Weiss Associates Environmental and Geologic Services

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

95 MAY 22 PM 2:46

May 16, 1995

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

Re: **Second Quarter 1995**
Shell Service Station
WIC #204-6852-0703
1285 Bancroft Avenue
San Leandro, California 94577
WA Job #81-0423-205

Dear Mr. Seery:

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.

Second Quarter 1995 Activities:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the site wells. BTS' report describing these activities and the analytic report for the ground water samples are included as Attachment A.

Anticipated Third Quarter 1995 Activities:

- WA will submit a report presenting the results of the third quarter 1995 ground water sampling and 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

Patricia Anne Dresser for

Grady S. Glasser
Technical Assistant

James W. Carmody

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

REGISTERED GEOLOGIST
JAMES W. CARMODY
No. EG 1576
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

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

GSG/JWC:all
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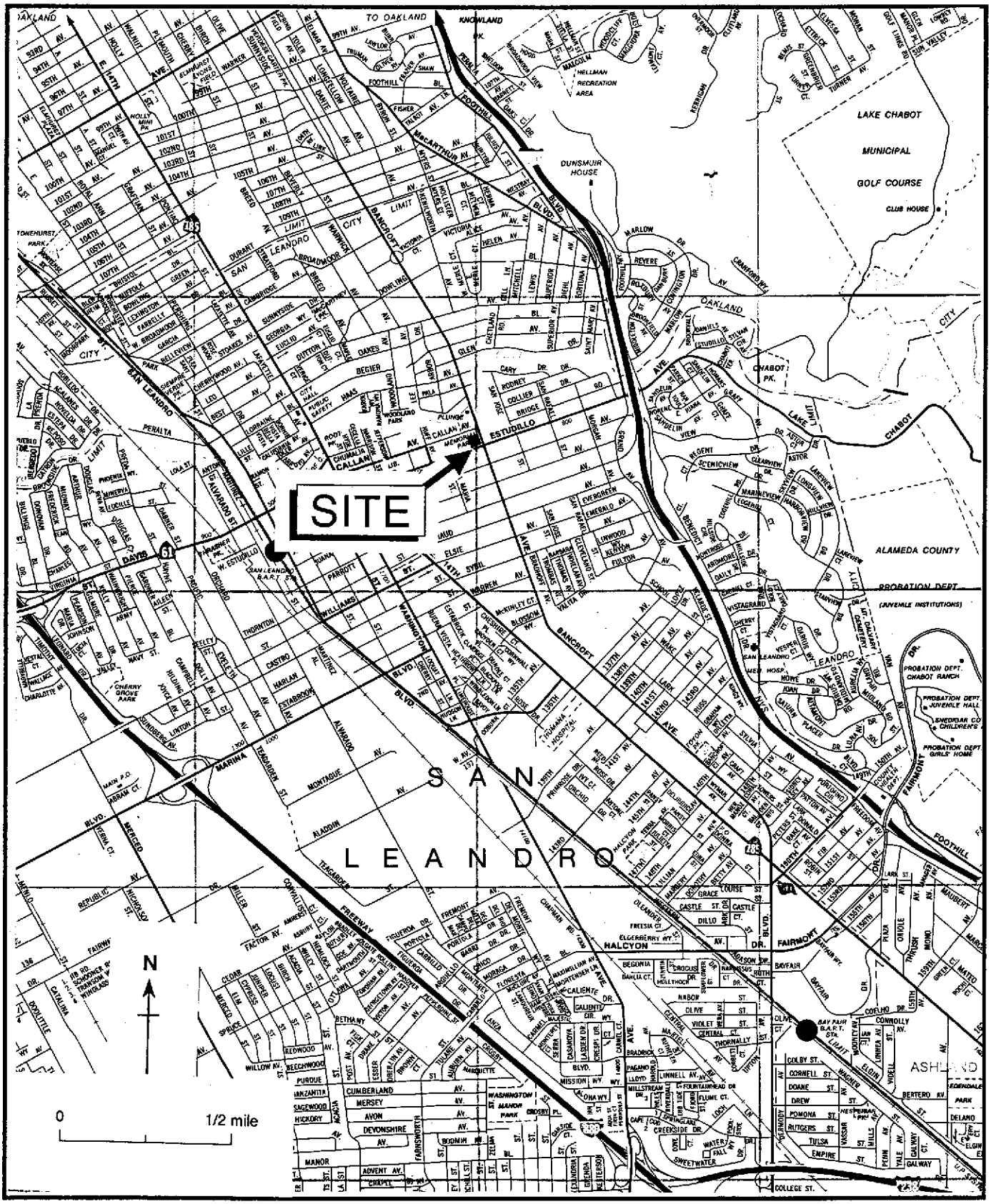
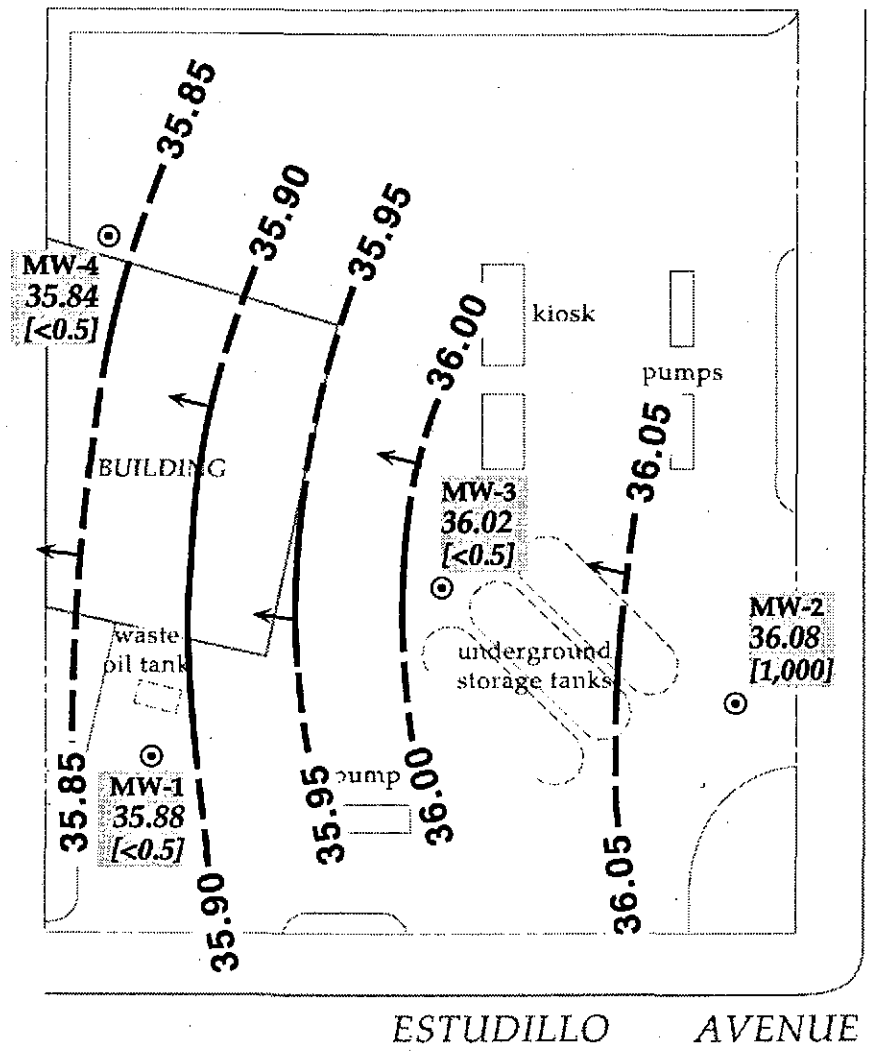


