Weiss Associates *Environmental and Geologic Services*

5500 Shellmound Street, Emeryville, CA 94608-2411 *Fax: 510-547-5043* *Phone:* ***510-450-6000***

November 17, 1994

Scott O. Seery
Alameda County Department
of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Re: Third Quarter 1994
Shell Service Station
WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California 94577
WA Job #81-0423-104

Dear Mr. Seery:

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 in the third quarter months of July and August. A sample was also taken in early October due to a scheduling conflict in September. BTS' report describing these activities and the analytic report for the ground water samples are included as Attachment A.

- As per your request in a letter dated July 5, 1994, WA arranged for monthly water level measurements from each well and ground water samples from MW-2 to be collected monthly throughout the third quarter. WA compiled the ground water elevation and analytic data (Tables 1 and 2) and prepared a ground water elevation contour maps (Figures 2, 3 and 4). Based on the third quarter data, water levels have stabilized and returned to the general northwesterly trend. Chemical concentrations in well MW-2 have decreased significantly since March 1994. Therefore, WA proposes returning to quarterly ground water sampling of well MW-2.

Anticipated Fourth Quarter 1994 Activities:

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

Please call if you have any questions or comments.

Sincerely,
Weiss Associates

J. Michael Asport
Staff Scientist I

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

Attachments: A - Ground Water Monitoring Report and Analytic Report

cc: Dan Kirk, Shell Oil Company, P.O. Box 4023, Concord, California 94524
Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Oakland, California 94612

JMA/JWC:jma
J:\SHELL\0423\QM\94Q3R.DOC

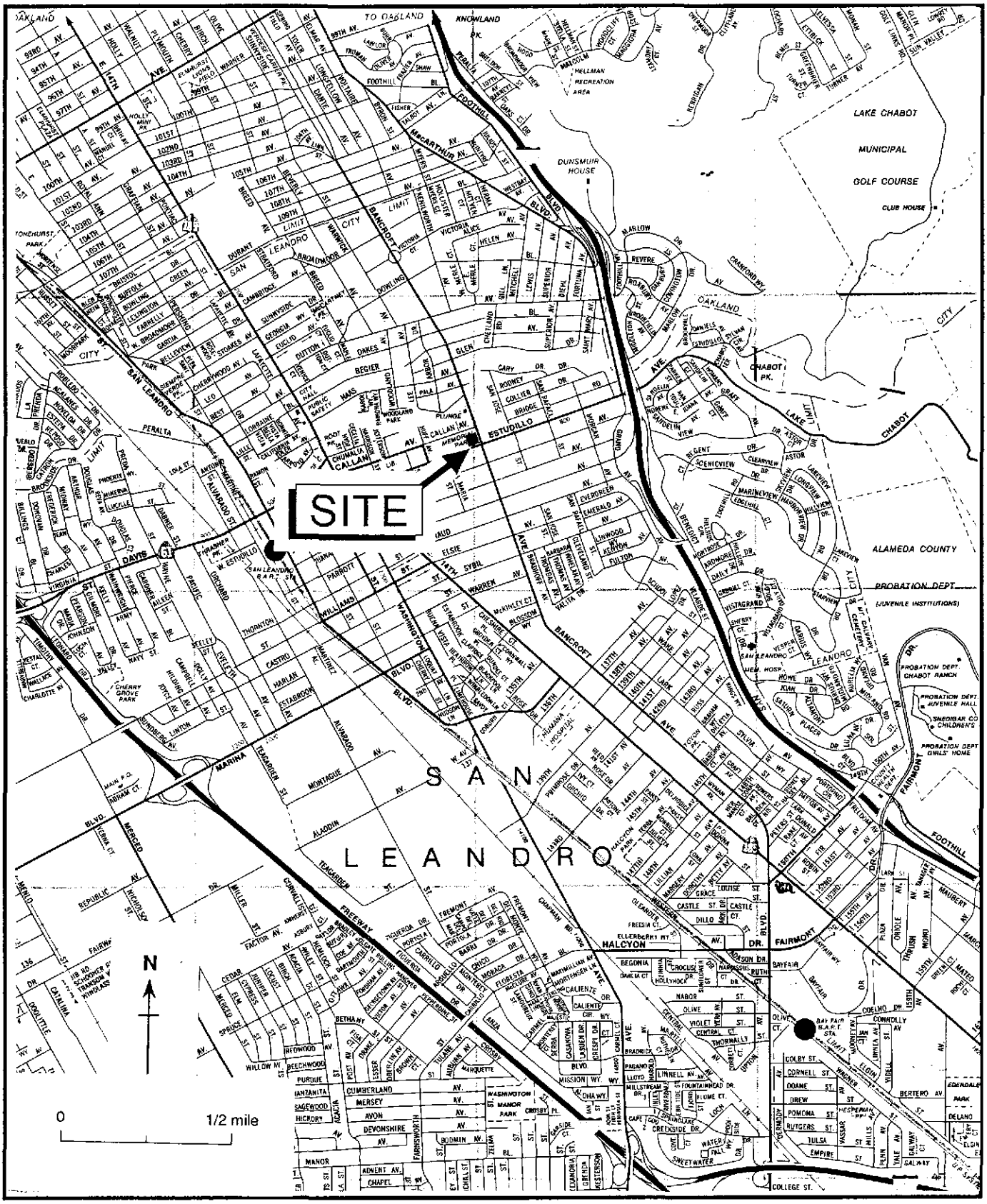
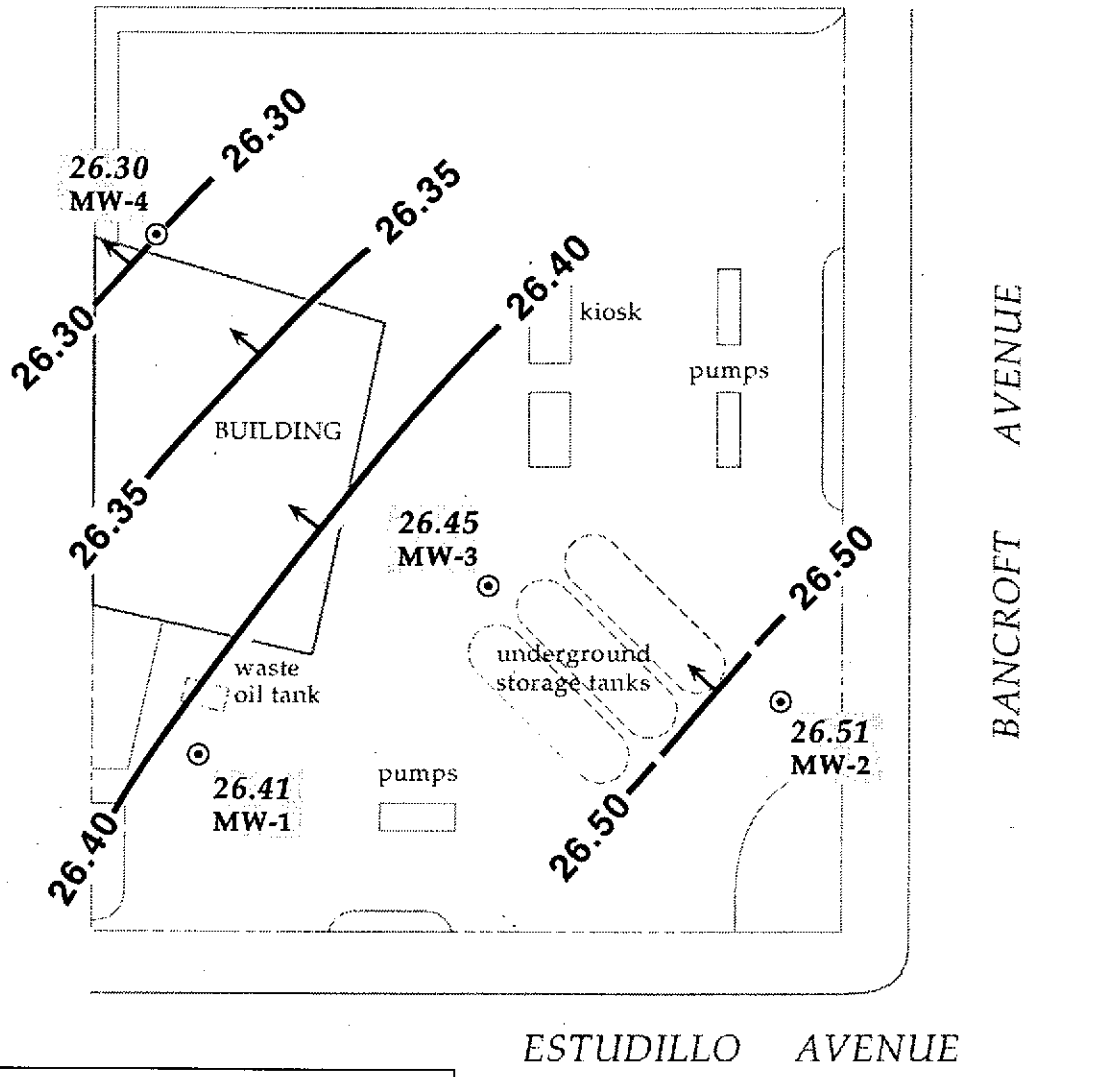


