	01/26/95		<50	<0.5	0.7	<0.5	<0.5	---
	04/21/95		<50	<0.5	<0.5	<0.5	<0.5	---
	07/28/95		<50	<0.5	<0.5	<0.5	<0.5	---
	10/31/95		<50	<0.5	<0.5	<0.5	<0.5	---
DTSC MCLs			NE	1	100 ^f	680	1,750	---

Abbreviations:

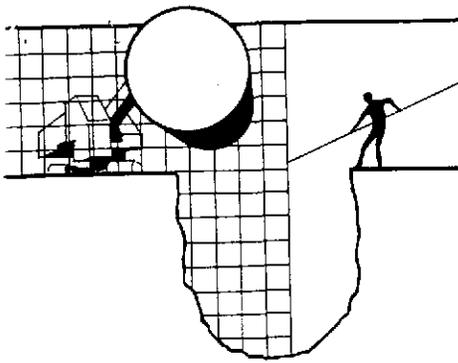
TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
 B = Benzene by EPA Method 8020
 T = Toluene by EPA Method 8020
 E = Ethylbenzene by EPA Method 8020
 X = Xylenes by EPA Method 602 or 8020
 --- = Not analyzed
 DTSC MCLs = California Department of Toxic Substances Control maximum
 contaminant levels for drinking water
 NE = Not established
 <n = Not detected at detection limits of n ppb
 dup = Duplicate sample
 SPH = Separate-phase hydrocarbons detected, no sample collected
 DO = Dissolved Oxygen
 HDM = Hydrocarbon Degrading Microbes

Notes:

a = Simple method
 b = Estimated number
 c = Compounds detected and calculated as gasoline are not characteristic of the
 standard gasoline chromatographic pattern
 d = Well inaccessible
 e = Sample analyzed for Total Dissolved Solids (450,000 ppb)
 f = DTSC recommended action level for drinking water; 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

January 30, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-0079-0109
999 San Pablo Avenue
Albany, California

1st Quarter 1996

Quarterly Groundwater Monitoring Report 960110-K-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	1/10/96	TOB	ODOR	NONE	—	—	8.24	11.70
S-2	1/10/96	TOB	ODOR	NONE	—	—	8.13	12.03
S-3	1/10/96	TOB	ODOR	NONE	—	—	7.48	12.05
S-4	1/10/96	TOB	—	NONE	—	—	8.26	14.11
S-5	1/10/96	TOB	FREE PRODUCT	11.92	0.13	—	12.05	—
S-6 *	1/10/96	TOB	SHEEN/ODOR	—	—	—	5.67	15.18
S-7	1/10/96	TOB	ODOR	NONE	—	—	10.33	15.02

* Sample DUP was a duplicate sample taken from well S-6.



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 980110-151

Date: 1/10/96

Page 1 of 1

Silo Address: 999 San Pablo Ave., Albany

WIC#: 204-0079-0109

Shell Engineer: Don Kirk R. Jeff Granberry Phone No.: (510) 575-6168
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: KCB

Printed Name: Keith Brown

Analysis Required

LAB: Not

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
					X				
					X				
					X				
					X				
					X				
					X				
					X				
					X				
					X				
					X				

CHECK ONE (1) BOX ONLY	C1/D1	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 Classify/Disposal <input type="checkbox"/>	6442	16 days <input checked="" type="checkbox"/> (Hazard)
Water Classify/Disposal <input type="checkbox"/>	6443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	6462	
Water Rem. or Sys. O & M <input type="checkbox"/>	6463	
Other <input type="checkbox"/>		

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

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
<u>MW1</u>	<u>1/10</u>			<u>W</u>		<u>3</u>		
<u>MW2</u>								
<u>MW3</u>								
<u>MW4</u>								
<u>MW5</u>								
<u>MW7</u>								
<u>DUP</u>								
<u>EB</u>								

CUSTODY SEALED

Date: 1-11-96 Time: 16:30 Initials: CB
SEAL INTACT? Yes No Initials: CB

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Keith C. Brown</u>	Date: <u>1-11-96</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>P. Smart</u>	Date: <u>1-11-96</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>P. Smart</u>	Date: <u>1-11-96</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>PAT GREEN</u>	Date: <u>1-12-96</u>
Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:

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: 01/24/1996
NET Client Acct. No: 1821
NET Job No: 96.00140
Received: 01/12/1996

Client Reference Information

Shell 999 San Pablo Ave., Albany, CA/960110-K1

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.

The surrogate recovery for Bromofluorobenzene is outside the established Quality Control window for samples S-1, S-3 and S-6 due to suspected matrix interference.

Submitted by:

A handwritten signature in cursive script that reads "Ginger Brinlee".

Ginger Brinlee
Project Coordinator

Enclosure (s)





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.
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NET Client Acct. No: 1821
NET Job No: 96.00140
Received: 01/12/1996

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Submitted by:

A handwritten signature in cursive script that reads "Ginger Brinlee".

