



September 29, 1994

Britt Johnson
Alameda County Department of
Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Shell Service Station
WIC #204-0079-0109
999 San Pablo Avenue
Albany, California
WA Job #81-0699-104

91 OCT 12 PM 1:57
HARRIS
ALCO

Dear Mr. Johnson:

This letter describes recently completed and anticipated activities at the Shell service station referenced above (Figure 1). This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 2652.d. Included below are descriptions and results of activities performed in the third quarter 1994 and proposed work for the fourth quarter 1994.

Third Quarter 1994 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. Well S-5 contained 1.79 ft of separate-phase hydrocarbons, probably originating from the adjacent Arco station, and was 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 Fourth Quarter 1994 Activities:

WA will submit a report presenting the results of the fourth quarter 1994 ground water sampling and ground water depth measurements. The report will include tabulated chemical analytic results, ground water elevations and a ground water elevation contour map.

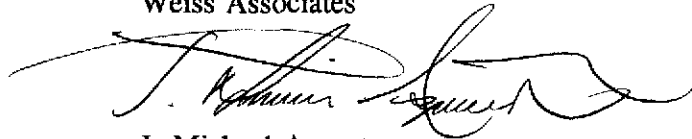
Conclusions and Recommendations:

- Since the floating hydrocarbons measured in monitoring well S-5 appear to originate from the Arco Station across Marin Avenue south of the Shell site, WA does not intend to install a hydrocarbon skimmer or bail separate-phase hydrocarbons from monitoring well S-5.
- WA recommends continued monitoring at this time in accordance to the sampling frequency schedule originally proposed in our first quarter 1994 quarterly monitoring report in Table 3.

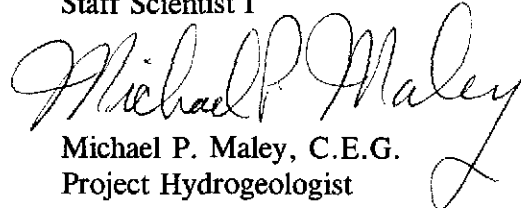
Please call if you have any questions.