Figure 1. Site Location Map - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

3/16/90



EXPLANATION

⊙ MW-1	Monitoring well
35.88	Ground water elevation, ft above mean sea level
[<0.5]	Benzene concentration in parts per billion (ppb)
36.00	Ground water elevation contour, ft above mean sea level, approximately located, dashed where inferred
→	Inferred ground water flow direction

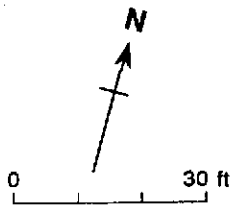


Figure 2. Monitoring Well Locations, Ground Water Elevation Contours and Benzene Concentrations in Ground Water - April 14, 1995 - Shell Service Station WIC #204-6852-0703, 1285 Bancroft Avenue, San Leandro, California

ATTACHMENT A

GROUND WATER MONITORING REPORT AND ANALYTIC REPORT

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
	11/11/94		41.34	25.56
	12/29/94		42.06	24.84
	01/04/95		39.90	27.00
	04/14/95		**31.02**	**35.88**
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
	11/11/94		41.22	25.69
	12/29/94		41.99	24.92
	01/04/95		39.81	27.10
	04/14/95		**30.83**	**36.08**
MW-3	03/01/92	66.31	42.00	24.31
	06/03/92		44.30	22.01

— Table 1 continues on next page —

Table 1. Ground Water Elevations, Shell Service Station WIC #204-6852-0703, 1285 Bancroft 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)
	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
	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
	11/11/94		41.86	25.66
	12/29/94		42.59	24.93
	01/04/95		40.54	26.98
	04/14/95		**31.50**	**36.02**
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
	11/11/94		42.54	25.54
	12/29/94		43.34	24.74
	01/04/95		41.57	26.51
	04/14/95		**32.24**	**35.84**

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
	01/04/95	39.90	<50	---	2.4	<0.5	<0.5	<0.5
	01/04/95[dup]	39.90	<50	---	2.5	<0.5	<0.5	<0.5
	04/14/95	**35.88**	**<50**	**---**	**<0.5**	**<0.5**	**0.5**	**<0.5**
	04/14/95[dup]	**35.88**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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

— 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) →					
	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
	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
	01/04/95	39.81	1,300	---	150	23	35	51
	04/14/95	**30.83**	**5,000**	**---**	**1,000**	**400**	**340**	**810**
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
	01/04/95	40.54	<50	---	6.0	<0.5	<0.5	<0.5
	04/14/95	**31.50**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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
	01/04/95	41.57	<50	---	1.4	<0.5	<0.5	<0.5
	04/14/95	**32.24**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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
	01/04/95		<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) →					
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
	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
	01/04/95		<50	---	<0.5	<0.5	<0.5	<0.5
	04/14/95		**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
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	---	---	---	---	---	---
	04/14/95	**31.02**	**---**	**---**	**---**	**---**	**---**	**---**
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

— 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) →					
	09/09/93	39.24	<0.5	---	12	7.3	1.1	<0.5
	12/13/93	40.64	---	---	---	---	---	---
	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
	01/04/95	39.81	<0.4	---	12	3.8	---	<0.4
	04/14/95	**30.83**	**<0.4**	**---**	**8.4**	**2.3**	**<0.4**	**---**
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 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)

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.

