Weiss Associates Environmental and Geologic Services

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

January 26, 1995

Scott O. Seery
Alameda County Department
of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway
Suite 250
Alameda, California 94502-6577

Re: Shell Service Station
WIC #204-6852-1404
1784 150th Avenue
San Leandro, California 94578
WA Job #81-0422-105

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 fourth quarter 1994 and proposed work for the first quarter 1995.

Fourth 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. The BTS report describing these activities and the analytic report for the ground water samples are included as Attachment A.
- WA compiled ground water elevation and analytic data (Tables 1 and 2), prepared a ground water elevation contour map (Figure 2), and prepared a benzene concentration in ground water map (Figure 3).

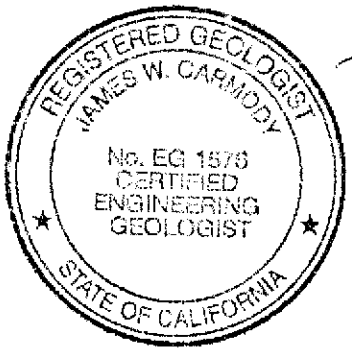
January 26, 1995

Anticipated First Quarter 1995 Activities:

- WA will conduct an off-site investigation which was described in a work plan sent to you under separate cover.
- WA will submit a report presenting the results of first quarter 1995 ground water sampling and depth measurements. The report will include tabulated chemical analytic results, a ground water elevation contour map and a benzene concentration in ground water map.

Please call if you have any questions.

Sincerely,
Weiss Associates



J. Michael Asport
Staff Scientist I

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

JMA/JWC:kam

J:\SHELL\0400\94Q4R.WP

Attachments: A - BTS 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, Suite 500, Oakland, California 94612
Eileen Hughes, California Department of Toxic Substances Control, 700 Heinz Avenue, Building "F" Suite 200, Berkeley CA, 94710