Sincerely,
Weiss Associates



J. Michael Asport
Staff Scientist I



Michael P. Maley, C.E.G.
Project Hydrogeologist

JMA/MPM:jma

J:\SHELL\0699\QM\699QMAU4.WP

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

cc: Dan Kirk, Shell Oil 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

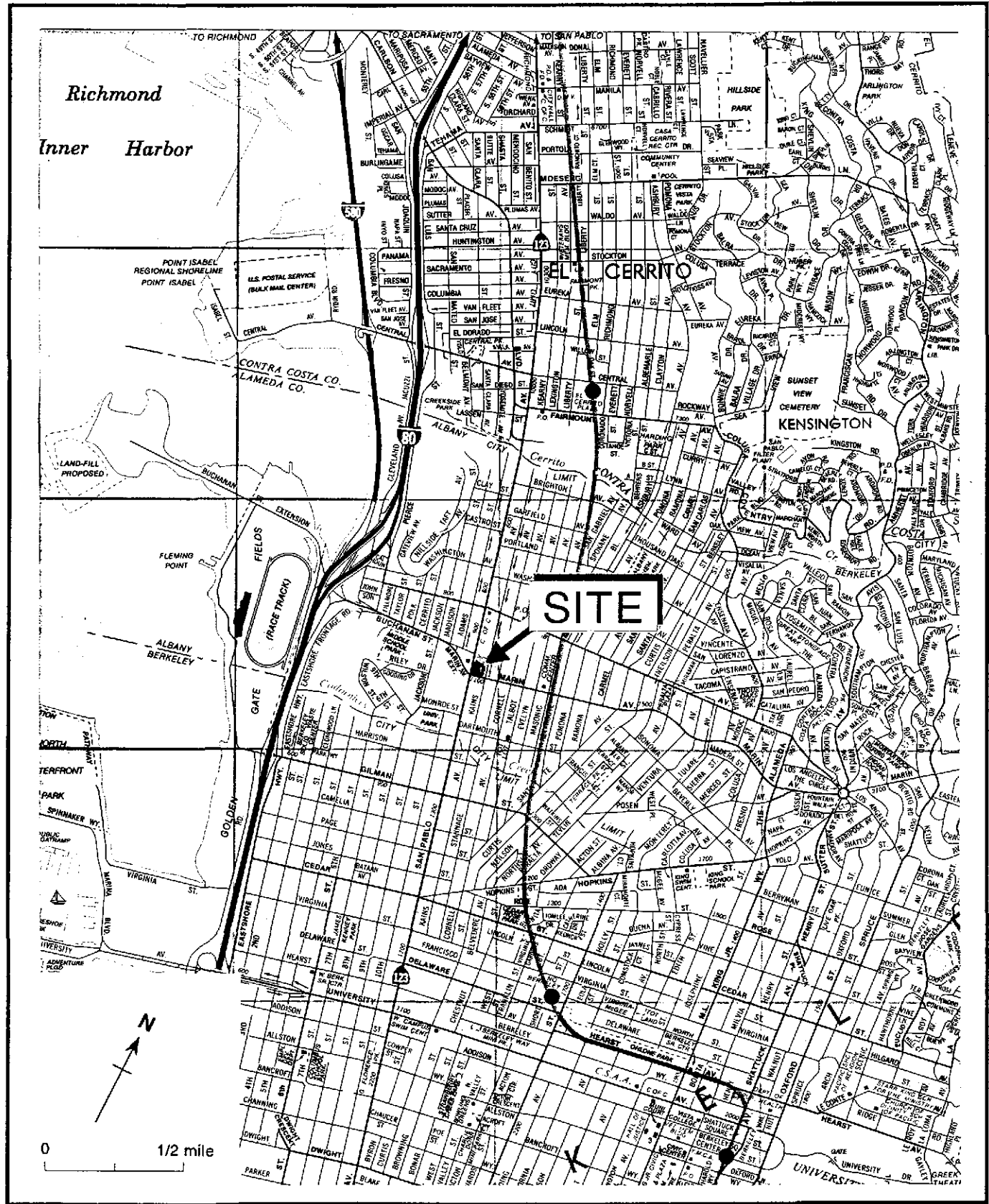


Figure 1. Site Location Map - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