Ginger Brinlee
Project Coordinator

Enclosure(s)



Client Name: Blaine Tech Services
 Client Acct: 1821
 NET Job No: 96.00140

Date: 01/24/1996
 ELAP Cert: 1386
 Page: 2

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

SAMPLE DESCRIPTION: EB

Date Taken: 01/10/1996
 Time Taken: 08:55
 NET Sample No: 258762

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/18/1996	3482
Purgeable TPH	ND		50	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	ND		0.5	ug/L	8020		01/18/1996	3482
Toluene	ND		0.5	ug/L	8020		01/18/1996	3482
Ethylbenzene	ND		0.5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	ND		0.5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURR)	101			% Rec.	8020		01/18/1996	3482

SAMPLE DESCRIPTION: S-1

Date Taken: 01/10/1996
 Time Taken: 09:10
 NET Sample No: 258763

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/18/1996	3482
Purgeable TPH	1,100		50	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	3.5		0.5	ug/L	8020		01/18/1996	3482
Toluene	7.0		0.5	ug/L	8020		01/18/1996	3482
Ethylbenzene	5.1		0.5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	9.4		0.5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURR)	123			% Rec.	8020		01/18/1996	3482

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00140

Date: 01/24/1996
ELAP Cert: 1386
Page: 3

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

SAMPLE DESCRIPTION: S-2
Date Taken: 01/10/1996
Time Taken:
NET Sample No: 258764

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	100						01/18/1996	3482
Purgeable TPH	17,000		5,000	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	1,400		50	ug/L	8020		01/18/1996	3482
Toluene	ND		50	ug/L	8020		01/18/1996	3482
Ethylbenzene	480		50	ug/L	8020		01/18/1996	3482
Xylenes (Total)	170		50	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURR)	95			% Rec.	8020		01/18/1996	3482

SAMPLE DESCRIPTION: S-3
Date Taken: 01/10/1996
Time Taken:
NET Sample No: 258765

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/18/1996	3482
Purgeable TPH	4,000		50	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	10		0.5	ug/L	8020		01/18/1996	3482
Toluene	ND		0.5	ug/L	8020		01/18/1996	3482
Ethylbenzene	13		0.5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	28		0.5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURR)	234			% Rec.	8020		01/18/1996	3482

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00140

Date: 01/24/1996
ELAP Cert: 1386
Page: 4

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

SAMPLE DESCRIPTION: S-4
Date Taken: 01/10/1996
Time Taken:
NET Sample No: 258766

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	1						01/18/1996	3482
Purgeable TPH	ND		50	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	1.0		0.5	ug/L	8020		01/18/1996	3482
Toluene	2.8		0.5	ug/L	8020		01/18/1996	3482
Ethylbenzene	ND		0.5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	2.1		0.5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURRE)	90			% Rec.	8020		01/18/1996	3482

SAMPLE DESCRIPTION: S-6
Date Taken: 01/10/1996
Time Taken:
NET Sample No: 258767

Parameter	Results	Flags	Reporting		Method	Date	Date	Run Batch No.
			Limit	Units		Extracted	Analyzed	
5030/8015-M/8020 (Shell)								
DILUTION FACTOR*	10						01/18/1996	3482
Purgeable TPH	6,800		500	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	170		5	ug/L	8020		01/18/1996	3482
Toluene	87		5	ug/L	8020		01/18/1996	3482
Ethylbenzene	35		5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	105		5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURRE)	133			% Rec.	8020		01/18/1996	3482

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services
 Client Acct: 1821
 NET Job No: 96.00140

Date: 01/24/1996
 ELAP Cert: 1386
 Page: 5

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

SAMPLE DESCRIPTION: S-7

Date Taken: 01/10/1996

Time Taken:

NET Sample No: 258768

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
5030/8015-M/8020 (Shell)							01/18/1996	3482
DILUTION FACTOR*	1						01/18/1996	3482
Purgeable TPH	ND		50	ug/L	5030/M8015		01/18/1996	3482
Carbon Range: C6 to C12	--						01/18/1996	3482
8020 (GC, Liquid)	--						01/18/1996	3482
Benzene	ND		0.5	ug/L	8020		01/18/1996	3482
Toluene	2.0		0.5	ug/L	8020		01/18/1996	3482
Ethylbenzene	ND		0.5	ug/L	8020		01/18/1996	3482
Xylenes (Total)	2.6		0.5	ug/L	8020		01/18/1996	3482
SURROGATE RESULTS	--						01/18/1996	3482
Bromofluorobenzene (SURR)	81			% Rec.	8020		01/18/1996	3482

SAMPLE DESCRIPTION: DUP

Date Taken: 01/10/1996

Time Taken:

NET Sample No: 258769

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
5030/8015-M/8020 (Shell)							01/19/1996	3486
DILUTION FACTOR*	100						01/19/1996	3486
Purgeable TPH	7,800		5,000	ug/L	5030/M8015		01/19/1996	3486
Carbon Range: C6 to C12	--						01/19/1996	3486
8020 (GC, Liquid)	--						01/19/1996	3486
Benzene	230		50	ug/L	8020		01/19/1996	3486
Toluene	120		50	ug/L	8020		01/19/1996	3486
Ethylbenzene	50		50	ug/L	8020		01/19/1996	3486
Xylenes (Total)	210		50	ug/L	8020		01/19/1996	3486
SURROGATE RESULTS	--						01/19/1996	3486
Bromofluorobenzene (SURR)	101			% Rec.	8020		01/19/1996	3486