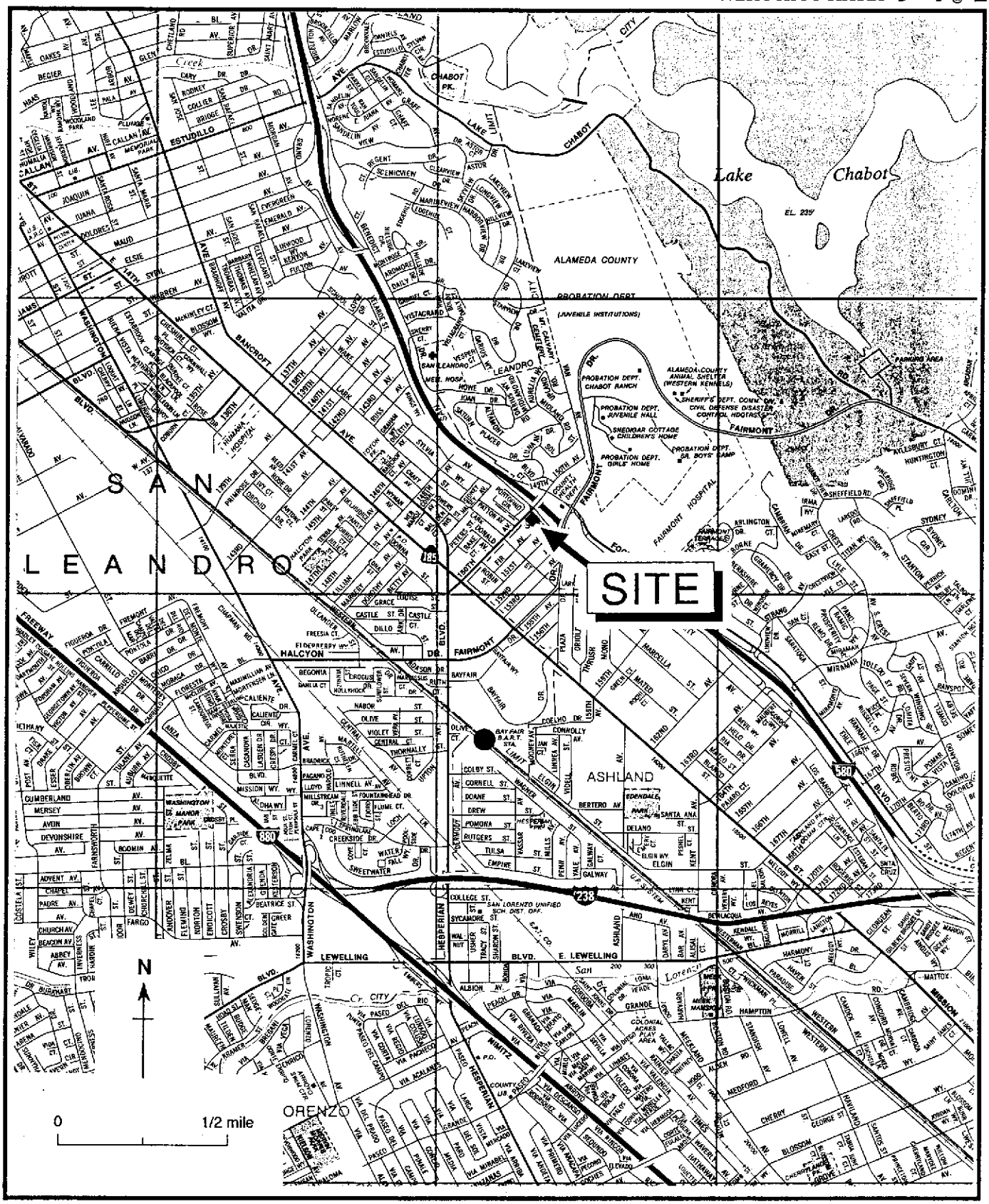


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

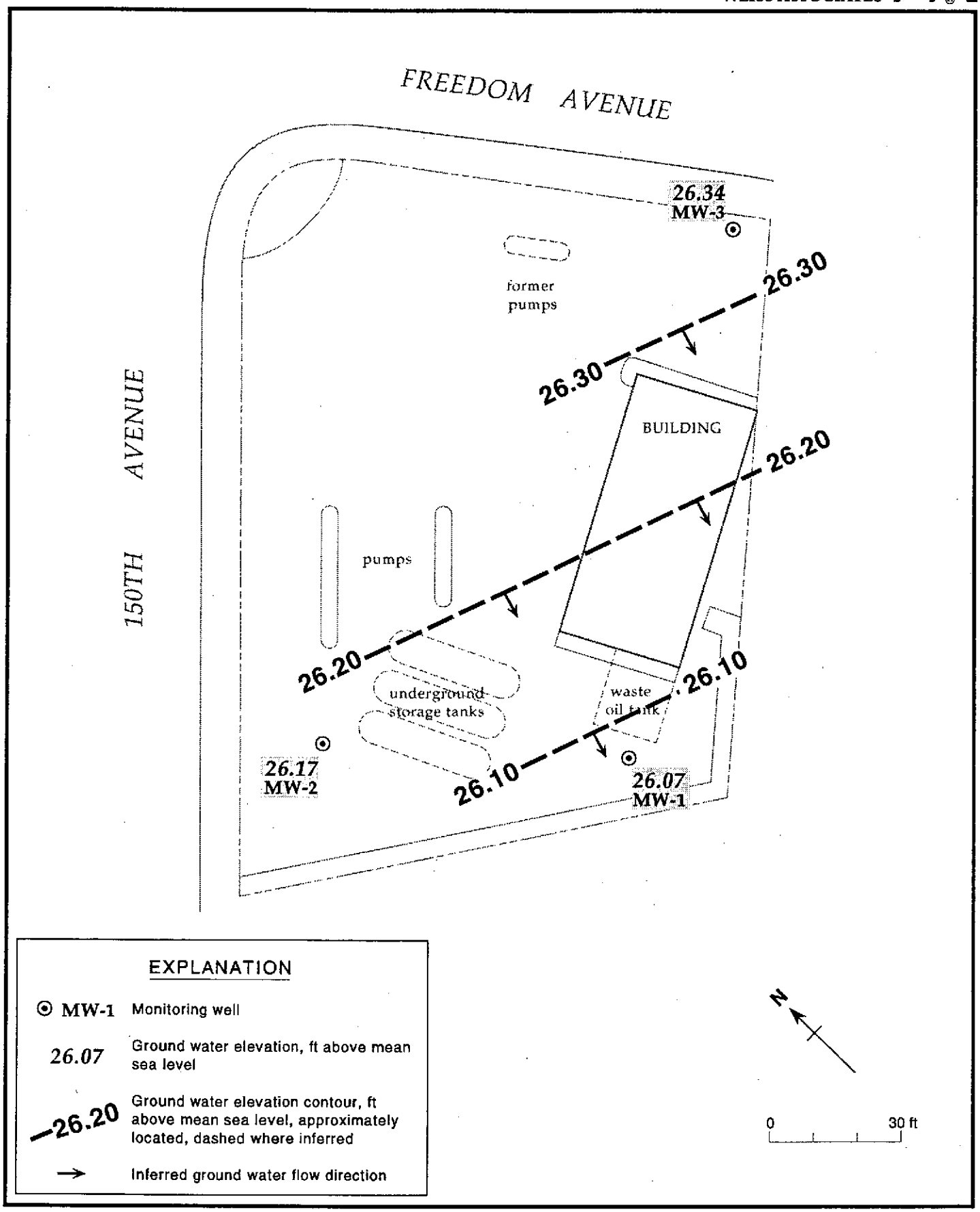


Figure 2. Monitoring Well Locations and Ground Water Elevations Contours - December 19, 1994 - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