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

3/16/90



EXPLANATION

⊙ MW-1	Monitoring well
26.41	Ground water elevation, ft above mean sea level (msl)
—26.40	Ground water elevation contour, ft above msl, approximately located, dashed where inferred
→	Inferred ground water flow direction

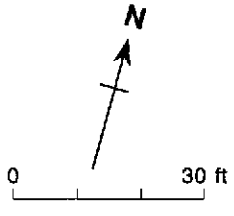
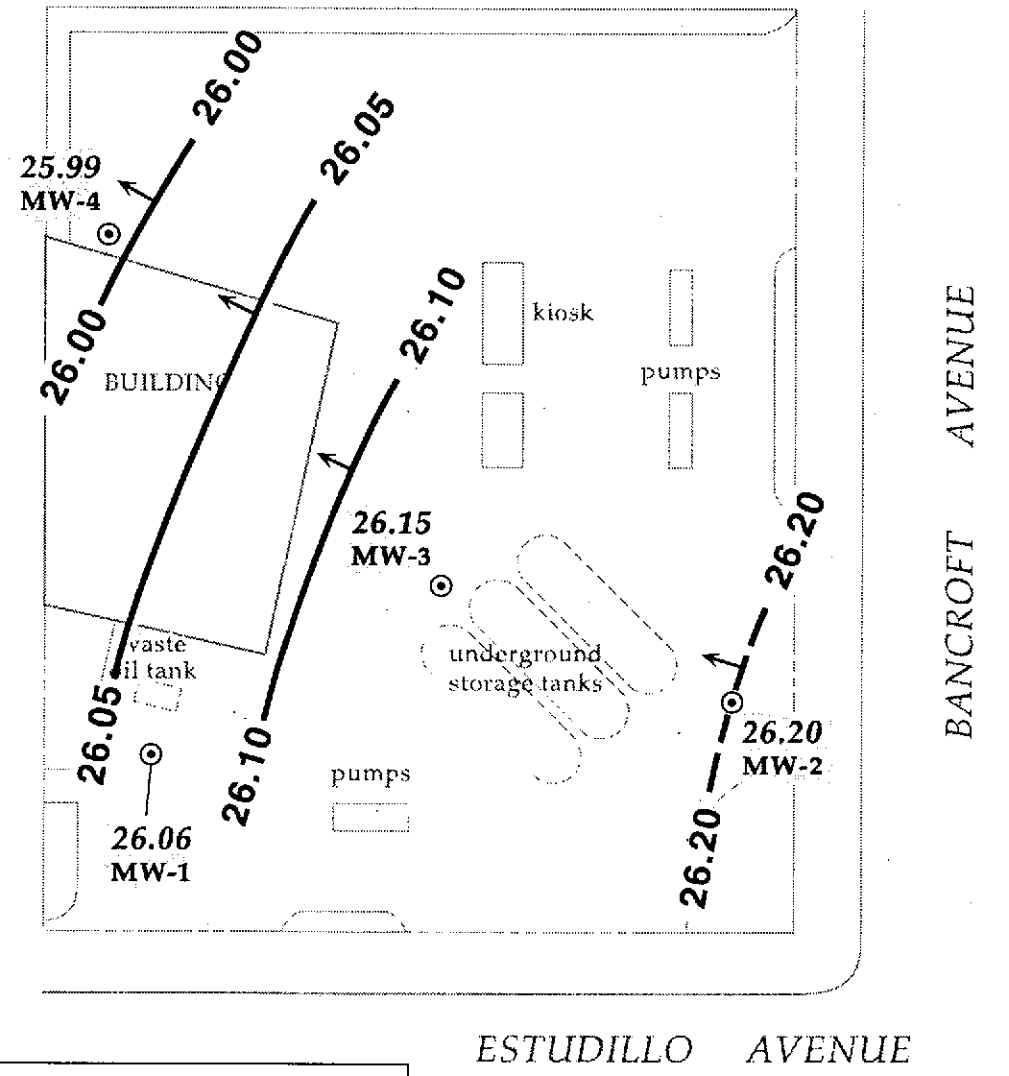


Figure 2. Monitoring Well Locations and Ground Water Elevation Contours - July 27, 1994 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California



EXPLANATION

⊙ MW-1	Monitoring well
26.06	Ground water elevation, ft above mean sea level (msl)
—26.00	Ground water elevation contour, ft above msl, approximately located, dashed where inferred
→	Inferred ground water flow direction

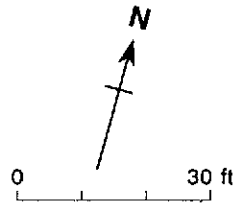


Figure 3. Monitoring Well Locations and Ground Water Elevation Contours - August 8, 1994 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