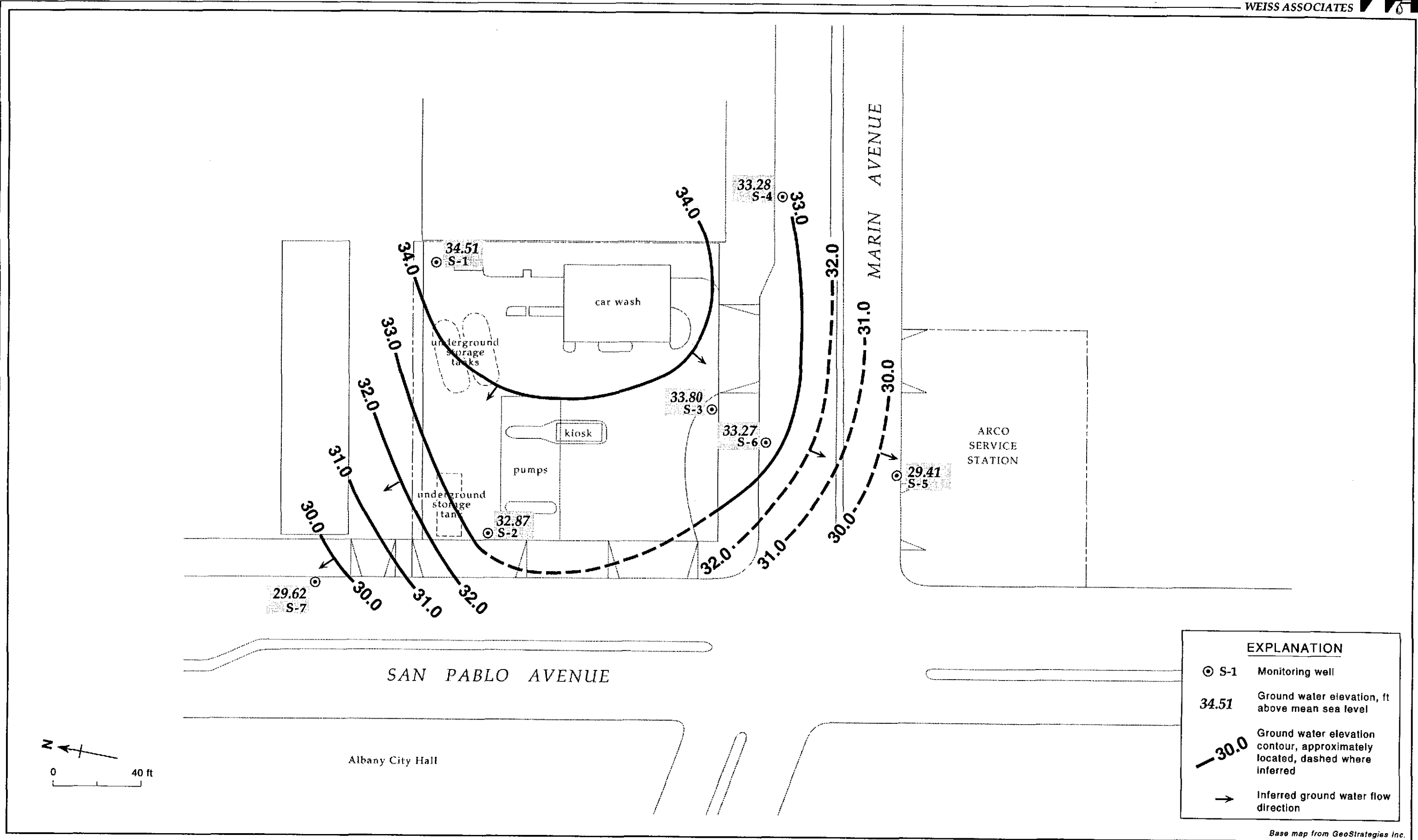


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - July 25, 1994- Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

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
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
S-3	05/13/91	41.46	7.90	---	33.56
	08/23/91		8.14	---	33.32
	11/07/91		7.91	---	33.55
	01/28/92		7.53	---	33.93
	05/06/92		7.55	---	33.91
	08/26/92		7.53	---	33.93
	10/28/92		7.95	---	33.51
	01/19/93		6.12	---	35.34
	04/29/93		7.27	---	34.19

-- Table 1 continues on next page --

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

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
	07/22/93		7.62	---	33.84
	10/21/93		7.81	---	33.65
	01/04/94		7.49	---	33.97
	04/13/94		7.32	---	34.14
	07/25/94		7.66	---	33.80
S-4	05/13/91	41.10	7.44	---	33.66
	08/23/91		8.32	---	32.78
	11/07/91		8.32	---	32.78
	01/28/92		7.40	---	33.70
	05/06/92		7.21	---	33.89
	08/26/92		8.13	---	32.97
	10/28/92		8.73	---	32.37
	01/19/93		5.86	---	35.24
	04/29/93		7.02	---	34.08
	07/22/93		7.76	---	33.34
	10/21/93		8.53	---	32.57
	01/04/94		7.92	---	33.18
	04/13/94		7.71	---	33.39
	07/25/94		7.82	---	33.28
S-5	05/13/91	39.99	14.60	6.48	30.57
	08/23/91		15.14	5.50	29.25
	11/07/91		15.10	5.35	29.17
	01/28/92		14.05	4.90	29.86
	05/06/92		14.31	5.66	30.21
	08/26/92		14.26	3.80	28.77
	10/28/92		14.22	3.81	28.82
	01/19/93		12.36	3.96	30.80
	04/29/93		9.64	0.90	31.07
	07/22/93		9.55	0.90	31.16
	10/21/93		11.23	0.73	29.34
	01/04/94		11.69	1.90	29.82
	04/13/94		11.42	1.62	29.87
	07/25/94		12.01	1.79	29.41
S-6	05/13/91	40.12	7.82	---	32.30
	08/23/91		9.58	---	30.54
	11/07/91		10.86	---	29.26

-- Table 1 continues on next page --

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

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft) ^a	Ground Water Elevation (ft above msl)
	01/28/92		8.97	---	31.15
	05/06/92		8.27	---	31.85
	08/26/92		9.57	---	31.55
	10/28/92		8.90	---	32.22
	01/19/93		4.84	---	35.28
	04/29/93		5.61	---	34.51
	07/22/93		6.56	---	33.56
	10/21/93		8.73	---	31.39
	01/04/94		7.14	---	32.98
	04/13/94		7.21	---	32.91
	07/25/94		6.85	---	33.27
S-7	05/13/91	40.10	10.56	---	29.54
	08/23/91		11.16	---	28.94
	11/07/91		11.48	---	28.62
	01/28/92		10.72	---	29.38
	05/06/92		10.34	---	29.76
	08/26/92		11.13	---	28.97
	10/28/92		11.52	---	28.58
	01/19/93		8.68	---	31.42
	04/29/93		9.90	---	30.20
	07/22/93		---	---	---
	10/21/93		11.10	---	29.00
	01/04/94		10.40	---	29.70
	04/13/94		10.20	---	29.90
	07/25/94		10.48	---	29.62

Notes:

a = When separate-phase hydrocarbons are present, ground water elevation corrected by the relation: corrected ground water elevation = (top-of-box elevation) - (depth to water) + (0.8 x floating hydrocarbon thickness)