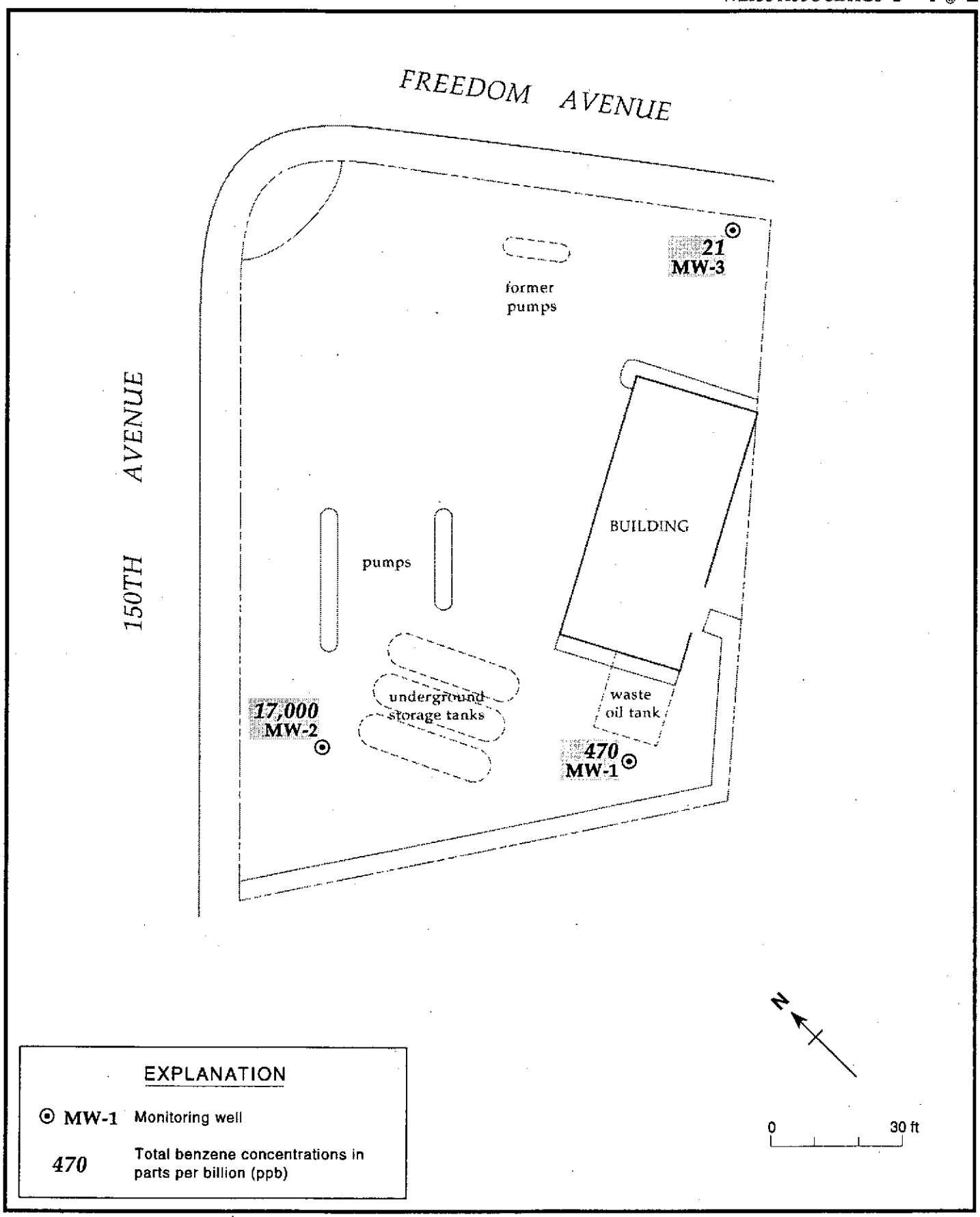


Figure 3. Benzene Concentrations in Ground Water - December 19, 1994 - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6852-1404, 1784 150th 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	03/08/90	49.13	25.29	23.84
	06/12/90		25.85	23.28
	09/13/90		27.49	21.64
	12/18/90		27.41	21.72
	03/07/91		25.79	23.34
	06/07/91		25.64	23.49
	09/17/91		27.54	21.59
	12/09/91		27.81	21.32
	02/13/92		25.57	23.56
	02/24/92		22.83	26.30
	02/27/92		23.09	26.04
	03/01/92		23.26	25.87
	06/03/92		24.64	24.49
	09/01/92		26.74	22.39
	10/06/92		27.18	21.95
	11/11/92		27.99	21.14
	12/04/92		27.14	21.99
	01/22/93		20.09	29.04
	02/10/93		24.26	24.87
	03/03/93		20.50	28.63
	05/11/93		21.70	27.43
	06/17/93		22.42	26.71
	09/10/93		24.11	25.02
	12/13/93		23.73	25.40
	03/03/94		22.08	27.05
	06/06/94		23.10	26.03
	09/12/94		25.19	23.94
	12/19/94		**23.06**	**26.07**
MW-2	02/13/92	45.83	22.22	23.61
	02/24/92		19.61	26.22
	02/27/92		19.92	25.91
	03/01/92		21.11	24.72
	06/03/92		21.58	24.25
	09/01/92		23.46	22.37
	10/06/92		23.99	21.84
	11/11/92		24.25	21.58
	12/04/92		23.89	21.94
	01/22/93		17.03	28.80
	02/10/93		18.08	27.75

-- Table 1 continues on next page --

Table 1. Ground Water Elevations - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	03/03/93		17.28	28.55
	05/11/93		18.41	27.42
	06/17/93		19.06	26.77
	09/10/93		20.88	24.95
	12/13/93		20.42	25.41
	03/03/94		18.48	27.35
	06/06/94		20.26	25.57
	09/12/94		21.80	24.03
	12/19/94		**19.66**	**26.17**
MW-3	02/13/92	51.97	27.97	24.00
	02/24/92		25.60	26.37
	02/27/92		25.88	26.09
	03/01/92		26.00	25.97
	06/03/92		27.70	24.27
	09/01/92		29.46	22.51
	10/06/92		30.01	21.96
	11/11/92		30.26	21.71
	12/04/92		29.93	22.04
	01/22/93		22.76	29.21
	02/10/93		21.40	30.57
	03/03/93		23.08	28.89
	05/11/93		24.51	27.46
	06/17/93		25.21	26.76
	09/10/93		26.95	25.02
	12/13/93		26.52	25.45
	03/03/94		24.50	27.47
	06/06/94		26.33	25.64
	09/12/94		27.98	23.99
	12/19/94		**25.63**	**26.34**

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-0703, 1784 150th Avenue, San Leandro, California