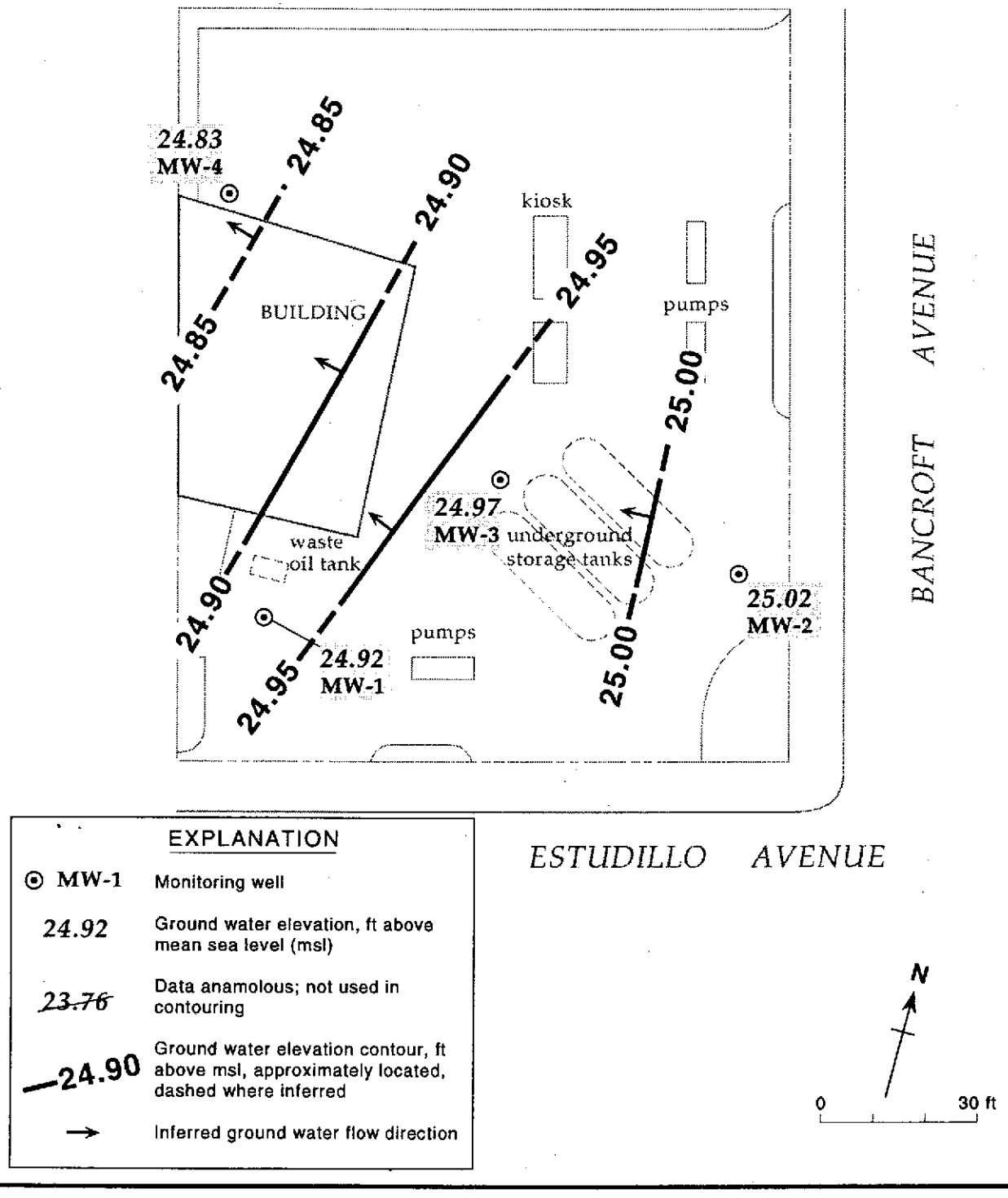


Figure 4. Monitoring Well Locations and Ground Water Elevation Contours - October 5, 1994 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Table 1. Ground Water Elevations, Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	03/13/90	66.29	42.65	23.64
	06/12/90		43.14	23.15
	09/13/90		44.71	21.58
	12/18/90		45.23	21.06
	03/07/91		43.32	22.97
	06/07/91		42.18	24.11
	09/17/91		44.85	21.44
	03/01/92		41.56	24.73
	06/03/92		40.74	25.55
	09/01/92		43.05	23.24
	12/07/92		44.19	22.10
	03/01/93		34.96	31.33
	06/22/93		36.75	29.54
	09/09/93		39.36	26.93
	12/13/93		40.74	25.55
	03/03/94		38.40	27.89
	07/27/94	**66.90[a]**	**40.49**	**26.41**
	08/09/94		**40.84**	**26.06**
	10/05/94[b]		**41.98**	**24.92**
MW-2	03/01/92	66.91	41.57	25.34
	06/03/92		40.56	26.35
	09/01/92		42.94	23.97
	12/07/92		44.13	22.78
	03/01/93		34.82	32.09
	06/22/93		36.64	30.27
	09/09/93		39.24	27.67
	12/13/93		40.64	26.27
	03/03/94		38.98	27.93
	07/27/94	**66.91[a]**	**40.40**	**26.51**
	08/09/94		**40.71**	**26.20**
	10/05/94[b]		**41.89**	**25.02**
MW-3	03/01/92	66.31	42.00	24.31
	06/03/92		44.30	22.01
	09/01/92		43.62	22.69
	12/07/92		44.77	21.54
	03/01/93		35.50	30.81
	06/22/93		37.30	29.01
	09/09/93		39.90	26.41
	12/13/93		41.30	25.01
	03/03/94		38.32	27.99

--- Table 1 continues on next page ---

Table 1. Ground Water Elevations, Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (cont'd)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	07/27/94	**67.52** [a]	**41.07**	**26.45**
	08/09/94		**41.37**	**26.15**
	10/05/94 [b]		**42.55**	**24.97**
MW-4	**07/27/94**	**68.08** [a]	**41.78**	**26.30**
	08/09/94		**42.09**	**25.99**
	10/05/94 [b]		**43.25**	**24.83**

Notes:

a = Top-of-Casing Elevation resurveyed March 29, 1994

b = Measurements this date represent 3rd month of 3rd Quarter 1994.

Table 2A. Analytical Results for Ground Water - Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X
			<----------parts per billion (mg/L)---------->					
MW-1	09/17/91	44.85	50[a]	160[b]	<0.5	<0.5	<0.5	<0.5
	03/01/92	41.56	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/03/92	40.74	<50	---	0.8	0.9	<0.5	<0.5
	09/01/92	43.05	<50	---	<0.5	5.3	5.8	7.2
	12/07/92	44.19	68	---	<0.5	<0.5	0.8	1.2
	03/01/93	34.96	<50	---	<0.5	<0.5	<0.5	<0.5
	03/01/93[dup]	34.96	<50	---	<0.5	<0.5	<0.5	<0.5
	06/22/93	36.75	<50	---	<0.5	<0.5	<0.5	<0.5
	09/09/93	39.36	200[c]	---	16	2.0	5.2	<0.5
	12/13/93	40.74	89[d]	---	3.4	<0.5	<0.5	<0.5
	03/03/94	38.40	65[d]	---	2.6	<0.5	<0.5	<0.5
	07/27/94	**40.49**	**180**	**---**	**30**	**2.6**	**1.8**	**5.0**
	07/27/94[dup]	**40.49**	**240**	**---**	**25**	**2.2**	**2.2**	**4.0**
	10/05/94	**41.98**	**<50**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
MW-2	03/01/92	41.57	910	<50	11	50	5.2	140
	06/03/92	40.56	1,400	---	33	150	16	240
	09/01/92	42.94	230	---	5.2	15	4.1	19
	09/01/92[dup]	42.94	320	---	5.6	18	5	220
	12/07/92	44.13	240	---	1.5	9.5	1.3	9.9
	12/07/92[dup]	44.13	<50	---	1.7	13	1	12
	03/01/93	34.82	230	---	260	27	310	66
	06/22/93	36.64	220	---	18	3.6	3.4	5.2
	06/22/93[dup]	36.64	320	---	29	4.2	4.8	6.1
	09/09/93	39.24	260	---	18	16	4.6	12
	09/09/93[dup]	39.24	210	---	16	14	3.9	9.1
	12/13/93	40.64	1,300[c]	---	82	73	34	15
	12/13/93[dup]	40.64	1,400[c]	---	110	72	45	19
	03/03/94	38.98	9,600	---	1,200	390	600	710

--- Table 2A continues on next page ---

Table 2A. Analytical Results for Ground Water - Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X
			<----------parts per billion (mg/L)---------->					
	03/03/94[dup]	38.98	10,000	---	930	330	500	590
	07/27/94	**40.40**	**190**	**---**	**<0.5**	**<0.5**	**1.0**	**<0.5**
	08/09/94	**40.71**	**1,500**	**---**	**53.5**	**46.2**	**12.4**	**44.0**
	10/05/94	**41.89**	**<485**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
MW-3	03/01/92	42.00	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/03/92	44.30	<50	---	<0.5	<0.5	<0.5	<0.5
	09/01/92	43.62	<50	---	<0.5	1.1	<0.5	3.2
	12/07/92	44.77	52	---	<0.5	<0.5	<0.5	0.5
	03/01/93	35.50	<50	---	<0.5	<0.5	<0.5	<0.5
	06/22/93	37.30	<50	---	<0.5	<0.5	<0.5	<0.5
	09/09/93	39.90	50[c]	---	5.0	<0.5	<0.5	<0.5
	12/13/93	41.30	120[d]	---	7.5	1.6	<0.5	6.3
	03/03/94	38.32	<50	---	0.81	<0.5	<0.5	<0.5
	07/27/94	**41.07**	**<50**	**---**	**3.5**	**<0.5**	**<0.5**	**<0.5**
	10/05/94[e]	**42.55**	**<57**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
MW-4	**07/27/94**	**41.78**	**120**	**---**	**3.4**	**0.6**	**3.9**	**4.9**
	10/05/94[e]	**43.25**	**<50**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
	10/05/94[dup]	**43.25**	**<50**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
Bailer Blank	09/01/92		<50	---	<0.5	<0.5	<0.5	1
	12/07/92		<50	---	<0.5	<0.5	<0.5	<0.5
Trip Blank	09/17/91		<50	---	<0.5	<0.5	<0.5	<0.5
	03/01/92		<50	---	<0.5	<0.5	<0.5	<0.5
	06/03/92		<50	---	<0.5	<0.5	<0.5	<0.5
	09/01/92		<50	---	<0.5	<0.5	<0.5	<0.5
	12/07/92		<50	---	<0.5	<0.5	<0.5	<0.5
	03/01/93		<50	---	<0.5	<0.5	<0.5	<0.5

--- Table 2A continues on next page ---

Table 2A. Analytical Results for Ground Water - Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	E	T	X
			<----------parts per billion (mg/L)---------->					
	06/22/93		<50	---	<0.5	<0.5	<0.5	<0.5
	09/09/93		<50	---	<0.5	<0.5	<0.5	<0.5
	12/13/93		<50	---	<0.5	<0.5	<0.5	<0.5
	03/03/94		<50	---	<0.5	<0.5	<0.5	<0.5
	07/27/94		**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	08/09/94		**<500**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
	10/05/94		**<50**	**---**	**<0.3**	**<0.3**	**<0.3**	**<0.6**
DTSC MCLs			NE	NE	1	680	100[g]	1,750

Abbreviations:

TPH-G	=	Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
TPH-D	=	Total petroleum hydrocarbons as diesel by Modified EPA Method 8015
B	=	Benzene by EPA Method 8020
E	=	Ethylbenzene by EPA Method 8020
T	=	Toluene by EPA Method 8020
X	=	Xylenes by EPA Method 8020
dup	=	Duplicate sample
NE	=	Not established
DTSC MCLs	=	California Department of Toxic Substances Control maximum contaminant levels for drinking water
---	=	Not analyzed
<n	=	Not detected at detection limits of n ppm

Notes:

a	=	Result due to a non-gasoline hydrocarbon compound
b	=	Result due to a non-diesel hydrocarbon compound
c	=	The concentrations reported as gasoline are primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.
d	=	The concentrations reported as gasoline are primarily due to the presence of a discrete peak not indicative of gasoline
e	=	Data not required, extra sample collected by sampling consultant.
f	=	Results this date represent 3rd month of 3rd Quarter 1994
g	=	DTSC recommended action level; MCL not established