BLAINE
TECH SERVICES INC.

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

May 3, 1995

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:
2nd quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950414-K-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.

James C. Blaine, Jr.

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: Grady Glasser

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 *	4/14/95	TOC	--	NONE	--	--	31.02	58.67
MW-2	4/14/95	TOC	--	NONE	--	--	30.83	58.58
MW-3	4/14/95	TOC	--	NONE	--	--	31.50	57.33
MW-4	4/14/95	TOC	--	NONE	--	--	32.24	54.20

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

#6420

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 950414-KCI

Date: 4/14/95
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

Printed Name: Keith Brown

LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring [X]	5461
Site Investigation [ ]	5441
Soil Classify/Disposal [ ]	5442
Water Classify/Disposal [ ]	5443
Soil/Air Rem. or Sys. O & M [ ]	5462
Water Rem. or Sys. O & M [ ]	5463
Other [ ]	

TURN AROUND TIME: 24 hours [ ] 48 hours [ ] 16 days [X] (Normal) Other [ ]

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

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	8010		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW1	4/14			XX		3						X								
MW2	↓			↓		6						X	X							
MW3						3						X								
MW4						↓						X								
DUP												X								
EB						↓						X								
TB	↓			↓		2						X							4/19 TB Seal Intact OK	

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	Keith Brown	Date: 4/17 Time: 1400	[signature]	G. Plumbee	Date: Time:
[signature]	G Plumbee	Date: 4/17 Time: 16:00	[signature]	TAM GREENE	Date: 04/18/95 Time: 08:00
		Date: Time:			Date: Time:

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

VIA: NCS

NATIONAL ENVIRONMENTAL TESTING, INC.

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

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

Date: 04/26/1995
NET Client Acct. No: 1821
NET Pacific Job No: 95.01596
Received: 04/18/1995

Client Reference Information

Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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:

Thomas F. Cullen, Jr.
Division Manager

Linda DeMartino
Project Coordinator

Enclosure(s)

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: MW1
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240206

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/19/1995	2765
DILUTION FACTOR*	1						04/19/1995	2765
as Gasoline	ND		50	ug/L	5030		04/19/1995	2765
Carbon Range:	--						04/19/1995	2765
METHOD 8020 (GC,Liquid)	--						04/19/1995	2765
Benzene	ND		0.5	ug/L	8020		04/19/1995	2765
Toluene	0.5	C	0.5	ug/L	8020		04/19/1995	2765
Ethylbenzene	ND		0.5	ug/L	8020		04/19/1995	2765
Xylenes (Total)	ND		0.5	ug/L	8020		04/19/1995	2765
SURROGATE RESULTS	--						04/19/1995	2765
Bromofluorobenzene (SURR)	75			% Rec.	5030		04/19/1995	2765

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

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: MW2
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240207

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/23/1995	2777
DILUTION FACTOR*	100						04/23/1995	2777
as Gasoline	5,000		5,000	ug/L	5030		04/23/1995	2777
Carbon Range:	C6-C12						04/23/1995	2777
METHOD 8020 (GC,Liquid)	--						04/23/1995	2777
Benzene	1,000		50	ug/L	8020		04/23/1995	2777
Toluene	340		50	ug/L	8020		04/23/1995	2777
Ethylbenzene	400		50	ug/L	8020		04/23/1995	2777
Xylenes (Total)	810		50	ug/L	8020		04/23/1995	2777
SURROGATE RESULTS	--						04/23/1995	2777
Bromofluorobenzene (SURR)	85			% Rec.	5030		04/23/1995	2777

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: MW2
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240207

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						04/21/1995	834
Bromodichloromethane	ND		0.4	ug/L	8010		04/21/1995	834
Bromoform	ND		0.4	ug/L	8010		04/21/1995	834
Bromomethane	ND		0.4	ug/L	8010		04/21/1995	834
Carbon tetrachloride	ND		0.4	ug/L	8010		04/21/1995	834
Chlorobenzene	ND		0.4	ug/L	8010		04/21/1995	834
Chloroethane	ND		0.4	ug/L	8010		04/21/1995	834
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/21/1995	834
Chloroform	2.3		0.4	ug/L	8010		04/21/1995	834
Chloromethane	ND		0.4	ug/L	8010		04/21/1995	834
Dibromochloromethane	ND		0.4	ug/L	8010		04/21/1995	834
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/21/1995	834
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/21/1995	834
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/21/1995	834
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/21/1995	834
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/21/1995	834
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/21/1995	834
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/21/1995	834
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/21/1995	834
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/21/1995	834
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/21/1995	834
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/21/1995	834
Methylene chloride	ND		10	ug/L	8010		04/21/1995	834
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/21/1995	834
Tetrachloroethene	8.4		0.4	ug/L	8010		04/21/1995	834
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/21/1995	834
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/21/1995	834
Trichloroethene	ND		0.4	ug/L	8010		04/21/1995	834
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/21/1995	834
Vinyl chloride	ND		0.4	ug/L	8010		04/21/1995	834
SURROGATE RESULTS	--						04/21/1995	834
1,4-Difluorobenzene (SURR)	128	MI		% Rec.			04/21/1995	834
1,4-Dichlorobutane (SURR)	112			% Rec.			04/21/1995	834

MI : Matrix Interference Suspected.