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	POG	B	E	T	X	1,2-DCA
			<--------			parts per billion (ug/l)				-------->
MW-1	03/08/90	25.29	510	120[a]	<10,000	1.5	<0.5	0.8	5.4	12
	06/12/90	25.85	390	100[a]	<10,000	86	0.7	1.3	6.2	<0.4
	09/13/90	27.49	100	130[a]	<10,000	56	2.4	0.75	2.8	<0.4[b]
	12/18/90	27.41	480	<50[a]	<10,000	54	3.3	1.7	3.7	5.3
	03/07/91	25.79	80	<50[a]	---	266	1.2	<0.5	<1.5	6.7
	06/07/91	25.64	510	<50[a] 120[ac]	---	130	6.1	3.8	11	7.9
	09/17/91	27.54	330		---	67	3	<0.5	2.2	6
	12/09/91	27.81	140[d]	80	---	<0.5	1.7	<0.5	4.7	5.4
	03/01/92	23.36	<50	<50	---	<0.5	<0.5	<0.5	<0.5	3
	06/03/92	24.64	1,500	---	---	520	72	180	230	3
	09/01/92	26.74	130	---	---	16	1.8	1.4	3.4	1.3[e]
	12/04/92	27.14	150	---	---	360	1.8	0.7	2.1	3.3
	03/03/93	20.50	<50	---	---	1.5	<0.5	<0.5	<0.5	0.76
	06/17/93	22.42	1,600	---	---	340	120	120	440	3
	09/10/93	24.11	2,600	---	---	670	310	340	730	2.3
	12/13/93	23.73	11,000	---	---	470	380	320	2,300	6.3
	03/03/94	22.08	16,000	---	---	700	480	690	3,200	---
	06/06/94	23.10	7,500	---	---	420	200	280	1,000	3.1
	09/12/94	25.19	1,200	---	---	110	3.3	21	420	2.6
	12/19/94	**23.06**	**4,600**	**---**	**---**	**470**	**230**	**330**	**1,300**	**3.7**
MW-2	02/24/92	19.61	17,000	2,700[c]	---	6,200	550	1,600	1,900	200
	03/01/92	21.11	86,000	1,000[g]	---	30,000	2,300	34,000	16,000	82
	06/03/92	21.58	87,000	---	---	28,000	2,000	18,000	10,000	<50
	09/01/92	23.46	110,000	---	---	21,000	1,900	13,000	7,800	83[h]
	12/04/92	23.89	42,000	---	---	15,000	960	2,400	2,900	100
	03/03/93	17.28	160,000	---	---	36,000	32,000	3,800	21,000	7.7
	03/03/93[h]	---	150,000	---	---	31,000	20,000	3,100	14,000	16
	06/17/93	19.06	65,000	---	---	34,000	3,200	15,000	11,000	37
	06/17/93[h]	19.06	62,000	---	---	28,000	2,700	14,000	10,000	36
	09/10/93[f]	20.88	72,000	---	---	24,000	2,300	16,000	11,000	28.0
	09/10/93[dupf]	20.88	71,000	---	---	23,000	2,300	15,000	10,000	27.0
	12/13/93	20.42	19,000	---	---	5,400	680	4,900	3,100	<0.5
	12/13/93[dup]		17,000	---	---	6,200	720	5,500	3,500	3.4
	03/03/94	18.48	110,000	---	---	21,000	2000	24,000	13,000	---
	03/03/94[dup]	18.48	93,000	---	---	19,000	1,800	22,000	12,000	---
	06/06/94	20.26	10,000	---	---	1,900	2,500	3,300	13,000	5.8
	06/06/94[dup]	20.26	99,000	---	---	9,900	2,400	12,000	12,000	5.7
	09/12/94	21.80	160,000	---	---	22,000	3,400	33,000	23,000	<0.4
	09/12/94[dup]	21.80	150,000	---	---	23,000	3,500	34,000	23,000	<0.4
	12/19/94	**19.66**	**80,000**	**---**	**---**	**17,000**	**2,300**	**16,000**	**14,000**	**<0.4**
	12/19/94[dup]	**19.66**	**100,000**	**---**	**---**	**28,000**	**3,400**	**26,000**	**20,000**	**<0.4**
MW-3	02/24/92	25.60	4,500	1,300[c]	---	97	78	<5	18	9.1
	03/01/92	26.00	2,200	440	---	69	<0.5	<0.5	<0.5	13
	06/03/92	27.70	4,100	---	---	13	44	72	65	16
	09/01/92	29.46	1,900	---	---	20	5.5	6.8	<5	19

-- Table 2 continues on next page --

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-0703, 1784 150th Avenue, San Leandro, California (continued)

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	POG	B	E	T	X	1,2-DCA
			<-----parts per billion (ug/l)----->							
	09/01/92[1]	29.46	1,900	---	---	21	3.4	6.6	<5	21
	12/04/92	29.93	2,400	---	---	8.2	<5	<5	<5	16
	12/04/92[1]	29.93	2,100	---	---	11	5.7	<0.5	<0.5	18
	03/03/93	23.08	5,100	---	---	63	75	61	150	3.3
	06/17/93	25.21	4,000	---	---	94	82	140	150	23
	09/10/93	26.95	3,200	---	---	140	12.5	12.5	12.5	20.0
	12/13/93	26.52	6,200	---	---	<12.5	<12.5	<12.5	<12.5	13
	03/03/94	24.50	4,500	---	---	73	<5	<5	<5	---
	06/06/94	26.33	3,200	---	---	<0.5	3.1	<0.5	<0.5	16
	09/12/94	27.98	3,900	---	---	<0.5	9.6	<0.5	4.1	7.8
	12/19/94	**25.63**	**2,400**	**---**	**---**	**21**	**4.2**	**22**	**2.6**	**25**
Trip Blank	03/08/90		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/12/90		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	12/18/90		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	03/07/91		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/07/91		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	09/17/91		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	12/09/91		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	02/24/92		<50	---	---	<0.5	0.6	2.5	2.2	---
	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	<0.5
	12/04/92		<50	---	---	<0.5	<0.5	<0.5	<0.5	<0.5[j]
	03/03/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	<0.5
	09/10/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	12/13/93		<50	---	---	<0.5	<0.5	<0.5	<0.5	<0.5[k]
	03/03/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	06/06/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	09/12/94		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	12/19/94		**<50**	**---**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
Bailer Blank	03/08/90		<50	---	---	<0.5	<0.5	<0.5	<0.5	---
	09/01/92		<50	---		<0.5	<0.5	0.7	<0.5	<0.5
	12/04/92		60	---		<0.5	<0.5	<0.5	<0.5	<0.5[j]
DTSC MCLs			NE	NE	NE	1	680	100[l]	1,750	5.0

-- Table 2 continues on next page --

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-0703, 1784 150th Avenue, San Leandro, California (continued)

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Modified EPA Method 8015
TPH-D = Total Petroleum Hydrocarbons as Diesel by Modified EPA Method 8015
POG = Petroleum oil and grease by American Public Health Association Standard Method 503E or 5520F
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
1,2-DCA = 1,2-Dichloroethane by EPA Method 601
--- = Not analyzed
<n = Not detected above method detection limit of n ppb
DTSC MCLs = California Department of Toxic Substances Control maximum contaminant levels for drinking water
NE = Not established

Notes:

a = No total petroleum hydrocarbons as motor oil detected above modified EPA Method 8015 detection limit of 500 ppb
b = Tetrachloroethene (PCE) detected at 24 ppb by EPA Method 601; DTSC MCL for PCE = 5 ppb
c = Result is due to hydrocarbon compounds lighter than diesel
d = Result due to a non-gasoline hydrocarbon compound
e = In the matrix spike/matrix spike duplicate of sample MW-1, the RPD for Freon 113 and 1,3-dichloroebenze was greater than 25%
f = The MW-2 and Dup samples each contained 1.6 ppb of methylene chloride which is within normal laboratory background levels.
g = Diesel result is due to a petroleum hydrocarbon that is lighter than diesel
h = Sample MW-2 was diluted 1:100 for EPA Method 8010 due to the interfering hydrocarbon peaks
i = Duplicate sample
j = The trip and field blank samples contained 14 and 10 µg/L 1,3-dichloroebenzene, respectively
k = 1.4 µg/L Chloroethene detected in equipment blank, trip blank not analyzed
l = DTSC recommended action level for drinking water; MCL not established

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

BLAINE
TECH SERVICES INC.