Table 2B. Analytic Reports for Ground Water - Non-Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

Well ID	Date Sampled	Depth to Water	TCE	TOG	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE
			<----------parts per billion (mg/L)---------->					
MW-1	03/08/90	42.65	---	<10,000	35	6.3	---	---
	06/12/90	43.14	---	<10,000	1.9	63	---	---
	09/13/90	44.71	---	<10,000	26	9	---	---
	12/18/90	45.23	---	<10,000	<0.4	5.3	---	---
	03/07/91	43.32	---	---	23	3.7	---	---
	06/07/91	42.18	---	---	21	6.6	---	---
	09/17/91	44.85	---	---	23	7.4	---	---
	03/01/92	41.56	<0.4	---	21	6.3	---	<0.4
	06/03/92	40.74	17	---	<0.5	6.7	<0.5	<0.5
	09/01/92	43.05	12	---	<0.5	5.8	<0.5	<0.5
	12/07/92	44.19	<0.5	---	17	9	<0.5	<0.5
	03/01/93	34.96	<0.5	---	22	13	<0.5	<0.5
	03/01/93^{dup}	34.96	<0.5	---	22	13	<0.5	<0.5
	06/23/93	36.75	<0.5	---	18	8	<0.5	<0.5
	09/09/93	39.36	<0.5	---	17	6.5	<0.5	<0.5
	12/13/93	40.74	---	---	---	---	---	---
MW-2	03/01/92	41.57	<0.4	---	11	8.9	---	<0.4
	06/03/92	40.56	7.4	---	<0.5	<0.5	0.76	6.3
	09/01/92	42.94	8.4	---	<0.5	9.1	<0.5	<0.5
	09/01/92^{dup}	42.94	8.4	---	<0.5	8.1	<0.5	<0.5
	12/07/92	44.13	<0.5	---	10	10	<0.5	<0.5
	12/07/92^{dup}	44.13	<0.5	---	10	9	<0.5	<0.5
	03/01/93	34.82	<0.5	---	<0.5	<0.5	<0.5	<0.5
	06/22/93	36.64	<0.5	---	13	7.9	<0.5	<0.5
	06/22/93^{dup}	36.64	<0.5	---	12	6.9	<0.5	<0.5
	09/09/93	39.24	<0.5	---	11	5.9	1.9	<0.5
	09/09/93	39.24	<0.5	---	12	7.3	1.1	<0.5
	12/13/93	40.64	---	---	---	---	---	---

-- Table 2B continues on next page ---

Table 2B. Analytic Reports for Ground Water - Non-Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)

Well ID	Date Sampled	Depth to Water	TCE	TOG	PCE	Chloroform	cis-1,2-DCE	trans-1,2-DCE
			<----------parts per billion (mg/L)---------->					
	07/27/94	**40.40**	**<0.4**		**<0.4**	**7.5**	**---**	**<0.4**
	08/09/94	**40.71**	**<0.1**	**---**	**10.1**	**5.8**	**<0.1**	**<0.3**
	10/05/94[a]	**41.89**	**<5**	**---**	**9**	**5**	**<5**	**<5**
MW-3	03/01/92	42.00	<0.4	---	8.8	2.4	---	<0.4
	06/03/92	44.30	3	---	<0.5	1.5	<0.5	<0.5
	09/01/92	43.62	8.8	---	<0.5	2.3	<0.5	<0.5
	12/07/92	44.77	<0.5	---	10	3	<0.5	<0.5
	03/01/93	35.50	<0.5	---	9.2	9.4	<0.5	<0.5
	06/22/93	37.30	<0.5	---	7.8	9.6	<0.5	<0.5
	09/09/93	39.90	<0.5	---	7.9	7.3	<0.5	<0.5
	12/13/93	41.30	---	---	---	---	---	---
Bailer Blank	09/01/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
	12/07/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
Trip Blank	09/01/92		<0.5	---	<0.5	<0.5	<0.5	<0.5
	12/07/92[b]		<0.5	---	<0.5	<0.5	<0.5	<0.5
	03/01/93		<0.5	---	<0.5	<0.5	<0.5	<0.5
	06/22/93[c]		<0.5	---	<0.5	<0.5	<0.5	<0.5
DTSC MCLs			5	NE	5	NE	6	10

--- Table 2B continues next page ---

Table 2B. Analytic Reports for Ground Water - Non-Fuel Compounds - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California (continued)

Abbreviations:

TCE	=	Trichloroethene by EPA Method 601
TOG	=	Total non-polar oil and grease by American Public Health Association Standard Methods 503A&E
PCE	=	Tetrachloroethene by EPA Method 601
cis-1,2-DCE	=	cis-1,2-Dichloroethene by EPA Method 601
trans-1,2-DCE	=	trans-1,2-Dichlorethene by EPA Method 601
---	=	Not analyzed
dup	=	Duplicate sample
DTSC MCLs	=	Department of Toxic Substances Control Maximum Contaminant Levels for drinking water
NE	=	DTSC MCL not established

Notes:

a	=	Results this date represent 3rd month of 3rd quarter 1994
b	=	Sample contained 0.014 mg/L of 1,3-Dichlorobenzene
c	=	Although 1.4 ppb methylene chloride was detected in one of the ground water samples from well MW-2, the laboratory indicated that this was within normal laboratory background concentrations.

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 15, 1994

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

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California

QUARTER:
3rd quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 940727-Y-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 dewaters 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 sites 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

RCB/lp

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

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

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)
MW-1 *	7/27/94	TOC	--	NONE	--	--	40.49	59.10
MW-2	7/27/94	TOC	--	NONE	--	--	40.40	58.94
MW-3	7/27/94	TOC	--	NONE	--	--	41.07	57.60
MW-4	7/27/94	TOC	--	NONE	--	--	41.78	54.64

* Sample DUP was a duplicate sample takem from well MW-1.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940727-X1

1645

Date: 7/27
Page 1 of 1

Site Address: 1285 Bancroft Avenue, San Leandro

WIC#: 204-6852-0703

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: Joe Carrera.

Printed Name: JOE Carrera.

LAB: ~~Anametrix~~ NET Pacific

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	EPA 8010 HVOC's		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	7.27			X		3						X								
MW-2	"			X		6						X	X							
MW-3	"			X		3						X								
MW-4	"			X		3						X								
DUP	7.27			X		3						X								
EQUIP BLANK	7.27			X		3						X								
TRIP BLANK	7.27			X		2						X								

CHECK ONE (1) BOX ONLY — C1/D1

- Quarterly Monitoring ☒ 6441
- Site Investigation ☐ 6441
- Soil Closure/Disposal ☐ 6442
- Water Closure/Disposal ☐ 6443
- Soil/Air Rem. or Sys. O & M ☐ 6442
- Water Rem. or Sys. O & M ☐ 6443
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 10 days ☒ (Normal)
- Other ☐ ___

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

Relinquished by (Signature)	Printed Name	Date / Time	Received (Signature)	Printed Name	Date / Time
[signature]	JOE Carrera	7/28/94 11:57	[signature]	G.P. Lumbre	7/28/94 11:30
[signature]	G.P. LUMBRE	7/28/94 17:30			
(Courier)			[signature]	K. Temple	7/29/94 0820

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: 08/11/1994
NET Client Acct. No: 1821
NET Pacific Job No: 94.03305
Received: 07/29/1994

Client Reference Information

SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

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
Project Coordinator

Jim Hoch
Operations Manager

Enclosure(s)

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: MW-1
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210479

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/05/1994
DILUTION FACTOR*	1						08/05/1994
as Gasoline	180		50	ug/L	5030		08/05/1994
Carbon Range:	C5-C14						08/05/1994
METHOD 8020 (GC,Liquid)	--						08/05/1994
Benzene	30		0.5	ug/L	8020		08/05/1994
Toluene	1.8		0.5	ug/L	8020		08/05/1994
Ethylbenzene	2.6		0.5	ug/L	8020		08/05/1994
Xylenes (Total)	5.0		0.5	ug/L	8020		08/05/1994
SURROGATE RESULTS	--						08/05/1994
Bromofluorobenzene (SURR)	96			% Rec.	5030		08/05/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: MW-2
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210480

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/04/1994
DILUTION FACTOR*	1						08/04/1994
as Gasoline	190		50	ug/L	5030		08/04/1994
Carbon Range:	C5-C12						08/04/1994
METHOD 8020 (GC,Liquid)	--						08/04/1994
Benzene	ND		0.5	ug/L	8020		08/04/1994
Toluene	1.0		0.5	ug/L	8020		08/04/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/04/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/04/1994
SURROGATE RESULTS	--						08/04/1994
Bromofluorobenzene (SURR)	92			% Rec.	5030		08/04/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: MW-2
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210480