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: MW3
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240208

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/19/1995	2765
DILUTION FACTOR*	1						04/19/1995	2765
as Gasoline	ND		50	ug/L	5030		04/19/1995	2765
Carbon Range:	--						04/19/1995	2765
METHOD 8020 (GC,Liquid)	--						04/19/1995	2765
Benzene	0.5	C	0.5	ug/L	8020		04/19/1995	2765
Toluene	ND		0.5	ug/L	8020		04/19/1995	2765
Ethylbenzene	ND		0.5	ug/L	8020		04/19/1995	2765
Xylenes (Total)	ND		0.5	ug/L	8020		04/19/1995	2765
SURROGATE RESULTS	--						04/19/1995	2765
Bromofluorobenzene (SURR)	77			% Rec.	5030		04/19/1995	2765

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

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: MW4
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240209

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/19/1995	2765
DILUTION FACTOR*	1						04/19/1995	2765
as Gasoline	ND		50	ug/L	5030		04/19/1995	2765
Carbon Range:	--						04/19/1995	2765
METHOD 8020 (GC,Liquid)	--						04/19/1995	2765
Benzene	ND		0.5	ug/L	8020		04/19/1995	2765
Toluene	ND		0.5	ug/L	8020		04/19/1995	2765
Ethylbenzene	ND		0.5	ug/L	8020		04/19/1995	2765
Xylenes (Total)	ND		0.5	ug/L	8020		04/19/1995	2765
SURROGATE RESULTS	--						04/19/1995	2765
Bromofluorobenzene (SURR)	78			% Rec.	5030		04/19/1995	2765

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: DUP
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240210

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/19/1995	2765
DILUTION FACTOR*	1						04/19/1995	2765
as Gasoline	ND		50	ug/L	5030		04/19/1995	2765
Carbon Range:	--						04/19/1995	2765
METHOD 8020 (GC,Liquid)	--						04/19/1995	2765
Benzene	ND		0.5	ug/L	8020		04/19/1995	2765
Toluene	ND		0.5	ug/L	8020		04/19/1995	2765
Ethylbenzene	ND		0.5	ug/L	8020		04/19/1995	2765
Xylenes (Total)	ND		0.5	ug/L	8020		04/19/1995	2765
SURROGATE RESULTS	--						04/19/1995	2765
Bromofluorobenzene (SURR)	70			% Rec.	5030		04/19/1995	2765

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: EB
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240211

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/19/1995	2765
DILUTION FACTOR*	1						04/19/1995	2765
as Gasoline	ND		50	ug/L	5030		04/19/1995	2765
Carbon Range:	--						04/19/1995	2765
METHOD 8020 (GC,Liquid)	--						04/19/1995	2765
Benzene	ND		0.5	ug/L	8020		04/19/1995	2765
Toluene	ND		0.5	ug/L	8020		04/19/1995	2765
Ethylbenzene	ND		0.5	ug/L	8020		04/19/1995	2765
Xylenes (Total)	ND		0.5	ug/L	8020		04/19/1995	2765
SURROGATE RESULTS	--						04/19/1995	2765
Bromofluorobenzene (SURR)	79			% Rec.	5030		04/19/1995	2765

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

SAMPLE DESCRIPTION: TB
Date Taken: 04/14/1995
Time Taken:
NET Sample No: 240212

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/23/1995	2777
DILUTION FACTOR*	1						04/23/1995	2777
as Gasoline	ND		50	ug/L	5030		04/23/1995	2777
Carbon Range:	--						04/23/1995	2777
METHOD 8020 (GC,Liquid)	--						04/23/1995	2777
Benzene	ND		0.5	ug/L	8020		04/23/1995	2777
Toluene	ND		0.5	ug/L	8020		04/23/1995	2777
Ethylbenzene	ND		0.5	ug/L	8020		04/23/1995	2777
Xylenes (Total)	ND		0.5	ug/L	8020		04/23/1995	2777
SURROGATE RESULTS	--						04/23/1995	2777
Bromofluorobenzene (SURR)	79			% Rec.	5030		04/23/1995	2777

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	114.0	0.57	1.00	mg/L	04/19/1995		2765
Benzene	95.6	4.78	5.00	ug/L	04/19/1995		2765
Toluene	89.4	4.47	5.00	ug/L	04/19/1995		2765
Ethylbenzene	95.6	4.78	5.00	ug/L	04/19/1995		2765
Xylenes (Total)	94.0	14.1	15.0	ug/L	04/19/1995		2765
Bromofluorobenzene (SURR)	82.0	82	100	% Rec.	04/19/1995		2765
TPH (Gas/BTXE,Liquid)							
as Gasoline	112.0	1.12	1.00	mg/L	04/23/1995	aal	2777
Benzene	100.6	5.03	5.00	ug/L	04/23/1995	aal	2777
Toluene	98.8	4.94	5.00	ug/L	04/23/1995	aal	2777
Ethylbenzene	103.4	5.17	5.00	ug/L	04/23/1995	aal	2777
Xylenes (Total)	103.3	15.5	15.0	ug/L	04/23/1995	aal	2777
Bromofluorobenzene (SURR)	91.0	91	100	% Rec.	04/23/1995	aal	2777