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

January 5, 1995

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

Attn: Daniel T. Kirk

SITE:
Shell WIC #204-6852-1404
1784 150th Avenue
San Leandro, California

QUARTER:
4th quarter of 1994

QUARTERLY GROUNDWATER SAMPLING REPORT 941219-E-2

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

ecovered 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 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)
MW-1	12/19/94	TOC	–	NONE	–	–	23.06	43.66
MW-2 *	12/19/94	TOC	ODOR	NONE	–	–	19.66	44.45
MW-3	12/19/94	TOC	ODOR	NONE	–	–	25.63	41.64

* Sample DUP was a duplicate sample taken from well MW-2.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 941219-EZ

Date: 12/19/94
Page 1 of 1

Site Address: 1784 150th Avenue, San Leandro

WIC#: 204-6852-1404

Shell Engineer: Dan Kirk
Phone No.: (510) 675-6188
Fax #: 675-6160

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

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

Comments:

Sampled by: Kent Brown

Printed Name: KENT BROWN

LAB: NET

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	G/D		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	12/19/94			W		6						X	X							
MW-2				W		6						X	X							
MW-3				W		6						X	X							
EB				W		6						X	X							
DUP				W		6						X	X							
T.B.				W		2						X								

Analysis Required

CHECK ONE (1) BOX ONLY — CT/DT

- Quarterly Monitoring XXX — 8441
- Site Investigation ☐ — 8441
- Soil Closure/Disposal ☐ — 8442
- Water Closure/Disposal ☐ — 8443
- Soil/Air Rem. or Sys. O & M ☐ — 8452
- Water Rem. or Sys. O & M ☐ — 8453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days XXX (Normal)
- Other ☐ ____

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

Seal intact 3.5

Relinquished by (signature):	Printed Name: KENT BROWN	Date: 12/20	Received (signature):	Printed Name:	Date: 12/20/94
Relinquished by (signature):	Printed Name: G.P. LUMBRE	Time: 10:00	Received (signature):	Printed Name: J. SORENSEN	Time: 10:00
Relinquished By (signature):	Printed Name:	Date: 12/20	Received (signature):	Printed Name:	Date: 12/21/94
		Time: 16:00			Time: 0700
		Date:			Date:
		Time:			Time:

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: 01/10/1995
NET Client Acct. No: 1821
NET Pacific Job No: 94.06183
Received: 12/21/1994

Client Reference Information

SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

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, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-1
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231749

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/30/1994	2442
DILUTION FACTOR*	20						12/30/1994	2442
as Gasoline	4,600		1,000	ug/L	5030		12/30/1994	2442
Carbon Range:	C5-C14						12/30/1994	2442
METHOD 8020 (GC,Liquid)	--						12/30/1994	2442
Benzene	470		10	ug/L	8020		12/30/1994	2442
Toluene	330		10	ug/L	8020		12/30/1994	2442
Ethylbenzene	230		10	ug/L	8020		12/30/1994	2442
Xylenes (Total)	1,300		10	ug/L	8020		12/30/1994	2442
SURROGATE RESULTS	--						12/30/1994	2442
Bromofluorobenzene (SURR)	121			% Rec.	5030		12/30/1994	2442

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-1
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231749

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						12/28/1994	788
Bromodichloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Bromoform	ND		0.4	ug/L	8010		12/28/1994	788
Bromomethane	ND		0.4	ug/L	8010		12/28/1994	788
Carbon tetrachloride	ND		0.4	ug/L	8010		12/28/1994	788
Chlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Chloroethane	ND		0.4	ug/L	8010		12/28/1994	788
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		12/28/1994	788
Chloroform	ND		0.4	ug/L	8010		12/28/1994	788
Chloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Dibromochloromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Dichlorodifluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloroethane	3.7		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloropropane	ND		0.4	ug/L	8010		12/28/1994	788
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
Methylene chloride	ND		10	ug/L	8010		12/28/1994	788
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		12/28/1994	788
Tetrachloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1,2-Trichloroethane	ND		1	ug/L	8010		12/28/1994	788
Trichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
Trichlorofluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
Vinyl chloride	ND		0.4	ug/L	8010		12/28/1994	788
SURROGATE RESULTS	--						12/28/1994	788
1,4-Difluorobenzene (SURR)	96			% Rec.			12/28/1994	788
Bromochloromethane (SURR)	95			% Rec.			12/28/1994	788

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-2
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231750

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/30/1994	2442
DILUTION FACTOR*	1,000						12/30/1994	2442
as Gasoline	80,000		50,000	ug/L	5030		12/30/1994	2442
Carbon Range:	C5-C14						12/30/1994	2442
METHOD 8020 (GC,Liquid)	--						12/30/1994	2442
Benzene	17,000		500	ug/L	8020		12/30/1994	2442
Toluene	16,000		500	ug/L	8020		12/30/1994	2442
Ethylbenzene	2,300		500	ug/L	8020		12/30/1994	2442
Xylenes (Total)	14,000		500	ug/L	8020		12/30/1994	2442
SURROGATE RESULTS	--						12/30/1994	2442
Bromofluorobenzene (SURR)	82			% Rec.	5030		12/30/1994	2442

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-2
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231750