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services

Date: 01/24/1996

Client Acct: 1821

ELAP Cert: 1386

NET Job No: 96.00140

Page: 6

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
	Standard % Recovery	Standard Amount Found					
5030/8015-M/8020 (Shell)							
Purgeable TPH	108.0	0.54	0.50	mg/L	01/18/1996	aal	3482
Benzene	107.8	5.39	5.00	ug/L	01/18/1996	aal	3482
Toluene	107.8	5.39	5.00	ug/L	01/18/1996	aal	3482
Ethylbenzene	99.0	4.95	5.00	ug/L	01/18/1996	aal	3482
Xylenes (Total)	102.7	15.4	15.0	ug/L	01/18/1996	aal	3482
Bromofluorobenzene (SURR)	100.0	100	100	% Rec.	01/18/1996	aal	3482
5030/8015-M/8020 (Shell)							
Purgeable TPH	110.0	0.55	0.50	mg/L	01/19/1996	dld	3486
Benzene	113.0	5.65	5.00	ug/L	01/19/1996	dld	3486
Toluene	111.6	5.58	5.00	ug/L	01/19/1996	dld	3486
Ethylbenzene	103.2	5.16	5.00	ug/L	01/19/1996	dld	3486
Xylenes (Total)	106.0	15.9	15.0	ug/L	01/19/1996	dld	3486
Bromofluorobenzene (SURR)	102.0	102	100	% Rec.	01/19/1996	dld	3486

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 96.00140

Date: 01/24/1996
ELAP Cert: 1386
Page: 7

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

METHOD BLANK REPORT

Parameter	Method	Reporting	Flags	Units	Date	Analyst	Run
	Blank						
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	01/18/1996	aal	3482
Benzene	ND	0.5		ug/L	01/18/1996	aal	3482
Toluene	ND	0.5		ug/L	01/18/1996	aal	3482
Ethylbenzene	ND	0.5		ug/L	01/18/1996	aal	3482
Xylenes (Total)	ND	0.5		ug/L	01/18/1996	aal	3482
Bromofluorobenzene (SURR)	99			% Rec.	01/18/1996	aal	3482
5030/8015-M/8020 (Shell)							
Purgeable TPH	ND	0.05		mg/L	01/19/1996	dld	3486
Benzene	ND	0.5		ug/L	01/19/1996	dld	3486
Toluene	ND	0.5		ug/L	01/19/1996	dld	3486
Ethylbenzene	ND	0.5		ug/L	01/19/1996	dld	3486
Xylenes (Total)	ND	0.5		ug/L	01/19/1996	dld	3486
Bromofluorobenzene (SURR)	91			% Rec.	01/19/1996	dld	3486

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Blaine Tech Services
 Client Acct: 1821
 NET Job No: 96.00140

Date: 01/24/1996
 ELAP Cert: 1386
 Page: 8

Ref: Shell 999 San Pablo Ave., Albany, CA/960110-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike				Sample Conc.	Matrix Spike			Flags	Units	Date Analyzed	Run Batch	Sample Spiked
	Matrix Spike % Rec.	Spike Dup % Rec.	RPD	Spike Amount		Matrix Spike Conc.	Dup. Conc.	Conc.					
5030/8015-M/8020 (Shell)													
Purgeable TPH	108.0	104.0	3.8	0.5	ND	0.54	0.52		mg/L	01/18/1996	3482	258762	
Benzene	98.5	94.1	4.6	7.84	ND	7.72	7.38		ug/L	01/18/1996	3482	258762	
Toluene	100.0	96.6	3.4	26.5	ND	26.5	25.6		ug/L	01/18/1996	3482	258762	
5030/8015-M/8020 (Shell)													
Purgeable TPH	118.0	114.0	3.4	0.50	ND	0.59	0.57		mg/L	01/19/1996	3486	258790	
Benzene	101.7	100.0	1.7	7.78	ND	7.91	7.78		ug/L	01/19/1996	3486	258790	
Toluene	101.2	99.6	1.5	25.9	ND	26.2	25.8		ug/L	01/19/1996	3486	258790	

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



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, $100 \text{ (Value 1 - Value 2) / mean value}$.
- 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: 960110-K1 Log No: 0858
 Cooler received on: 1/12/96 and checked on 1/12/96 by JM Greene
 (signature) JM Greene

- 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°
 - 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:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Cont. are marked
 S-1 = 6 VOA'S 08:55
 09:10
 S-2 = 3 " 11:35
 S-3 = 3 " 09:30
 S-4 = 3 " 08:30
 S-6 = 3 " 09:50
 S-7 = 3 " 11:25
 DUP = 3 "

*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 #
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

S-1 @ 08155 = EB per
 Grant 16 Jan 96 @ 10:25
 JB