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 E T X				
				-----parts per billion (µg/L)-----				
S-1 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.24	1,500	20	86	2.6	74	
	08/23/91	8.37	2,900	27	75	<2.5	18	
	11/07/91	8.30	2,900	8	46	2.5	26	
	01/28/92	7.84	2,000	11	60	<2.5	20	
	05/06/92	7.95	1,200	5.5	80	<2.5	36	
	07/29/93	8.24	2,000	9.4	130	<2.5	<2.5	
	10/28/92	8.52	1,300	27	72	3.2	13	
	01/19/93	6.54	1,500	13	29	3	31	
	04/29/93	7.93	2,000	15	82	<2.5	<65	
	07/22/93	8.09	620	1.1	3.5	4.2	13	
	10/21/93	9.43	1,200	34	15	25	9.5	
	01/04/94	8.25	860	<2.5	5.7	<2.5	5.3	
	07/25/94	8.22	1,200	8.3	15	7.4	20	
	S-2 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.50	23,000	3,900	1,100	230	3,200
08/23/91		8.80	23,000	4,400	1,900	260	2,400	
11/07/91		8.61	40,000	4,000	1,020	160	3,400	
01/28/92		7.80	22,000	1,600	420	70	1,700	
05/06/92		8.10	20,000	2,600	860	110	1,900	
07/29/92		8.37	42,000	5,000	1,100	160	3,500	
10/28/92		8.64	34,000	4,800	1,600	330	2,900	
01/19/93		5.82	20,000	2,300	660	370	1,300	
04/29/93		7.70	40,000	2,000	900	67	1,900	
07/22/93		8.38	22,000	3,000	1,000	120	1,600	
07/22/93 ^{dup}		8.38	17,000	3,000	1,000	110	1,500	
10/21/93		8.58	14,000	2,800	870	74	1,100	
10/21/93 ^{dup}		8.58	13,000	3,200	960	53	820	
01/04/94		7.70	21,000	2,100	990	67	770	
01/04/94 ^{dup}	7.70	22,000	2,000	910	64	750		
07/25/94	7.86	43,000	2,600	990	490	1,300		
S-3 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	7.90	3,300	30	26	3.6	13	
	08/23/91	8.14	2,000	25	9.3	4	4.5	
	11/07/91	7.91	4,000	20	5	3.9	4.9	
	01/28/92	7.53	2,100	21	6.7	7.6	15	
	01/28/92 ^{dup}	7.53	2,100	18	7.1	6.1	14	
	05/06/92	7.55	6,600	38	45	51	65	
	07/29/92	7.53	5,800	18	29	12	60	
	10/28/92	7.95	3,000	55	16	11	32	
	01/19/93	6.12	3,100	<5	11	5.1	16	
	04/29/93	7.27	3,000	31	<5	22	14	
	07/22/93	7.62	2,600	3.1	23	43	53	
	10/21/93	7.81	2,500	73	16	14	32	
	01/04/94	7.49	4,800	13	<12.5	21	33	

-- Table 2 continues on next page --



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

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B E T X			
				-----parts per billion (µg/L)----->			
	07/25/94	7.66	2,600	6.1	3.8	4.0	12
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	2.7	0.7	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
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	---	---	---	---	---
	07/25/94 ^{SPH}	12.01	---	---	---	---	---
S-6 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	7.82	13,000	600	210	140	310
	08/23/91	9.58	9,800	480	120	80	150
	11/07/91	10.86	6,200	240	25	23	27
	01/28/92	8.97	5,600	250	41	15	36
	05/06/92	8.27	7,100	330	110	29	210
	07/29/92	9.57	13,000	240	56	<50	780
	10/28/92	8.90	10,000	470	67	210	170
	01/19/93	4.84	4,800	100	27	26	45
	04/29/93	5.61	7,000	430	<12.5	20	42
	07/22/93	6.56	5,800	260	65	120	150
	10/21/93	8.73	5,500	270	120	69	140
	01/04/94	7.14	7,100	180	63	58	62
	07/25/94	6.85	12,000	190	30	52	39
	07/25/94 ^{dup}	6.85	7,200	170	31	32	34

-- Table 2 continues on next page --



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

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G ----->	B	E	T	X
			parts per billion (µg/L)				
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	1.9	0.6	9.2
	04/29/93	9.90	<50	<0.5	<0.5	<0.5	<0.5
	07/22/93 ^a	---	---	---	---	---	---
	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	<0.5	0.61	0.64
	04/13/94 ^{dup}	10.20	<50	1.4	<0.5	0.61	0.66
	07/25/94	10.48	<50	<0.5	<0.5	<0.5	<0.5
	Trip Blank	01/28/92		<50	<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	
DTSC MCLs			NE	1	680	10 ^b	1,750