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						12/28/1994	788
Bromodichloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Bromoform	ND		0.4	ug/L	8010		12/28/1994	788
Bromomethane	ND		0.4	ug/L	8010		12/28/1994	788
Carbon tetrachloride	ND		0.4	ug/L	8010		12/28/1994	788
Chlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Chloroethane	ND		0.4	ug/L	8010		12/28/1994	788
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		12/28/1994	788
Chloroform	ND		0.4	ug/L	8010		12/28/1994	788
Chloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Dibromochloromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Dichlorodifluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloropropane	ND		0.4	ug/L	8010		12/28/1994	788
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
Methylene chloride	ND		10	ug/L	8010		12/28/1994	788
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		12/28/1994	788
Tetrachloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1,2-Trichloroethane	ND		1	ug/L	8010		12/28/1994	788
Trichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
Trichlorofluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
Vinyl chloride	ND		0.4	ug/L	8010		12/28/1994	788
SURROGATE RESULTS	--						12/28/1994	788
1,4-Difluorobenzene (SURR)	280	MI		% Rec.			12/28/1994	788
Bromochloromethane (SURR)	96			% Rec.			12/28/1994	788

MI : Matrix Interference Suspected

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-3
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231751

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/30/1994	2442
DILUTION FACTOR*	1						12/30/1994	2442
as Gasoline	2,400		50	ug/L	5030		12/30/1994	2442
Carbon Range:	C5-C14						12/30/1994	2442
METHOD 8020 (GC,Liquid)	--						12/30/1994	2442
Benzene	21		0.5	ug/L	8020		12/30/1994	2442
Toluene	22		0.5	ug/L	8020		12/30/1994	2442
Ethylbenzene	4.2		0.5	ug/L	8020		12/30/1994	2442
Xylenes (Total)	2.6		0.5	ug/L	8020		12/30/1994	2442
SURROGATE RESULTS	--						12/30/1994	2442
Bromofluorobenzene (SURR)	203	MI		% Rec.	5030		12/30/1994	2442

MI : Matrix Interference Suspected

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: MW-3
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231751

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						12/28/1994	788
Bromodichloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Bromoform	ND		0.4	ug/L	8010		12/28/1994	788
Bromomethane	ND		0.4	ug/L	8010		12/28/1994	788
Carbon tetrachloride	ND		0.4	ug/L	8010		12/28/1994	788
Chlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Chloroethane	ND		0.4	ug/L	8010		12/28/1994	788
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		12/28/1994	788
Chloroform	ND		0.4	ug/L	8010		12/28/1994	788
Chloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Dibromochloromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Dichlorodifluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloroethane	25		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloropropane	ND		0.4	ug/L	8010		12/28/1994	788
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
Methylene chloride	ND		10	ug/L	8010		12/28/1994	788
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		12/28/1994	788
Tetrachloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1,2-Trichloroethane	ND		1	ug/L	8010		12/28/1994	788
Trichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
Trichlorofluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
Vinyl chloride	ND		0.4	ug/L	8010		12/28/1994	788
SURROGATE RESULTS	--						12/28/1994	788
1,4-Difluorobenzene (SURR)	85			% Rec.			12/28/1994	788
Bromochloromethane (SURR)	96			% Rec.			12/28/1994	788

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: EB
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231752

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/29/1994	2426
DILUTION FACTOR*	1						12/29/1994	2426
as Gasoline	ND		50	ug/L	5030		12/29/1994	2426
Carbon Range:	--						12/29/1994	2426
METHOD 8020 (GC,Liquid)	--						12/29/1994	2426
Benzene	ND		0.5	ug/L	8020		12/29/1994	2426
Toluene	ND		0.5	ug/L	8020		12/29/1994	2426
Ethylbenzene	ND		0.5	ug/L	8020		12/29/1994	2426
Xylenes (Total)	ND		0.5	ug/L	8020		12/29/1994	2426
SURROGATE RESULTS	--						12/29/1994	2426
Bromofluorobenzene (SURR)	118			% Rec.	5030		12/29/1994	2426

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: EB
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231752

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						12/28/1994	788
Bromodichloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Bromoform	ND		0.4	ug/L	8010		12/28/1994	788
Bromomethane	ND		0.4	ug/L	8010		12/28/1994	788
Carbon tetrachloride	ND		0.4	ug/L	8010		12/28/1994	788
Chlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Chloroethane	ND		0.4	ug/L	8010		12/28/1994	788
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		12/28/1994	788
Chloroform	ND		0.4	ug/L	8010		12/28/1994	788
Chloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Dibromochloromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Dichlorodifluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloropropane	ND		0.4	ug/L	8010		12/28/1994	788
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
Methylene chloride	ND		10	ug/L	8010		12/28/1994	788
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		12/28/1994	788
Tetrachloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1,2-Trichloroethane	ND		1	ug/L	8010		12/28/1994	788
Trichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
Trichlorofluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
Vinyl chloride	ND		0.4	ug/L	8010		12/28/1994	788
SURROGATE RESULTS	--						12/28/1994	788
1,4-Difluorobenzene (SURR)	80			% Rec.			12/28/1994	788
Bromochloromethane (SURR)	98			% Rec.			12/28/1994	788

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: DUP
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231753

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/30/1994	2442
DILUTION FACTOR*	1,000						12/30/1994	2442
as Gasoline	100,000		50,000	ug/L	5030		12/30/1994	2442
Carbon Range:	C5-C14						12/30/1994	2442
METHOD 8020 (GC,Liquid)	--						12/30/1994	2442
Benzene	28,000		500	ug/L	8020		12/30/1994	2442
Toluene	26,000		500	ug/L	8020		12/30/1994	2442
Ethylbenzene	3,400		500	ug/L	8020		12/30/1994	2442
Xylenes (Total)	20,000		500	ug/L	8020		12/30/1994	2442
SURROGATE RESULTS	--						12/30/1994	2442
Bromofluorobenzene (SURR)	92			% Rec.	5030		12/30/1994	2442

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: DUP
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231753