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	85.5	17.1	20.0	ug/L	04/20/1995	ltg	834
Bromoform	91.0	18.2	20.0	ug/L	04/20/1995	ltg	834
Bromomethane	89.0	17.8	20.0	ug/L	04/20/1995	ltg	834
Carbon tetrachloride	88.0	17.6	20.0	ug/L	04/20/1995	ltg	834
Chlorobenzene	88.5	17.7	20.0	ug/L	04/20/1995	ltg	834
Chloroethane	81.5	16.3	20.0	ug/L	04/20/1995	ltg	834
2-Chloroethylvinyl ether	75.5	15.1	20.0	ug/L	04/20/1995	ltg	834
Chloroform	84.5	16.9	20.0	ug/L	04/20/1995	ltg	834
Chloromethane	86.5	17.3	20.0	ug/L	04/20/1995	ltg	834
Dibromochloromethane	87.5	17.5	20.0	ug/L	04/20/1995	ltg	834
1,2-Dichlorobenzene	89.0	17.8	20.0	ug/L	04/20/1995	ltg	834
1,3-Dichlorobenzene	83.5	16.7	20.0	ug/L	04/20/1995	ltg	834
1,4-Dichlorobenzene	89.5	17.9	20.0	ug/L	04/20/1995	ltg	834
Dichlorodifluoromethane	104.5	20.9	20.0	ug/L	04/20/1995	ltg	834
1,1-Dichloroethane	88.0	17.6	20.0	ug/L	04/20/1995	ltg	834
1,2-Dichloroethane	86.5	17.3	20.0	ug/L	04/20/1995	ltg	834
1,1-Dichloroethene	83.5	16.7	20.0	ug/L	04/20/1995	ltg	834
trans-1,2-Dichloroethene	83.0	16.6	20.0	ug/L	04/20/1995	ltg	834
1,2-Dichloropropane	83.0	16.6	20.0	ug/L	04/20/1995	ltg	834
cis-1,3-Dichloropropene	85.5	17.1	20.0	ug/L	04/20/1995	ltg	834
trans-1,3-Dichloropropene	84.5	16.9	20.0	ug/L	04/20/1995	ltg	834
Methylene chloride	82.0	16.4	20.0	ug/L	04/20/1995	ltg	834
1,1,2,2-Tetrachloroethane	97.5	19.5	20.0	ug/L	04/20/1995	ltg	834
Tetrachloroethene	89.0	17.8	20.0	ug/L	04/20/1995	ltg	834
1,1,1-Trichloroethane	88.0	17.6	20.0	ug/L	04/20/1995	ltg	834
1,1,2-Trichloroethane	88.0	17.6	20.0	ug/L	04/20/1995	ltg	834
Trichloroethene	86.0	17.2	20.0	ug/L	04/20/1995	ltg	834
Trichlorofluoromethane	85.0	17.0	20.0	ug/L	04/20/1995	ltg	834
Vinyl chloride	88.0	17.6	20.0	ug/L	04/20/1995	ltg	834
1,4-Difluorobenzene (SURR)	99.0	99	100	% Rec.	04/20/1995	ltg	834
1,4-Dichlorobutane (SURR)	98.0	98	100	% Rec.	04/20/1995	ltg	834

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	89.0	17.8	20.0	ug/L	04/21/1995	ltg	834
Bromoform	93.5	18.7	20.0	ug/L	04/21/1995	ltg	834
Bromomethane	81.5	16.3	20.0	ug/L	04/21/1995	ltg	834
Carbon tetrachloride	88.5	17.7	20.0	ug/L	04/21/1995	ltg	834
Chlorobenzene	91.0	18.2	20.0	ug/L	04/21/1995	ltg	834
Chloroethane	86.5	17.3	20.0	ug/L	04/21/1995	ltg	834
2-Chloroethylvinyl ether	90.0	18.0	20.0	ug/L	04/21/1995	ltg	834
Chloroform	90.5	18.1	20.0	ug/L	04/21/1995	ltg	834
Chloromethane	92.0	18.4	20.0	ug/L	04/21/1995	ltg	834
Dibromochloromethane	93.5	18.7	20.0	ug/L	04/21/1995	ltg	834
1,2-Dichlorobenzene	91.0	18.2	20.0	ug/L	04/21/1995	ltg	834
1,3-Dichlorobenzene	87.5	17.5	20.0	ug/L	04/21/1995	ltg	834
1,4-Dichlorobenzene	93.0	18.6	20.0	ug/L	04/21/1995	ltg	834
Dichlorodifluoromethane	86.0	17.2	20.0	ug/L	04/21/1995	ltg	834
1,1-Dichloroethane	91.0	18.2	20.0	ug/L	04/21/1995	ltg	834
1,2-Dichloroethane	88.5	17.7	20.0	ug/L	04/21/1995	ltg	834
1,1-Dichloroethene	87.5	17.5	20.0	ug/L	04/21/1995	ltg	834
trans-1,2-Dichloroethene	89.0	17.8	20.0	ug/L	04/21/1995	ltg	834
1,2-Dichloropropane	89.5	17.9	20.0	ug/L	04/21/1995	ltg	834
cis-1,3-Dichloropropene	91.0	18.2	20.0	ug/L	04/21/1995	ltg	834
trans-1,3-Dichloropropene	94.0	18.8	20.0	ug/L	04/21/1995	ltg	834
Methylene chloride	105.0	21.0	20.0	ug/L	04/21/1995	ltg	834
1,1,2,2-Tetrachloroethane	106.5	21.3	20.0	ug/L	04/21/1995	ltg	834
Tetrachloroethene	93.0	18.6	20.0	ug/L	04/21/1995	ltg	834
1,1,1-Trichloroethane	86.0	17.2	20.0	ug/L	04/21/1995	ltg	834
1,1,2-Trichloroethane	96.5	19.3	20.0	ug/L	04/21/1995	ltg	834
Trichloroethene	90.0	18.0	20.0	ug/L	04/21/1995	ltg	834
Trichlorofluoromethane	85.0	17.0	20.0	ug/L	04/21/1995	ltg	834
Vinyl chloride	87.0	17.4	20.0	ug/L	04/21/1995	ltg	834
1,4-Difluorobenzene (SURR)	98.0	98	100	% Rec.	04/21/1995	ltg	834
1,4-Dichlorobutane (SURR)	101.0	101	100	% Rec.	04/21/1995	ltg	834