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline 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 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

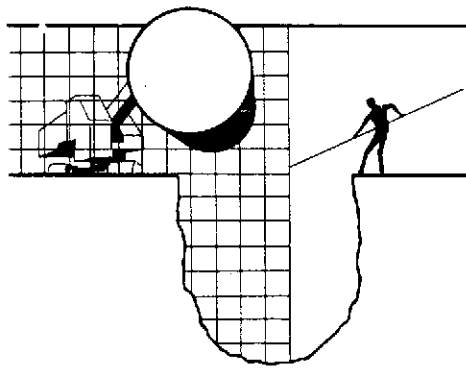
Notes:

a = Well inaccessible
 b = DTSC recommended action level for drinking water; MCL not established
 c = Compounds detected and calculated as gasoline are not characteristic of the standard gasoline chromatographic pattern



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

August 10, 1994

Shell Oil Company
P.O. Box 5278
Concord, CA 94520-9998

Attn: Daniel T. Kirk

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

QUARTER:
3rd quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 940725-F-1

This report contains data collected during routine inspection, gauging and sampling of groundwater monitoring wells performed by Blaine Tech Services, Inc. in response to the request of the consultant who is overseeing work at this site on behalf of our mutual client, Shell Oil Company. Data collected in the course of our field work is presented in a **TABLE OF WELL GAUGING DATA**. The field information was collected during our preliminary gauging and inspection of the wells, the subsequent evacuation of each well prior to sampling, and at the time of sampling.

Measurements taken include the total depth of the well and the depth to water. The surface of water was further inspected for the presence of immiscibles which may be present as a thin film (a sheen on the surface of the water) or as a measurable free product zone (FPZ). At intervals during the evacuation phase, the purge water was monitored with instruments that measure electrical conductivity (EC), potential hydrogen (pH), temperature (degrees Fahrenheit), and turbidity (NTU). In the interest of simplicity, fundamental information is tabulated here, while the bulk of the information is turned over directly to the consultant who is making professional interpretations and evaluations of the conditions at the site.

STANDARD PROCEDURES

Evacuation

Groundwater wells are thoroughly purged before sampling to insure that the sample is collected from water that has been newly drawn into the well from the surrounding geologic formation. The selection of equipment to evacuate each well is based on the physical characteristics of the well and what is known about the performance of the formation in which the well has been installed. There are several suitable devices which can be used for evacuation. The most commonly employed devices are air or gas actuated pumps, electric submersible pumps, and hand or mechanically actuated bailers. Our personnel frequently employ USGS/Middleburg positive displacement pumps or similar air actuated pumps which do not agitate the water standing in the well.

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water are removed in cases where more evacuation is needed to achieve stabilization of water parameters and when requested by the local implementing agency. Less water may be removed in cases where the well dewateres and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty-four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Effluent water from purging and on-site equipment cleaning is collected and transported to Shell's Martinez Manufacturing Complex in Martinez, California.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This

recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such site is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under a standard Shell Oil Company Chain of Custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the Chain of Custody (time, date, and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to National Environmental Testing, Inc. in Santa Rosa, California. NET is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #178.

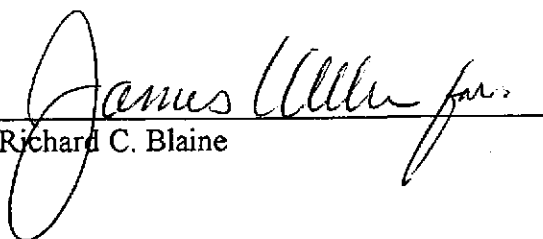
Objective Information Collection

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. performs no consulting and does not become involved in the marketing or installation of remedial systems of any kind. Blaine Tech Services, Inc. is concerned only with the generation of objective information, not with the use of that information to support evaluations and recommendations concerning the environmental condition of the site. Even the straightforward interpretation of objective analytical data is better performed by interested regulatory agencies and those engineers and geologists who are engaged in the work of providing professional opinions about the site and proposals to perform additional investigation or design remedial systems.

Reportage

Submission of this report and the attached laboratory report to interested regulatory agencies is handled by the consultant in charge of the project. Any professional evaluations or recommendations will be made by the consultant under separate cover.

Please call if we can be of any further assistance.