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						12/28/1994	788
Bromodichloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Bromoform	ND		0.4	ug/L	8010		12/28/1994	788
Bromomethane	ND		0.4	ug/L	8010		12/28/1994	788
Carbon tetrachloride	ND		0.4	ug/L	8010		12/28/1994	788
Chlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Chloroethane	ND		0.4	ug/L	8010		12/28/1994	788
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		12/28/1994	788
Chloroform	ND		0.4	ug/L	8010		12/28/1994	788
Chloromethane	ND		0.4	ug/L	8010		12/28/1994	788
Dibromochloromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		12/28/1994	788
Dichlorodifluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,2-Dichloropropane	ND		0.4	ug/L	8010		12/28/1994	788
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		12/28/1994	788
Methylene chloride	ND		10	ug/L	8010		12/28/1994	788
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		12/28/1994	788
Tetrachloroethene	ND		0.4	ug/L	8010		12/28/1994	788
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		12/28/1994	788
1,1,2-Trichloroethane	ND		1	ug/L	8010		12/28/1994	788
Trichloroethene	ND		0.4	ug/L	8010		12/28/1994	788
Trichlorofluoromethane	ND		0.4	ug/L	8010		12/28/1994	788
Vinyl chloride	ND		0.4	ug/L	8010		12/28/1994	788
SURROGATE RESULTS	--						12/28/1994	788
1,4-Difluorobenzene (SURR)	330	MI		% Rec.			12/28/1994	788
Bromochloromethane (SURR)	88			% Rec.			12/28/1994	788

MI : Matrix Interference Suspected

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

SAMPLE DESCRIPTION: TB
Date Taken: 12/19/1994
Time Taken:
NET Sample No: 231754

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						12/29/1994	2426
DILUTION FACTOR*	1						12/29/1994	2426
as Gasoline	ND		50	ug/L	5030		12/29/1994	2426
Carbon Range:	--						12/29/1994	2426
METHOD 8020 (GC,Liquid)	--						12/29/1994	2426
Benzene	ND		0.5	ug/L	8020		12/29/1994	2426
Toluene	ND		0.5	ug/L	8020		12/29/1994	2426
Ethylbenzene	ND		0.5	ug/L	8020		12/29/1994	2426
Xylenes (Total)	ND		0.5	ug/L	8020		12/29/1994	2426
SURROGATE RESULTS	--						12/29/1994	2426
Bromofluorobenzene (SURR)	106			% Rec.	5030		12/29/1994	2426

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	112.0	1.12	1.00	mg/L	12/29/1994	jmh	2426
Benzene	100.2	5.01	5.00	ug/L	12/29/1994	jmh	2426
Toluene	104.0	5.20	5.00	ug/L	12/29/1994	jmh	2426
Ethylbenzene	107.8	5.39	5.00	ug/L	12/29/1994	jmh	2426
Xylenes (Total)	106.7	16.0	15.0	ug/L	12/29/1994	jmh	2426
Bromofluorobenzene (SURR)	110.0	110	100	% Rec.	12/29/1994	jmh	2426
TPH (Gas/BTXE,Liquid)							
as Gasoline	114.0	1.14	1.00	mg/L	12/30/1994	aal	2442
Benzene	91.2	4.56	5.00	ug/L	12/30/1994	aal	2442
Toluene	97.6	4.88	5.00	ug/L	12/30/1994	aal	2442
Ethylbenzene	108.2	5.41	5.00	ug/L	12/30/1994	aal	2442
Xylenes (Total)	90.7	13.6	15.0	ug/L	12/30/1994	aal	2442
Bromofluorobenzene (SURR)	108.0	108	100	% Rec.	12/30/1994	aal	2442

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)							
Bromodichloromethane	104.0	20.8	20.0	ug/L	12/28/1994	ltg	788
Bromoform	97.0	19.4	20.0	ug/L	12/28/1994	ltg	788
Bromomethane	108.0	21.6	20.0	ug/L	12/28/1994	ltg	788
Carbon tetrachloride	105.0	21.0	20.0	ug/L	12/28/1994	ltg	788
Chlorobenzene	97.5	19.5	20.0	ug/L	12/28/1994	ltg	788
Chloroethane	102.0	20.4	20.0	ug/L	12/28/1994	ltg	788
2-Chloroethylvinyl ether	95.0	19.0	20.0	ug/L	12/28/1994	ltg	788
Chloroform	113.0	22.6	20.0	ug/L	12/28/1994	ltg	788
Chloromethane	95.0	19.0	20.0	ug/L	12/28/1994	ltg	788
Dibromochloromethane	99.0	19.8	20.0	ug/L	12/28/1994	ltg	788
1,2-Dichlorobenzene	97.0	19.4	20.0	ug/L	12/28/1994	ltg	788
1,3-Dichlorobenzene	99.5	19.9	20.0	ug/L	12/28/1994	ltg	788
1,4-Dichlorobenzene	101.0	20.2	20.0	ug/L	12/28/1994	ltg	788
Dichlorodifluoromethane	102.5	20.5	20.0	ug/L	12/28/1994	ltg	788
1,1-Dichloroethane	112.5	22.5	20.0	ug/L	12/28/1994	ltg	788
1,2-Dichloroethane	99.5	19.9	20.0	ug/L	12/28/1994	ltg	788
1,1-Dichloroethene	122.0	24.4	20.0	ug/L	12/28/1994	ltg	788
trans-1,2-Dichloroethene	94.0	18.8	20.0	ug/L	12/28/1994	ltg	788
1,2-Dichloropropane	98.5	19.7	20.0	ug/L	12/28/1994	ltg	788
cis-1,3-Dichloropropene	95.5	19.1	20.0	ug/L	12/28/1994	ltg	788
trans-1,3-Dichloropropene	99.0	19.8	20.0	ug/L	12/28/1994	ltg	788
Methylene chloride	97.5	19.5	20.0	ug/L	12/28/1994	ltg	788
1,1,2,2-Tetrachloroethane	103.5	20.7	20.0	ug/L	12/28/1994	ltg	788
Tetrachloroethene	103.5	20.7	20.0	ug/L	12/28/1994	ltg	788
1,1,1-Trichloroethane	102.0	20.4	20.0	ug/L	12/28/1994	ltg	788
1,1,2-Trichloroethane	99.0	19.8	20.0	ug/L	12/28/1994	ltg	788
Trichloroethene	104.5	20.9	20.0	ug/L	12/28/1994	ltg	788
Trichlorofluoromethane	108.0	21.6	20.0	ug/L	12/28/1994	ltg	788
Vinyl chloride	102.5	20.5	20.0	ug/L	12/28/1994	ltg	788
1,4-Difluorobenzene (SURR)	100.0	100	100	% Rec.	12/28/1994	ltg	788
Bromochloromethane (SURR)	109.0	109	100	% Rec.	12/28/1994	ltg	788