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						08/04/1994
Bromodichloromethane	ND		0.4	ug/L	8010		08/04/1994
Bromoform	ND		0.4	ug/L	8010		08/04/1994
Bromomethane	ND		0.4	ug/L	8010		08/04/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		08/04/1994
Chlorobenzene	ND		0.4	ug/L	8010		08/04/1994
Chloroethane	ND		0.4	ug/L	8010		08/04/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		08/04/1994
Chloroform	7.5		0.4	ug/L	8010		08/04/1994
Chloromethane	ND		0.4	ug/L	8010		08/04/1994
Dibromochloromethane	ND		0.4	ug/L	8010		08/04/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		08/04/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		08/04/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		08/04/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		08/04/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		08/04/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		08/04/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		08/04/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		08/04/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		08/04/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		08/04/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		08/04/1994
Methylene chloride	ND		10	ug/L	8010		08/04/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		08/04/1994
Tetrachloroethene	ND		0.4	ug/L	8010		08/04/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		08/04/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		08/04/1994
Trichloroethene	ND		0.4	ug/L	8010		08/04/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		08/04/1994
Vinyl chloride	ND		0.4	ug/L	8010		08/04/1994
SURROGATE RESULTS	--						08/04/1994
1,4-Difluorobenzene (SURR)	100			% Rec.			08/04/1994
1,4-Dichlorobutane (SURR)	116			% Rec.			08/04/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: MW-3
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210481

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/04/1994
DILUTION FACTOR*	1						08/04/1994
as Gasoline	ND		50	ug/L	5030		08/04/1994
Carbon Range:	--						08/04/1994
METHOD 8020 (GC,Liquid)	--						08/04/1994
Benzene	3.5	C	0.5	ug/L	8020		08/04/1994
Toluene	ND		0.5	ug/L	8020		08/04/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/04/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/04/1994
SURROGATE RESULTS	--						08/04/1994
Bromofluorobenzene (SURR)	79			% Rec.	5030		08/04/1994

C : Positive result confirmed by secondary column or GC/MS analysis.

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: MW-4
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210482

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/06/1994
DILUTION FACTOR*	1						08/06/1994
as Gasoline	120		50	ug/L	5030		08/06/1994
Carbon Range:	C5-C14						08/06/1994
METHOD 8020 (GC,Liquid)	--						08/06/1994
Benzene	3.4		0.5	ug/L	8020		08/06/1994
Toluene	3.9		0.5	ug/L	8020		08/06/1994
Ethylbenzene	0.6		0.5	ug/L	8020		08/06/1994
Xylenes (Total)	4.9		0.5	ug/L	8020		08/06/1994
SURROGATE RESULTS	--						08/06/1994
Bromofluorobenzene (SURR)	86			% Rec.	5030		08/06/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: DUP
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210483

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/05/1994
DILUTION FACTOR*	1						08/05/1994
as Gasoline	240		50	ug/L	5030		08/05/1994
Carbon Range:	C5-C12						08/05/1994
METHOD 8020 (GC,Liquid)	--						08/05/1994
Benzene	25		0.5	ug/L	8020		08/05/1994
Toluene	2.2		0.5	ug/L	8020		08/05/1994
Ethylbenzene	2.2		0.5	ug/L	8020		08/05/1994
Xylenes (Total)	4.0		0.5	ug/L	8020		08/05/1994
SURROGATE RESULTS	--						08/05/1994
Bromofluorobenzene (SURR)	81			% Rec.	5030		08/05/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: Equip. Blank
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210484

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/05/1994
DILUTION FACTOR*	1						08/05/1994
as Gasoline	ND		50	ug/L	5030		08/05/1994
Carbon Range:	--						08/05/1994
METHOD 8020 (GC,Liquid)	--						08/05/1994
Benzene	ND		0.5	ug/L	8020		08/05/1994
Toluene	ND		0.5	ug/L	8020		08/05/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/05/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/05/1994
SURROGATE RESULTS	--						08/05/1994
Bromofluorobenzene (SURR)	71			% Rec.	5030		08/05/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

SAMPLE DESCRIPTION: Trip Blank
Date Taken: 07/27/1994
Time Taken:
NET Sample No: 210485

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						08/05/1994
DILUTION FACTOR*	1						08/05/1994
as Gasoline	ND		50	ug/L	5030		08/05/1994
Carbon Range:	--						08/05/1994
METHOD 8020 (GC,Liquid)	--						08/05/1994
Benzene	ND		0.5	ug/L	8020		08/05/1994
Toluene	ND		0.5	ug/L	8020		08/05/1994
Ethylbenzene	ND		0.5	ug/L	8020		08/05/1994
Xylenes (Total)	ND		0.5	ug/L	8020		08/05/1994
SURROGATE RESULTS	--						08/05/1994
Bromofluorobenzene (SURR)	81			% Rec.	5030		08/05/1994

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)						
as Gasoline	108.0	1.08	1.00	mg/L	08/04/1994	jmh
Benzene	89.6	4.48	5.00	ug/L	08/04/1994	jmh
Toluene	91.6	4.58	5.00	ug/L	08/04/1994	jmh
Ethylbenzene	84.8	4.24	5.00	ug/L	08/04/1994	jmh
Xylenes (Total)	89.3	13.4	15.0	ug/L	08/04/1994	jmh
Bromofluorobenzene (SURR)	90.0	90	100	% Rec.	08/04/1994	jmh
TPH (Gas/BTXE,Liquid)						
as Gasoline	105.0	1.05	1.00	mg/L	08/06/1994	jmh
Benzene	85.0	4.25	5.00	ug/L	08/06/1994	jmh
Toluene	87.2	4.36	5.00	ug/L	08/06/1994	jmh
Ethylbenzene	88.2	4.41	5.00	ug/L	08/06/1994	jmh
Xylenes (Total)	92.0	13.8	15.0	ug/L	08/06/1994	jmh
Bromofluorobenzene (SURR)	88.0	88	100	% Rec.	08/06/1994	jmh
TPH (Gas/BTXE,Liquid)						
as Gasoline	105.0	1.05	1.00	mg/L	08/05/1994	pbg
Benzene	100.4	5.02	5.00	ug/L	08/05/1994	pbg
Toluene	98.8	4.94	5.00	ug/L	08/05/1994	pbg
Ethylbenzene	108.2	5.41	5.00	ug/L	08/05/1994	pbg
Xylenes (Total)	109.2	16.38	15.0	ug/L	08/05/1994	pbg
Bromofluorobenzene (SURR)	107.0	107	100	% Rec.	08/05/1994	pbg

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	101.5	20.3	20.0	ug/L	08/04/1994	asm
Bromoform	91.5	18.3	20.0	ug/L	08/04/1994	asm
Bromomethane	92.5	18.5	20.0	ug/L	08/04/1994	asm
Carbon tetrachloride	100.5	20.1	20.0	ug/L	08/04/1994	asm
Chlorobenzene	101.5	20.3	20.0	ug/L	08/04/1994	asm
Chloroethane	84.0	16.8	20.0	ug/L	08/04/1994	asm
2-Chloroethylvinyl ether	117.5	23.5	20.0	ug/L	08/04/1994	asm
Chloroform	111.5	22.3	20.0	ug/L	08/04/1994	asm
Chloromethane	81.5	16.3	20.0	ug/L	08/04/1994	asm
Dibromochloromethane	97.0	19.4	20.0	ug/L	08/04/1994	asm
1,2-Dichlorobenzene	98.5	19.7	20.0	ug/L	08/04/1994	asm
1,3-Dichlorobenzene	84.0	16.8	20.0	ug/L	08/04/1994	asm
1,4-Dichlorobenzene	91.5	18.3	20.0	ug/L	08/04/1994	asm
Dichlorodifluoromethane	89.0	17.8	20.0	ug/L	08/04/1994	asm
1,1-Dichloroethane	105.5	21.1	20.0	ug/L	08/04/1994	asm
1,2-Dichloroethane	97.5	19.5	20.0	ug/L	08/04/1994	asm
1,1-Dichloroethene	100.5	20.1	20.0	ug/L	08/04/1994	asm
trans-1,2-Dichloroethene	91.5	18.3	20.0	ug/L	08/04/1994	asm
1,2-Dichloropropane	102.0	20.4	20.0	ug/L	08/04/1994	asm
cis-1,3-Dichloropropene	99.5	19.9	20.0	ug/L	08/04/1994	asm
trans-1,3-Dichloropropene	97.5	19.5	20.0	ug/L	08/04/1994	asm
Methylene chloride	114.5	22.9	20.0	ug/L	08/04/1994	asm
1,1,2,2-Tetrachloroethane	92.5	18.5	20.0	ug/L	08/04/1994	asm
Tetrachloroethene	81.5	16.3	20.0	ug/L	08/04/1994	asm
1,1,1-Trichloroethane	102.0	20.4	20.0	ug/L	08/04/1994	asm
1,1,2-Trichloroethane	86.0	17.2	20.0	ug/L	08/04/1994	asm
Trichloroethene	99.5	19.9	20.0	ug/L	08/04/1994	asm
Trichlorofluoromethane	89.0	17.8	20.0	ug/L	08/04/1994	asm
Vinyl chloride	85.0	17.0	20.0	ug/L	08/04/1994	asm
1,4-Difluorobenzene (SURR)	104.0	104	100	% Rec.	08/04/1994	asm
1,4-Dichlorobutane (SURR)	91.0	91	100	% Rec.	08/04/1994	asm