Richard C. Blaine

RCBlp

Attachments: table of well gauging data
chain of custody
certified analytical report

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
ATTN: Michael Asport

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	7/25/94	TOB	ODOR	NONE	--	--	8.22	11.98
S-2	7/25/94	TOB	SHEEN/ODOR	--	--	--	7.86	12.13
S-3	7/25/94	TOB	ODOR	NONE	--	--	7.66	12.17
S-4	7/25/94	TOB	--	NONE	--	--	7.82	14.21
S-5	7/25/94	TOB	FREE PRODUCT	10.22	1.79	--	12.01	--
S-6 *	7/25/94	TOB	SHEEN/ODOR	--	--	--	6.85	15.22
S-7	7/25/94	TOB	--	NONE	--	--	10.48	15.04

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



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 9407255-1

Date: _____
Page 1 of 1

1594

Silo Address: 999 San Pablo Ave., Albany

WICK: 204-0079-0109

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

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

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

Comments:

Sampled by: *[Signature]*
Printed Name: Tom F1004

Analysis Required

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

LAB: NCT

CHECK ONE (1) BOX ONLY	CT/DT	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 Clarity/Disposal <input type="checkbox"/> 6441		16 days <input checked="" type="checkbox"/> (Normal)
Water Clarity/Disposal <input type="checkbox"/> 6443		Other <input type="checkbox"/>
Soil/Air Rem. of Sp. O & M <input type="checkbox"/> 6462		
Water Rem. of Sp. O & M <input type="checkbox"/> 6463		
Other <input type="checkbox"/>		

NOTE: Notify Lab as soon as possible of 24/48 hr. TAT.

Sample ID	Time	Date	Sludge	Soil	Water	Air	No. of conds.	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-1	10:25	7/25/94			X		3					X							
S-2	12:30											X							
S-3	10:42											X							
S-6	11:25											X							
S-7	10:00											X							
DW	-											X							
EB	10:10											X							
TB	LAB											X							

[Signature]
original etc.

Relinquished By (Signature): <i>[Signature]</i>	Printed Name: <u>Tom F1004</u>	Date: <u>7/25/94</u>	Time: <u>9:45</u>	Received (Signature): <i>[Signature]</i>	Printed Name: <u>GT Lumore</u>	Date: <u>7/26/94</u>	Time: <u>16:00</u>
Relinquished By (Signature): <i>[Signature]</i>	Printed Name: <u>GT Lumore</u>	Date: <u>7/26/94</u>	Time: <u>16:00</u>	Received (Signature): <i>[Signature]</i>	Printed Name: <u>GT Lumore</u>	Date: <u>7/27/94</u>	Time: <u>08:00</u>
Relinquished By (Signature): <i>[Signature]</i> (VIA NCS)	Printed Name: _____	Date: _____	Time: _____	Received (Signature): <i>[Signature]</i>	Printed Name: <u>K Temple</u>	Date: <u>7/27/94</u>	Time: <u>08:00</u>

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



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Santa Rosa Division
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

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


Date: 08/06/1994
NET Client Acct. No: 1821
NET Pacific Job No: 94.03248
Received: 07/27/1994

Client Reference Information

SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. 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 welcome to contact Client Services.

Approved by:


Judy Ridley *For*
Project Coordinator


Jim Hoch
Operations Manager

Enclosure (s)





Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 2

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: S-1
Date Taken: 07/25/1994
Time Taken: 10:25
NET Sample No: 210235

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/02/1994
DILUTION FACTOR*	1						08/02/1994
as Gasoline	1,200		50	ug/L	5030		08/02/1994
Carbon Range:	C5-C12						08/02/1994
METHOD 8020 (GC,Liquid)	--						08/02/1994
Benzene	8.3		0.5	ug/L	8020		08/02/1994
Toluene	7.4		0.5	ug/L	8020		08/02/1994
Ethylbenzene	15		0.5	ug/L	8020		08/02/1994
Xylenes (Total)	20		0.5	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURR)	94			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Elaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 3

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: S-2
Date Taken: 07/25/1994
Time Taken: 12:30
NET Sample No: 210236

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
TFH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/02/1994
DILUTION FACTOR*	100						08/02/1994
as Gasoline	43,000		5,000	ug/L	5030		08/02/1994
Carbon Range:	C5-C12						08/02/1994
METHOD 8020 (GC,Liquid)	--						08/02/1994
Benzene	2,600		50	ug/L	8020		08/02/1994
Toluene	490		50	ug/L	8020		08/02/1994
Ethylbenzene	990		50	ug/L	8020		08/02/1994
Xylenes (Total)	1,300		50	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURRE)	90			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 4