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	04/19/1995	jmh	2765
Benzene	ND	0.5	ug/L	04/19/1995	jmh	2765
Toluene	ND	0.5	ug/L	04/19/1995	jmh	2765
Ethylbenzene	ND	0.5	ug/L	04/19/1995	jmh	2765
Xylenes (Total)	ND	0.5	ug/L	04/19/1995	jmh	2765
Bromofluorobenzene (SURR)	77		% Rec.	04/19/1995	jmh	2765
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	04/23/1995	aal	2777
Benzene	ND	0.5	ug/L	04/23/1995	aal	2777
Toluene	ND	0.5	ug/L	04/23/1995	aal	2777
Ethylbenzene	ND	0.5	ug/L	04/23/1995	aal	2777
Xylenes (Total)	ND	0.5	ug/L	04/23/1995	aal	2777
Bromofluorobenzene (SURR)	81		% Rec.	04/23/1995	aal	2777

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	04/20/1995	ltg	834
Bromoform	ND	0.4	ug/L	04/20/1995	ltg	834
Bromomethane	ND	0.4	ug/L	04/20/1995	ltg	834
Carbon tetrachloride	ND	0.4	ug/L	04/20/1995	ltg	834
Chlorobenzene	ND	0.4	ug/L	04/20/1995	ltg	834
Chloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
2-Chloroethylvinyl ether	ND	1.0	ug/L	04/20/1995	ltg	834
Chloroform	ND	0.4	ug/L	04/20/1995	ltg	834
Chloromethane	ND	0.4	ug/L	04/20/1995	ltg	834
Dibromochloromethane	ND	0.4	ug/L	04/20/1995	ltg	834
1,2-Dichlorobenzene	ND	0.4	ug/L	04/20/1995	ltg	834
1,3-Dichlorobenzene	ND	0.4	ug/L	04/20/1995	ltg	834
1,4-Dichlorobenzene	ND	0.4	ug/L	04/20/1995	ltg	834
Dichlorodifluoromethane	ND	0.4	ug/L	04/20/1995	ltg	834
1,1-Dichloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
1,2-Dichloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
1,1-Dichloroethene	ND	0.4	ug/L	04/20/1995	ltg	834
trans-1,2-Dichloroethene	ND	0.4	ug/L	04/20/1995	ltg	834
1,2-Dichloropropane	ND	0.4	ug/L	04/20/1995	ltg	834
cis-1,3-Dichloropropene	ND	0.4	ug/L	04/20/1995	ltg	834
trans-1,3-Dichloropropene	ND	0.4	ug/L	04/20/1995	ltg	834
Methylene chloride	ND	10	ug/L	04/20/1995	ltg	834
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
Tetrachloroethene	ND	0.4	ug/L	04/20/1995	ltg	834
1,1,1-Trichloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
1,1,2-Trichloroethane	ND	0.4	ug/L	04/20/1995	ltg	834
Trichloroethene	ND	0.4	ug/L	04/20/1995	ltg	834
Trichlorofluoromethane	ND	0.4	ug/L	04/20/1995	ltg	834
Vinyl chloride	ND	0.4	ug/L	04/20/1995	ltg	834
1,4-Difluorobenzene (SURR)	99		% Rec.	04/20/1995	ltg	834
1,4-Dichlorobutane (SURR)	100		% Rec.	04/20/1995	ltg	834