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)					
as Gasoline	ND	0.05	mg/L	08/04/1994	jmh
Benzene	ND	0.5	ug/L	08/04/1994	jmh
Toluene	ND	0.5	ug/L	08/04/1994	jmh
Ethylbenzene	ND	0.5	ug/L	08/04/1994	jmh
Xylenes (Total)	ND	0.5	ug/L	08/04/1994	jmh
Bromofluorobenzene (SURR)	77		% Rec.	08/04/1994	jmh
TPH (Gas/BTXE,Liquid)					
as Gasoline	ND	0.05	mg/L	08/06/1994	jmh
Benzene	ND	0.5	ug/L	08/06/1994	jmh
Toluene	ND	0.5	ug/L	08/06/1994	jmh
Ethylbenzene	ND	0.5	ug/L	08/06/1994	jmh
Xylenes (Total)	ND	0.5	ug/L	08/06/1994	jmh
Bromofluorobenzene (SURR)	79		% Rec.	08/06/1994	jmh
TPH (Gas/BTXE,Liquid)					
as Gasoline	ND	0.05	mg/L	08/05/1994	pbg
Benzene	ND	0.5	ug/L	08/05/1994	pbg
Toluene	ND	0.5	ug/L	08/05/1994	pbg
Ethylbenzene	ND	0.5	ug/L	08/05/1994	pbg
Xylenes (Total)	ND	0.5	ug/L	08/05/1994	pbg
Bromofluorobenzene (SURR)	91		% Rec.	08/05/1994	pbg

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	08/04/1994	asm
Bromoform	ND	0.4	ug/L	08/04/1994	asm
Bromomethane	ND	0.4	ug/L	08/04/1994	asm
Carbon tetrachloride	ND	0.4	ug/L	08/04/1994	asm
Chlorobenzene	ND	0.4	ug/L	08/04/1994	asm
Chloroethane	ND	0.4	ug/L	08/04/1994	asm
2-Chloroethylvinyl ether	ND	1.0	ug/L	08/04/1994	asm
Chloroform	ND	0.4	ug/L	08/04/1994	asm
Chloromethane	ND	0.4	ug/L	08/04/1994	asm
Dibromochloromethane	ND	0.4	ug/L	08/04/1994	asm
1,2-Dichlorobenzene	ND	0.4	ug/L	08/04/1994	asm
1,3-Dichlorobenzene	ND	0.4	ug/L	08/04/1994	asm
1,4-Dichlorobenzene	ND	0.4	ug/L	08/04/1994	asm
Dichlorodifluoromethane	ND	0.4	ug/L	08/04/1994	asm
1,1-Dichloroethane	ND	0.4	ug/L	08/04/1994	asm
1,2-Dichloroethane	ND	0.4	ug/L	08/04/1994	asm
1,1-Dichloroethene	ND	0.4	ug/L	08/04/1994	asm
trans-1,2-Dichloroethene	ND	0.4	ug/L	08/04/1994	asm
1,2-Dichloropropane	ND	0.4	ug/L	08/04/1994	asm
cis-1,3-Dichloropropene	ND	0.4	ug/L	08/04/1994	asm
trans-1,3-Dichloropropene	ND	0.4	ug/L	08/04/1994	asm
Methylene chloride	ND	10	ug/L	08/04/1994	asm
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	08/04/1994	asm
Tetrachloroethene	ND	0.4	ug/L	08/04/1994	asm
1,1,1-Trichloroethane	ND	0.4	ug/L	08/04/1994	asm
1,1,2-Trichloroethane	ND	0.4	ug/L	08/04/1994	asm
Trichloroethene	ND	0.4	ug/L	08/04/1994	asm
Trichlorofluoromethane	ND	0.4	ug/L	08/04/1994	asm
Vinyl chloride	ND	0.4	ug/L	08/04/1994	asm
1,4-Difluorobenzene (SURR)	110		% Rec.	08/04/1994	asm
1,4-Dichlorobutane (SURR)	97		% Rec.	08/04/1994	asm

Ref: SHELL, 1285 Bancroft Avenue, San Leandro, Job No. 940727-Y1

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	Analyst Initials
TPH (Gas/BTXE,Liquid)										
as Gasoline	104.0	112.0	7.4	1.00	ND	1.04	1.12	mg/L	08/04/1994	jmh
Benzene	103.4	107.5	3.9	31.9	ND	33.0	34.3	ug/L	08/04/1994	jmh
Toluene	100.3	102.1	1.8	93.4	ND	93.7	95.4	ug/L	08/04/1994	jmh
TPH (Gas/BTXE,Liquid)										
as Gasoline	104.0	103.0	1.0	1.00	ND	1.04	1.03	mg/L	08/05/1994	pbg
Benzene	99.4	98.0	1.4	34.7	ND	34.5	34.0	ug/L	08/05/1994	pbg
Toluene	99.6	99.1	0.5	76.3	ND	76.0	75.6	ug/L	08/05/1994	pbg
TPH (Gas/BTXE,Liquid)										
as Gasoline	99.0	97.0	2.0	1.00	ND	0.99	0.97	mg/L	08/06/1994	aal
Benzene	90.5	89.4	1.2	34.9	ND	31.6	31.2	ug/L	08/06/1994	aal
Toluene	91.6	90.0	1.8	107.7	ND	98.6	96.9	ug/L	08/06/1994	aal
METHOD 8010 (GC,Liquid)										
Chlorobenzene	115.0	116.5	1.3	20.0	ND	23.0	23.3	ug/L	08/04/1994	asm
1,1-Dichloroethene	95.5	98.5	3.1	20.0	ND	19.1	19.7	ug/L	08/04/1994	asm
Trichloroethene	109.5	112.5	2.7	20.0	ND	21.9	22.5	ug/L	08/04/1994	asm

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 [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
abb.93

COOLER RECEIPT FORM

oject: Shell 1285 Bancroft Ave. San Leandro Log No: 7645
oler received on: 7/29/94 and checked on 7/29/94 by K. Temple
(signature)

re custody papers present?..... YES NO
re custody papers properly filled out?..... YES NO
re the custody papers signed?..... YES NO
s sufficient ice used?..... YES NO 0>2°C
d all bottles arrive in good condition (unbroken)?..... YES NO
d bottle labels match COC?..... YES NO
re proper bottles used for analysis indicated?..... YES NO
rrect preservatives used?..... YES NO
A vials checked for headspace bubbles?..... YES NO
Note which voas (if any) had bubbles:*

mple descriptor:	Number of vials:
TB	2 of 2

ll VOAs with headspace bubbles have been set aside so they will not be sed for analysis..... YES NO

st here all other jobs received in the same cooler:

ient Job #	NET log #

(coolerrec)

BLAINE
TECH SERVICES INC.

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

August 22, 1994

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

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California

QUARTER:
3rd quarter of 1994

GROUNDWATER SAMPLING REPORT 940809-K-4

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 dewaters 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 sites 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 Crosby Laboratories, Inc. in Anaheim , California. Crosby Laboratories, Inc. is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1552.

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

RCB/lp

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

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

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)
MW-1	8/9/94	TOC	–	NONE	–	–	40.84	59.16
MW-2	8/9/94	TOC	–	NONE	–	–	40.71	59.08
MW-3	8/9/94	TOC	–	NONE	–	–	41.37	57.92
MW-4	8/9/94	TOC	–	NONE	–	–	42.09	54.67

CROSBY
LABORATORIES
INCORPORATED

Analytical Report

5200 E. Hunter Street, Suite B Anaheim, California 92807 • 714-777-1425 • 1-800-3 CROSBY • FAX 714-777-3926

ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

COVER SHEET

LAB RECEIVING #: 9408.065

REPORT DATE: 08/17/94

REPORTED TO: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER
985 TIMOTHY DRIVE
SAN JOSE, CA 95133

WIC #: 204-6852-0703
PROJECT #: NONE
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

DATE SAMPLED: 08/09/94
DATE RECEIVED: 08/10/94
 # OF SAMPLES: 2

SAMPLE MATRIX: LIQUID

SAMPLE ID: MW2
TB

SAMPLE HANDLING & CONTROL STATEMENT

The above mentioned samples were received in appropriate containers accompanied by a fully signed and dated chain-of-custody record. The containers were assigned unique identification numbers and had sufficient amount for the test requested. There were no site specific quality control requirements made at the time of sample submittal. Samples submitted did not exceed the holding time of the requested test parameters.