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	12/29/1994	jmh	2426
Benzene	ND	0.5	ug/L	12/29/1994	jmh	2426
Toluene	ND	0.5	ug/L	12/29/1994	jmh	2426
Ethylbenzene	ND	0.5	ug/L	12/29/1994	jmh	2426
Xylenes (Total)	ND	0.5	ug/L	12/29/1994	jmh	2426
Bromofluorobenzene (SURR)	95		% Rec.	12/29/1994	jmh	2426
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	12/30/1994	aal	2442
Benzene	ND	0.5	ug/L	12/30/1994	aal	2442
Toluene	ND	0.5	ug/L	12/30/1994	aal	2442
Ethylbenzene	ND	0.5	ug/L	12/30/1994	aal	2442
Xylenes (Total)	ND	0.5	ug/L	12/30/1994	aal	2442
Bromofluorobenzene (SURR)	80		% Rec.	12/30/1994	aal	2442

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	ND	0.4	ug/L	12/28/1994	ltg	788
Bromoform	ND	0.4	ug/L	12/28/1994	ltg	788
Bromomethane	ND	0.4	ug/L	12/28/1994	ltg	788
Carbon tetrachloride	ND	0.4	ug/L	12/28/1994	ltg	788
Chlorobenzene	ND	0.4	ug/L	12/28/1994	ltg	788
Chloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
2-Chloroethylvinyl ether	ND	1.0	ug/L	12/28/1994	ltg	788
Chloroform	ND	0.4	ug/L	12/28/1994	ltg	788
Chloromethane	ND	0.4	ug/L	12/28/1994	ltg	788
Dibromochloromethane	ND	0.4	ug/L	12/28/1994	ltg	788
1,2-Dichlorobenzene	ND	0.4	ug/L	12/28/1994	ltg	788
1,3-Dichlorobenzene	ND	0.4	ug/L	12/28/1994	ltg	788
1,4-Dichlorobenzene	ND	0.4	ug/L	12/28/1994	ltg	788
Dichlorodifluoromethane	ND	0.4	ug/L	12/28/1994	ltg	788
1,1-Dichloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
1,2-Dichloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
1,1-Dichloroethene	ND	0.4	ug/L	12/28/1994	ltg	788
trans-1,2-Dichloroethene	ND	0.4	ug/L	12/28/1994	ltg	788
1,2-Dichloropropane	ND	0.4	ug/L	12/28/1994	ltg	788
cis-1,3-Dichloropropene	ND	0.4	ug/L	12/28/1994	ltg	788
trans-1,3-Dichloropropene	ND	0.4	ug/L	12/28/1994	ltg	788
Methylene chloride	ND	10	ug/L	12/28/1994	ltg	788
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
Tetrachloroethene	ND	0.4	ug/L	12/28/1994	ltg	788
1,1,1-Trichloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
1,1,2-Trichloroethane	ND	0.4	ug/L	12/28/1994	ltg	788
Trichloroethene	ND	0.4	ug/L	12/28/1994	ltg	788
Trichlorofluoromethane	ND	0.4	ug/L	12/28/1994	ltg	788
Vinyl chloride	ND	0.4	ug/L	12/28/1994	ltg	788
1,4-Difluorobenzene (SURR)	87		% Rec.	12/28/1994	ltg	788
Bromochloromethane (SURR)	101		% Rec.	12/28/1994	ltg	788

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 94.06183

Date: 01/10/1995
ELAP Cert: 1386
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Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)											231976
as Gasoline	106.0	110.0	3.7	1.00	ND	1.06	1.10	mg/L	12/29/1994	2426	231976
Benzene	91.5	92.8	1.4	23.6	ND	21.6	21.9	ug/L	12/29/1994	2426	231976
Toluene	91.1	94.2	3.3	83.8	ND	76.3	78.9	ug/L	12/29/1994	2426	231976
TPH (Gas/BTXE,Liquid)											231975
as Gasoline	104.0	109.0	4.7	1.00	ND	1.04	1.09	mg/L	12/30/1994	2442	231975
Benzene	91.2	93.3	2.3	23.9	ND	21.8	22.3	ug/L	12/30/1994	2442	231975
Toluene	95.2	102.0	6.8	84.8	ND	80.7	86.5	ug/L	12/30/1994	2442	231975

Ref: SHELL, 1784 150th Avenue, San Leandro, Job No. 941219-E2

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
METHOD 8010 (GC,Liquid)											231749
Chlorobenzene	99.0	88.0	11.8	20.0	ND	19.8	17.6	ug/L	12/28/1994	788	231749
1,1-Dichloroethene	118.0	110.0	7.0	20.0	ND	23.6	22.0	ug/L	12/28/1994	788	231749
Trichloroethene	102.5	96.0	6.4	20.0	ND	20.5	19.2	ug/L	12/28/1994	788	231749

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

roject: 94219-E2 Log No: 4561
ooler received on: 12/21/94 and checked on _____ by _____
(signature)

ere custody papers present?..... (YES) NO

ere custody papers properly filled out?..... (YES) NO

ere the custody papers signed?..... (YES) NO

as sufficient ice used?..... (YES) NO 0.7°C

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

id bottle labels match COC?..... (YES) NO

ere proper bottles used for analysis indicated?..... (YES) NO

orrect preservatives used?..... (YES) NO

OA vials checked for headspace bubbles?..... (YES) NO
Note which Voas (if any) had bubbles:*

Sample descriptor:	Number of vials:

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

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)