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: S-3
Date Taken: 07/25/1994
Time Taken: 10:42
NET Sample No: 210237

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/02/1994
DILUTION FACTOR*	1						08/02/1994
as Gasoline	2,600		50	ug/L	5030		08/02/1994
Carbon Range:	C5-C14						08/02/1994
METHOD 8020 (GC,Liquid)	--						08/02/1994
Benzene	6.1		0.5	ug/L	8020		08/02/1994
Toluene	4.0		0.5	ug/L	8020		08/02/1994
Ethylbenzene	3.8		0.5	ug/L	8020		08/02/1994
Xylenes (Total)	12		0.5	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURR)	122			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 5

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: S-6
Date Taken: 07/25/1994
Time Taken: 11:25
NET Sample No: 210238

Parameter	Results	Flags	Reporting			Date	Date
			Limit	Units	Method	Extracted	Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/03/1994
DILUTION FACTOR*	10						08/03/1994
as Gasoline	12,000		500	ug/L	5030		08/03/1994
Carbon Range:	C5-C12						08/03/1994
METHOD 8020 (GC,Liquid)	--						08/03/1994
Benzene	190		5	ug/L	8020		08/03/1994
Toluene	52		5	ug/L	8020		08/03/1994
Ethylbenzene	30		5	ug/L	8020		08/03/1994
Xylenes (Total)	39		5	ug/L	8020		08/03/1994
SURROGATE RESULTS	--						08/03/1994
Bromofluorobenzene (SURR)	92			% Rec.	5030		08/03/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 6

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: S-7
Date Taken: 07/25/1994
Time Taken: 10:00
NET Sample No: 210239

Parameter	Results	Flags	Reporting			Date	Date
			Limit	Units	Method	Extracted	Analyzed
TPH (Gas/BTXE, Liquid)							
METHOD 5030/M8015	--						08/02/1994
DILUTION FACTOR*	1						08/02/1994
as Gasoline	ND		50	ug/L	5030		08/02/1994
Carbon Range:	--						08/02/1994
METHOD 8020 (GC, Liquid)	--						08/02/1994
Benzene	ND		0.5	ug/L	8020		08/02/1994
Toluene	ND		0.5	ug/L	8020		08/02/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/02/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURR)	81			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 7

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: DUP
Date Taken: 07/25/1994
Time Taken:
NET Sample No: 210240

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/03/1994
DILUTION FACTOR*	10						08/03/1994
as Gasoline	7,200		500	ug/L	5030		08/03/1994
Carbon Range:	C5-C12						08/03/1994
METHOD 8020 (GC,Liquid)	--						08/03/1994
Benzene	170		5	ug/L	8020		08/03/1994
Toluene	32		5	ug/L	8020		08/03/1994
Ethylbenzene	31		5	ug/L	8020		08/03/1994
Xylenes (Total)	34		5	ug/L	8020		08/03/1994
SURROGATE RESULTS	--						08/03/1994
Bromofluorobenzene (SURR)	85			% Rec.	5030		08/03/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 8

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: EB
Date Taken: 07/25/1994
Time Taken: 10:10
NET Sample No: 210241

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE, Liquid)							
METHOD 5030/MB015	--						08/02/1994
DILUTION FACTOR*	1						08/02/1994
as Gasoline	ND		50	ug/L	5030		08/02/1994
Carbon Range:	--						08/02/1994
METHOD 8020 (GC, Liquid)	--						08/02/1994
Benzene	ND		0.5	ug/L	8020		08/02/1994
Toluene	ND		0.5	ug/L	8020		08/02/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/02/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURR)	71			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
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Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

SAMPLE DESCRIPTION: TB
Date Taken: 07/25/1994
Time Taken:
NET Sample No: 210242

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/02/1994
DILUTION FACTOR*	1						08/02/1994
as Gasoline	ND		50	ug/L	5030		08/02/1994
Carbon Range:	--						08/02/1994
METHOD 8020 (GC,Liquid)	--						08/02/1994
Benzene	ND		0.5	ug/L	8020		08/02/1994
Toluene	ND		0.5	ug/L	8020		08/02/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/02/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/02/1994
SURROGATE RESULTS	--						08/02/1994
Bromofluorobenzene (SURR)	78			% Rec.	5030		08/02/1994

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



Client Acct: 1821
Client Name: Elaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 10