QUALITY CONTROL SUMMARY STATEMENT

Laboratory Quality Control parameters and results of instrument calibration standards were all within control limits and the analytical data hereby submitted falls within acceptable limits of accuracy and precision unless otherwise indicated. Please see the attached Quality Control Data for additional information.

SUBMITTED BY:

Girma Selassie
QA/QC Director

CERTIFICATE OF APPROVED ANALYSIS

The information contained in this cover sheet is an integral part of the attached analytical report.

DOHS Lab Certificate #: 1552
Expiration Date: 6/30/95

A2LA Certificate #: 0389.01
Expiration Date: 9/30/94

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Analytical Report

5200 E. Hunter Street, Suite B Anaheim, California 92807 • 714-777-1425 • 1-800-3 CROSBY • FAX 714-777-3926

ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

CLIENT: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER

LAB RECEIVING#: 9408.065

WIC #: 204-6852-0703
PROJECT #: NONE
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

Spl. Prep. Meth.: EPA 5030

MATRIX: LIQUID
UNIT: µg/l

Prepared: 08/11/94
Analyzed: 08/11/94
Analyst: JS

			EPA 8020 (Partial)/8015 TPH-Modified (Gasoline)					%Surrogate Recovery	
Lab ID	Client Sample ID	D.F.	Benzene	Toluene	Ethyl Benzene	Total Xylene	TPH Gasoline	BTEX (80-120)	TPH (80-120)
RA081194	METHOD BLANK	1	ND	ND	ND	ND	ND	91	87
AA48613	MW2	5	53.5	12.4	46.2	44.0	1500	108	93
AA48614	TB	1	ND	ND	ND	ND	ND	96	91
DETECTION LIMITS			0.3	0.3	0.3	0.6	500		

QUALITY CONTROL DATA, EPA-8020Part./8015Mod.

			ACCURACY					*PRECISION*	
MATRIX SPIKE/ MATRIX SPIKE DUPLICATE	SPK CONC. (µg/l)	MS (µg/l)	% MS	MSD (µg/l)	% MSD	ACP % MS	RPD	ACP % RPD
Benzene	8.0	7.7	96	7.7	96	80-120	0	0-25
Toluene	8.0	8.1	101	7.9	99	80-120	2	0-25
Ethyl Benzene	8.0	9.4	118	9.3	116	80-120	1	0-25

AUDIT DATA	LAB ID	SAMPLE ID	BATCH #	QC STD #	ANALYZED
	AA48572	DISCHARGE	BT081194	GC132	08/11/94

NOTES:

ND denotes Not Detected at the indicated detection limit.

This report is preceded by a cover sheet that contains vital information.

CROSBY
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INCORPORATED

Analytical Report

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ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

CLIENT: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER
WIC #: 204-6852-0703
PROJECT #: NONE
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

LAB RECEIVING#: 9408.065

Spl. Prep. Meth.: EPA 5030

MATRIX:	LIQUID
UNIT:	µg/l

Prepared:	08/16/94
Analyzed:	08/16/94
Analyst:	JC

HALOGENATED VOLATILE ORGANICS, EPA-8010

	Lab ID:	RA081694	AA48613	
	Client Sample ID:	Method Blank	MW2	Detection
COMPOUNDS:	D.F.:	1	1	Limits
Bromodichloromethane		ND	ND	0.1
Bromoform		ND	ND	0.1
Bromomethane		ND	ND	0.1
Carbon Tetrachloride		ND	ND	0.1
Chlorobenzene		ND	ND	0.1
Chloroethane		ND	ND	0.2
Chloroform		ND	5.8	0.1
Chloromethane		ND	ND	0.1
Dibromochloromethane		ND	ND	0.1
1,2-Dibromo-3-chloropropane		ND	ND	0.2
1,2-Dibromoethane		ND	ND	0.2
Dibromomethane		ND	ND	0.2
1,2-Dichlorobenzene		ND	ND	0.2
1,3-Dichlorobenzene		ND	ND	0.1
1,4-Dichlorobenzene		ND	ND	0.1
Dichlorodifluoromethane		ND	ND	0.1
1,1-Dichloroethane		ND	ND	0.2
1,2-Dichloroethane		ND	ND	0.1
1,1-Dichloroethene		ND	ND	0.1
trans-1,2-Dichloroethene		ND	ND	0.3
1,2-Dichloropropane		ND	ND	0.1
cis-1,3-Dichloropropene		ND	ND	0.1
trans-1,3-Dichloropropene		ND	ND	0.1
Methylene Chloride		ND	ND	0.1
1,1,1,2-Tetrachloroethane		ND	ND	0.1
1,1,2,2-Tetrachloroethane		ND	ND	0.1
Tetrachloroethene		ND	10.1	0.1
1,1,1-Trichloroethane		ND	2.2	0.1
1,1,2-Trichloroethane		ND	ND	0.1
Trichloroethene		ND	ND	0.1
Trichlorofluoromethane		ND	ND	0.2
Vinyl Chloride		ND	ND	0.2

SURROGATE SPIKE	% SURROGATE RECOVERY		Control Limits
Bromochloromethane	99	106	80-120
2-Bromo-1-chloropropane	96	102	80-120
1,4-Dichlorobutane	89	95	80-120

QUALITY CONTROL DATA, EPA-8010

		ACCURACY					PRECISION	
MATRIX SPIKE/ MATRIX SPIKE DUPLICATE	SPK CONC. (µg/l)	MS (µg/l)	% MS	MSD (µg/l)	% MSD	ACP % MS	RPD	ACP % RPD
1,1-Dichloroethene	10.0	8.5	85	9.9	99	80-120	15	0-25
Trichloroethene	10.0	10.9	109	10.7	107	80-120	2	0-25
Chlorobenzene	10.0	9.8	98	9.9	99	80-120	1	0-25

AUDIT DATA	LAB ID	SAMPLE ID	BATCH #	QC STD #	ANALYZED
	AA48613	MW2	8010-081694	GC92&32	08/16/94

NOTES:

ND denotes Not Detected at the indicated detection limit.

This report is preceded by a cover sheet that contains vital information.

BLAINE
TECH SERVICES INC.

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

October 27, 1994

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

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California

QUARTER:
~~4th~~ 3rd quarter of 1994

GROUNDWATER SAMPLING REPORT 941005-J-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 dewaters 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 sites 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 Crosby Laboratories, Inc. in Anaheim, California. Crosby Laboratories, Inc. is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1552.

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

RCB/lp

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

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

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)
MW-1	10/5/94	TOC	--	NONE	--	--	41.98	59.25
MW-2	10/5/94	TOC	--	NONE	--	--	41.89	59.19
MW-3	10/5/94	TOC	--	NONE	--	--	42.55	57.98
MW-4 *	10/5/94	TOC	--	NONE	--	--	43.25	54.78

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

Shell3

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD 1990 — Serial No: 941005 J1 9410.068

Date: 10/5/94 — Page 1 of 1

Site Address: 1285 Bancroft Avenue, San Leandro

WIC#: 204-6852-0703

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:

Printed Name: JEAN GATINEAU

LAB: CROSBY

CHECK ONE (1) BOX ONLY		C/D#
Quarterly Monitoring	X	6441
Site Investigation		6441
Soil Closure/Disposal		6442
Water Closure/Disposal		6443
Soil/Air Rem. or Sys. O & M		6442
Water Rem. or Sys. O & M		6443
Other		

TURN AROUND TIME: 24 hours ☐ — 48 hours ☐ — 15 days ☒ (Normal) — Other ☐ ____

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

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	HVOC 8010		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	10/5			X		3						X							AA51097	
MW-2						6							X						AA51098	
MW-3						3													AA51099	
MW-4						3													AA51100	
E.B.						3													AA51101	
DUP						3													AA51102	
T.B.	↓			↓		2						↓							AA51103	

	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
Relinquished by (signature):	JEAN GATINEAU	Date: 10/7/94 Time: 11:20	D'APOCCIA	D'APOCCIA	Date: 10/7/94 Time: 11:20
Relinquished by (signature): D'APOCCIA	D'APOCCIA	Date: 10/10/94 Time: 16:00		Jim Lynch	Date: 10-10-94 Time: 16:00
Relinquished By (signature):	Jim Lynch	Date: 10-7-94 Time: 12:53		Jenny Byramian	Date: 10/11/94 Time: 10:50

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

CROSBY
LABORATORIES
INCORPORATED

Analytical Report

5200 E. Hunter Street, Suite B Anaheim, California 92807 • 714-777-1425 • 1-800-3 CROSBY • FAX 714-777-3926

ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

LAB RECEIVING #: **9410.068**

REPORT DATE: 10/21/94

REPORTED TO: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER
985 TIMOTHY DRIVE
SAN JOSE, CA 95133

WIC #: 204-6852-0703
PROJECT #: 941005J1
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

DATE SAMPLED: 10/05/94
DATE RECEIVED: 10/07/94
 # OF SAMPLES: 7

SAMPLE MATRIX: LIQUID

SAMPLE ID: MW-1
MW-2
MW-3
MW-4
E.B.
DUP
T.B.