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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	04/21/1995	ltg	834
Bromoform	ND	0.4	ug/L	04/21/1995	ltg	834
Bromomethane	ND	0.4	ug/L	04/21/1995	ltg	834
Carbon tetrachloride	ND	0.4	ug/L	04/21/1995	ltg	834
Chlorobenzene	ND	0.4	ug/L	04/21/1995	ltg	834
Chloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
2-Chloroethylvinyl ether	ND	1.0	ug/L	04/21/1995	ltg	834
Chloroform	ND	0.4	ug/L	04/21/1995	ltg	834
Chloromethane	ND	0.4	ug/L	04/21/1995	ltg	834
Dibromochloromethane	ND	0.4	ug/L	04/21/1995	ltg	834
1,2-Dichlorobenzene	ND	0.4	ug/L	04/21/1995	ltg	834
1,3-Dichlorobenzene	ND	0.4	ug/L	04/21/1995	ltg	834
1,4-Dichlorobenzene	ND	0.4	ug/L	04/21/1995	ltg	834
Dichlorodifluoromethane	ND	0.4	ug/L	04/21/1995	ltg	834
1,1-Dichloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
1,2-Dichloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
1,1-Dichloroethene	ND	0.4	ug/L	04/21/1995	ltg	834
trans-1,2-Dichloroethene	ND	0.4	ug/L	04/21/1995	ltg	834
1,2-Dichloropropane	ND	0.4	ug/L	04/21/1995	ltg	834
cis-1,3-Dichloropropene	ND	0.4	ug/L	04/21/1995	ltg	834
trans-1,3-Dichloropropene	ND	0.4	ug/L	04/21/1995	ltg	834
Methylene chloride	ND	10	ug/L	04/21/1995	ltg	834
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
Tetrachloroethene	ND	0.4	ug/L	04/21/1995	ltg	834
1,1,1-Trichloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
1,1,2-Trichloroethane	ND	0.4	ug/L	04/21/1995	ltg	834
Trichloroethene	ND	0.4	ug/L	04/21/1995	ltg	834
Trichlorofluoromethane	ND	0.4	ug/L	04/21/1995	ltg	834
Vinyl chloride	ND	0.4	ug/L	04/21/1995	ltg	834
1,4-Difluorobenzene (SURR)	103		% Rec.	04/21/1995	ltg	834
1,4-Dichlorobutane (SURR)	95		% Rec.	04/21/1995	ltg	834

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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)											240222
as Gasoline	102.0	86.0	16.9	0.50	ND	0.51	0.43	mg/L	04/19/1995	2765	240222
Benzene	92.6	73.0	23.7	9.41	ND	8.71	6.87	ug/L	04/19/1995	2765	240222
Toluene	110.2	88.2	22.1	30.5	ND	33.6	26.9	ug/L	04/19/1995	2765	240222
TPH (Gas/BTXE,Liquid)											240212
as Gasoline	57.0	53.0	7.3	1.00	ND	0.57	0.53	mg/L	04/23/1995	2777	240212
Benzene	45.0	45.6	1.3	20.0	ND	9.00	9.12	ug/L	04/23/1995	2777	240212
Toluene	57.2	52.5	8.6	60.0	ND	34.3	31.5	ug/L	04/23/1995	2777	240212

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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)											239940
Chlorobenzene	94.0	104.5	10.5	20.0	ND	18.8	20.9	ug/L	04/21/1995	834	239940
1,1-Dichloroethene	89.5	101.5	12.5	20.0	ND	17.9	20.3	ug/L	04/21/1995	834	239940
Trichloroethene	90.5	99.0	9.0	20.0	ND	18.1	19.8	ug/L	04/21/1995	834	239940

Ref: Shell 1285 Bancroft Ave., San Leandro, CA/950414-K1

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)											239940
Chlorobenzene	100.0	100.0	0.0	20.0	ND	20.0	20.0	ug/L	04/21/1995	834	239940
1,1-Dichloroethene	100.0	100.0	0.0	20.0	ND	20.0	20.	ug/L	04/21/1995	834	239940
Trichloroethene	100.0	100.0	0.0	20.0	ND	20.0	20.0	ug/L	04/21/1995	834	239940

NET®

KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

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

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

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

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

COOLER RECEIPT FORM

Project: 950414-K1 Log No: 10420
Cooler, received on: 04/18/95 and checked on 04/18/95 by: Bon Greene
(signature) Bon Greene

Were custody papers present?..... (YES) NO
Were custody papers properly filled out?..... (YES) NO
Were the custody papers signed?..... (YES) NO
Was sufficient ice used?..... (YES) NO 0.3°
Did all bottles arrive in good condition (unbroken)?..... (YES) NO
Did bottle labels match COC?..... (YES) NO
Were proper bottles used for analysis indicated?..... (YES) NO
Correct preservatives used?..... (YES) NO
VOA vials checked for headspace bubbles?..... (YES) NO
Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:

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

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)

WELL GAUGING DATA

Project # 950414-101 Date 4/14/95 Client Shell

Site 1285 Bancroft Ave, San Leandro

Well I.D.	Well Size (in.)	Sheen/ Odor	Depth to Immiscible Liquid (feet)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to Water (feet)	Depth to Well Bottom (feet)	Survey Point: TOB or TOC
MW1	4					31.02	58.67	TOC
MW2	4					30.83	58.58	↓
MW3	4					31.50	57.33	
MW4	4					32.24	54.20	

SHELL WELL MONITORING DATA SHEET

Project #: 950414-1C1	Wic # 204-6852-0703
Sampler: KCS	Date Sampled: 4/14
Well I.D.: MW1	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 58.67 After	Depth to Water: Before 31.02 After
Depth to Free Product: —	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):
(12 × (d²/4) × π)/231
Where
12 = in./foot
d = diameter (in.)
π = 3.1416
231 = cu.in./gal.