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Units	Date Analyzed	Analyst Initials
	Standard % Recovery	Standard Amount Found	Standard Amount Expected			
TPH (Gas/BTXE,Liquid)						
as Gasoline	99.0	0.99	1.00	mg/L	08/02/1994	jmh
Benzene	89.6	4.48	5.00	ug/L	08/02/1994	jmh
Toluene	97.6	4.88	5.00	ug/L	08/02/1994	jmh
Ethylbenzene	88.6	4.43	5.00	ug/L	08/02/1994	jmh
Xylenes (Total)	94.0	14.1	15.0	ug/L	08/02/1994	jmh
Bromofluorobenzene (SURR)	94.0	94	100	% Rec.	08/02/1994	jmh
TPH (Gas/BTXE,Liquid)						
as Gasoline	111.0	1.11	1.00	mg/L	08/03/1994	tts
Benzene	98.6	4.93	5.00	ug/L	08/03/1994	tts
Toluene	98.4	4.92	5.00	ug/L	08/03/1994	tts
Ethylbenzene	94.0	4.70	5.00	ug/L	08/03/1994	tts
Xylenes (Total)	97.4	14.61	15.0	ug/L	08/03/1994	tts
Bromofluorobenzene (SURR)	97.0	97	100	% Rec.	08/03/1994	tts

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 11

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

METHOD BLANK REPORT

Parameter	Method	Reporting	Units	Date	Analyst
	Blank				
	Amount	Limit		Analyzed	Initials
TPH (Gas/BTEX, Liquid)					
as Gasoline	ND	0.05	mg/L	08/02/1994	jmh
Benzene	ND	0.5	ug/L	08/02/1994	jmh
Toluene	ND	0.5	ug/L	08/02/1994	jmh
Ethylbenzene	ND	0.5	ug/L	08/02/1994	jmh
Xylenes (Total)	ND	0.5	ug/L	08/02/1994	jmh
Bromofluorobenzene (SURR)	88		% Rec.	08/02/1994	jmh
TPH (Gas/BTEX, Liquid)					
as Gasoline	ND	0.05	mg/L	08/03/1994	tts
Benzene	ND	0.5	ug/L	08/03/1994	tts
Toluene	ND	0.5	ug/L	08/03/1994	tts
Ethylbenzene	ND	0.5	ug/L	08/03/1994	tts
Xylenes (Total)	ND	0.5	ug/L	08/03/1994	tts
Bromofluorobenzene (SURR)	82		% Rec.	08/03/1994	tts

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



Client Acct: 1821
Client Name: Blaine Tech Services
NET Job No: 94.03248

Date: 08/06/1994
ELAP Certificate: 1386
Page: 12

Ref: SHELL, 999 San Pablo Ave., Albany, Job No. 940725F1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	Matrix Spike % Rec.	Spike Dup % Rec.	RPD			Matrix Spike Conc.	Spike Dup. Conc.			
TPH (Gas/BTXE, Liquid)										
as Gasoline	97.0	91.0	6.4	1.00	ND	0.97	0.91	mg/L	08/02/1994	jmh
Benzene	97.2	93.6	3.8	32.6	ND	31.7	30.5	ug/L	08/02/1994	jmh
Toluene	96.6	93.0	3.8	94.3	ND	91.1	87.7	ug/L	08/02/1994	jmh
TPH (Gas/BTXE, Liquid)										
as Gasoline	86.0	98.0	13.0	1.00	ND	0.86	0.98	mg/L	08/03/1994	tts
Benzene	87.0	93.5	7.2	33.9	ND	29.5	31.7	ug/L	08/03/1994	tts
Toluene	88.5	95.4	7.5	94.5	ND	83.6	90.2	ug/L	08/03/1994	tts

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

COOLER RECEIPT FORM

Subject: Shell Albany 940725 F1 Log No: 1594
Cooler received on: 7-27-94 and checked on 7-27-94 by J. Sorenson
(Signature)

- Are custody papers present?..... YES NO
- Are custody papers properly filled out?..... YES NO
- Are the custody papers signed?..... YES NO
- Is sufficient ice used?..... YES NO
- Do all bottles arrive in good condition (unbroken)?..... YES NO
- Do bottle labels match COC?..... YES NO
- Are proper bottles used for analysis indicated?..... YES NO
- Are correct preservatives used?..... YES NO
- Are vials checked for headspace bubbles?..... YES NO

Note which voas (if any) had bubbles:*

Sample descriptor:
TB

Number of vials:
2 of 2

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)



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. Actual reporting limits and results have been multiplied by the listed dilution factor. Do not multiply the reporting limits or reported values by the dilution factor.
- dw : Result expressed as dry weight.
- 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 the 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., Rev. 1, December 1987.

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

Revised September, 1993

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