SAMPLE HANDLING & CONTROL STATEMENT

The above mentioned samples were received in appropriate containers accompanied by a fully signed and dated chain-of-custody record. The containers were assigned unique identification numbers and had sufficient amount for the test requested. There were no site specific quality control requirements made at the time of sample submittal. Samples submitted did not exceed the holding time of the requested test parameters.

QUALITY CONTROL SUMMARY STATEMENT

Laboratory Quality Control parameters and results of instrument calibration standards were all within control limits and the analytical data hereby submitted falls within acceptable limits of accuracy and precision unless otherwise indicated. Please see the attached Quality Control Data for additional information.

SUBMITTED BY:

Girma Selassie
QA/QC Director

CERTIFICATE OF APPROVED ANALYSIS

The information contained in this cover sheet is an integral part of the attached analytical report.

DOHS Lab Certificate #: 1552
Expiration Date: 6/30/95

A2LA Certificate #: 0389.01
Expiration Date: 9/30/94

CROSBY LABORATORIES INCORPORATED

1101 South Richfield Road Placentia, California 92670 • 714-777-1425 • 1-800-3 CROSBY • FAX 714-777-3926

ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

Analytical Report

CLIENT: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER

LAB RECEIVING#: 9410.068

WIC #: 204-6852-0703
PROJECT #: 941005J1
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

Spl. Prep. Meth.: EPA 5030

MATRIX: LIQUID
UNIT: µg/l

Prepared: 10/19/94
Analyzed: 10/20/94
Analyst: AR

			EPA 8020 (Partial)/8015 TPH-Modified (Gasoline)					%Surrogate Recovery	
Lab ID	Client Sample ID	D.F.	Benzene	Toluene	Ethyl Benzene	Total Xylene	TPH Gasoline	BTEX (80-120)	TPH (80-120)
RA101994	METHOD BLANK	1	ND	ND	ND	ND	ND	93	94
AA51097	MW-1	1	ND	ND	ND	ND	ND	96	92
AA51098	MW-2	1	ND	ND	ND	ND	485	93	86
AA51099	MW-3	1	ND	ND	ND	ND	57	93	92
AA51100	MW-4	1	ND	ND	ND	ND	ND	92	90
AA51101	E.B.	1	ND	ND	ND	ND	ND	102	102
AA51102	DUP	1	ND	ND	ND	ND	ND	94	94
AA51103	T.B.	1	ND	ND	ND	ND	ND	94	96
DETECTION LIMITS			0.3	0.3	0.3	0.6	50		

QUALITY CONTROL DATA, EPA-8020Part./8015Mod.

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE	ACCURACY SPK CONC. (µg/l)	MS (µg/l)	% MS	MSD (µg/l)	% MSD	ACP % MS	PRECISION RPD	ACP % RPD
Benzene	8.0	8.7	109	8.3	104	80-120	5	0-25
Toluene	8.0	7.9	99	7.6	95	80-120	4	0-25
Ethyl Benzene	8.0	7.8	98	7.3	91	80-120	7	0-25

AUDIT DATA	LAB ID	SAMPLE ID	BATCH #	QC STD #	ANALYZED
	AA48129	MW-5	BT101994	GC132	10/19/94

NOTES:

ND denotes Not Detected at the indicated detection limit.

CROSBY
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Analytical Report

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ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

CLIENT: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER

LAB RECEIVING#: 9410.068

WIC #: 204-6852-0703
PROJECT #: 941005J1
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

Spl. Prep. Meth.: EPA 5030

MATRIX: LIQUID
UNIT: µg/l

Prepared: 10/20/94
Analyzed: 10/20/94
Analyst: RRT

VOLATILE ORGANIC COMPOUNDS, EPA- 8240

	Lab ID:	X19B1.D	AA51098	
	Client Sample ID:	Method Blank	MW-2	Detection
COMPOUNDS:	D.F.:	1	1	Limits
chloromethane		ND	ND	10
vinyl chloride		ND	ND	10
bromomethane		ND	ND	10
chloroethane		ND	ND	10
acetone		ND	ND	100
1,1-dichloroethene		ND	ND	5
carbon disulfide		ND	ND	5
methylene chloride		ND	ND	5
trans-1,2-dichloroethene		ND	ND	5
1,1-dichloroethane		ND	ND	5
2-butanone		ND	ND	100
cis-1,2-dichloroethene		ND	ND	5
chloroform		ND	5	5
1,2-dichloroethane		ND	ND	5
1,1,1-trichloroethane		ND	ND	5
carbon tetrachloride		ND	ND	5
benzene		ND	93	5
trichloroethene		ND	ND	5
1,2-dichloropropane		ND	ND	5
bromodichloromethane		ND	ND	5
dibromochloromethane		ND	ND	5
2-chloroethylvinyl ether		ND	ND	5
trans-1,3-dichloropropene		ND	ND	5
1,1,2-trichloroethane		ND	ND	5
bromoform		ND	ND	5
4-methyl-2-pentanone		ND	ND	50
toluene		ND	13	5
cis-1,3-dichloropropene		ND	ND	5
2-hexanone		ND	ND	50
tetrachloroethene		ND	9	5
chlorobenzene		ND	ND	5
ethylbenzene		ND	42	5
p,m-xylene		ND	24	5
styrene		ND	ND	5
o-xylene		ND	6	5
1,1,2,2-tetrachloroethane		ND	ND	5
1,3-dichlorobenzene		ND	ND	5
1,4-dichlorobenzene		ND	ND	5
1,2-dichlorobenzene		ND	ND	5
total xylenes		ND	30	15

SURROGATE SPIKE	% SURROGATE RECOVERY		Control Limits
1,2-Dichloroethane-d4	105	107	76-114
toluene-d8	105	101	88-110
4-bromofluorobenzene	105	106	86-115

NOTES:

ND denotes Not Detected at the indicated detection limit.

This report is preceded by a cover sheet that contains vital information.

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Analytical Report

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ENVIRONMENTAL • CHEMICAL • MICROBIOLOGICAL • TESTING SERVICES

CLIENT: BLAINE TECH SERVICES, INC.
ATTN.: MR. JIM KELLER

LAB RECEIVING#: 9410.068

WIC #: 204-6852-0703
PROJECT #: 941005J1
PROJECT NAME: SHELL-1285 BANCROFT AVENUE, SAN LEANDRO

Spl. Prep. Meth.: EPA 5030

MATRIX:	LIQUID
UNIT:	µg/l

Prepared:	10/20/94
Analyzed:	10/20/94
Analyst:	RRT

QUALITY CONTROL DATA, EPA- 8240

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE	ACCURACY SPK CONC. (µg/l)	MS (µg/l)	MSD (µg/l)	% MS	% MSD	ACP % MS	PRECISION RPD	ACP % RPD
1,1-dichloroethene	50.0	48.0	47.9	96	96	61-145	0	0-14
benzene	50.0	46.1	45.6	92	91	76-127	1	0-11
trichloroethene	50.0	46.5	46.0	93	92	71-120	1	0-14
toluene	50.0	46.8	46.3	94	93	76-125	1	0-13
chlorobenzene	50.0	44.8	44.8	90	90	75-130	0	0-13

AUDIT DATA	LAB ID	SAMPLE ID	BATCH #	QC STD #	ANALYZED
	AA51428	TAILWATER	VX1994	VOA 39	10/20/94

9408065 8/24 Bin#3

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 940805-1C4

Date: 8/8/94
Page 1 of 1

Site Address: 1285 Bancroft Avenue, San Leandro

WIC#: 204-6852-0703

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: KCB/GDM

Printed Name: Keith Brown

LAB: Crosby

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	#VOC's (by 8010)	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW2	8/4			W		6						X	X					AA48613	NO HS BC
TB	↓			W		2						X						AA48614	HS-Lvoa

CHECK ONE (1) BOX ONLY — Cl/Ol

- Quarterly Monitoring ☒ — $441
- Site Investigation ☐ — $441
- Soil Closure/Disposal ☐ — $442
- Water Closure/Disposal ☐ — $443
- Soil/Air Rem. or Sys. O & M ☐ — $462
- Water Rem. or Sys. O & M ☐ — $463
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☒ (Normal)
- Other ☐ ___

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

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	Keith Brown	8/10/94	9:25		B CAROCCIA	8/10/94	9:25
B CAROCCIA	B CAROCCIA	8/10/94	1545		G DIACK 709	8/10/94	15:45
G DIACK 709	G DIACK 709				Jenny Brandon	8/11/94	10:00

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