Well dia.	VCF
2"	0.16
3"	0.37
4"	0.65
6"	1.47
10"	4.08
12"	5.87

18.0	x	3	=	54.0
1 Case Volume		Specified Volumes		gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☑ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☑ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
819	65.0	7.8	610	45.9	18	
822	65.8	7.6	600	28.7	36	
825	66.0	7.6	600	13.4	54	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 54

Sampling Time: 835

Sample I.D.: MW1 Laboratory: Non

Analyzed for: TPHG BTEX

Duplicate I.D.: DUP Cleaning Blank I.D.:

Analyzed for: TPHG BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 950414-K1	Wic # 204-6852-0703
Sampler: KCB	Date Sampled: 4/14
Well I.D.: MW2	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 5858 After	Depth to Water: Before 3083 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: PVC Grade Other --	

Volume Conversion Factor (VCF):
(12 = (d²/4) * π)/231
Where
12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in³/gal

Well dia.	VCF
2"	= 0.16
3"	= 0.37
4"	= 0.65
6"	= 1.47
10"	= 4.08
12"	= 5.87

1 Case Volume	x	Specified Volumes	=	gallons
180	x	3	=	54

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☑ Suction Pump ☐ Type of Installed Pump _____

Sampling: Bailer ☑ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
846	64.6	7.7	630	36.1	18	
849	65.8	7.8	640	17.6	36	
851	66.0	7.7	610	13.1	54	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 54

Sampling Time: 900

Sample I.D.: MW2 Laboratory: Nor

Analyzed for: TPH-G, BTEX, 8010 (HVOC)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 950414-K1		Wic #: 204-6852-0703	
Sampler: KGB		Date Sampled: 4/14	
Well I.D.: MW3		Well Diameter: (circle one) 2 3 (4) 6 ____	
Total Well Depth: Before 5733	After	Depth to Water: Before 3150	After
Depth to Free Product: ____		Thickness of Free Product (feet):	
Measurements referenced to: (PVC)	Grade	Other --	

Volume Conversion Factor (VCF):

$$\{12 \times (d^2/4) \times \pi\}/231$$

where

12 = in/foot
d = diameter (in.)
π = 3.1416
231 = in³/gal

Well dia.		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	5.87

16.8 (1 Case Volume) x 3 (Specified Volumes) = 50.4 gallons

Purging:
- Bailer ☐
- Middleburg ☐
- Electric Submersible ☑
- Suction Pump ☐
- Type of Installed Pump ____________

Sampling:
- Bailer ☑
- Middleburg ☐
- Electric Submersible ☐
- Suction Pump ☐
- Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
753	64.2	7.8	770	39.8	17	
756	65.0	7.8	700	30.2	34	
759	65.0	7.6	710	19.4	51	

Did Well Dewater? N If yes, gals. — Gallons Actually Evacuated: 51

Sampling Time: 810

Sample I.D.: MW3 Laboratory: Net

Analyzed for: TPHG, BTEX

Duplicate I.D.: Cleaning Blank I.D.: EB-745

Analyzed for: TPHG, BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 950414-K1	Wic # 204-6852-0703
Sampler: KCB	Date Sampled: 4/14
Well I.D.: MW4	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 34.20 After	Depth to Water: Before 32.24 After
Depth to Free Product: ___	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):
$(12 \times (d^2/4) \times \pi)/231$
Where
12 = in./foot
d = diameter (in.)
π = 3.1416
231 = in.³/gal

Well dia.	VCF
2"	0.16
3"	0.37
4"	0.65
6"	1.47
10"	4.08
12"	5.87

14.2 (1 Case Volume) x 3 (Specified Volumes) = 42.6 gallons

Purging: Bailer ☐ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Type of Installed Pump ___

Sampling: Bailer ☑ Middleburg ☐ Electric Submersible ☐ Suction Pump ☐ Installed Pump ☐

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
723	64.4	7.8	1400	25.6	15	
725	65.8	7.8	1300	34.8	30	
727	65.6	7.7	1200	65.4	43	

Did Well Dewater? N If yes, gals. ___ Gallons Actually Evacuated: 43

Sampling Time: 735

Sample I.D.: MW4 Laboratory: Not

Analyzed for: TPH-G BTEX

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for:

Shipping Notations:

Additional Notations:

WELL HEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client Shell Site # 204-6852-0703 Inspection date: 4/14

Site address 1285 Bancroft Ave Inspected by: KGB

San Leandro BTS Event # 050414-KG1

1. Lid on the box? Yes No	5. Water standing in the well box?	7. Can cap be pulled loose?
2. Lid whole?	5a. Standing above well top?	8. Can cap seal out water?
3. Lid secure?	5b. Standing below well top?	9. Padlock present?
4. Lid seal intact?	5c. Water even with top of well cap?	10. Padlock found locked?
	6. Well cap/plug present?	11. Padlock functional?

☑ Check box if *no deficiences* were found. Note below deficiencies you were able to correct.

Well I.D.	Deficiency	Corrective Action Taken

Note below all deficiences that could not be corrected and *still need to be corrected.*

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected

Office review and assignments made by _____ date _____