PACIFIC
ENVIRONMENTAL
GROUP, INC.

5510 3673
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April 28, 1995
Project 305-085.2C

Mr. Dan Kirk
Shell Oil Company
P.O. Box 4023
Concord, California 94524

Re: Quarterly Report - First Quarter 1995
Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue, 94611
Oakland, California
WIC No 204-5508-0703

Dear Mr. Kirk:

The following presents the results of the first quarter 1995 monitoring program for the site referenced above. This letter has been prepared for Shell Oil Company by Pacific Environmental Group, Inc. (PACIFIC).

FINDINGS

Groundwater monitoring wells were gauged and sampled by Blaine Tech Services, Inc. (Blaine) at the direction of PACIFIC on March 13, 1995. Groundwater elevation contours for the sampling date are shown on Figure 1. Table 1 presents groundwater elevation data.

The samples from Wells MW-1, MW-4, and the duplicate sample from Well MW-4 were analyzed after the method specified holding time. Wells MW-1 through MW-3 were resampled on April 21, 1995. Groundwater analytical data are presented in Table 2. Total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene concentrations for the March and April 1995 sampling events are shown on Figure 2. The laboratory reported the positive result of TPH-g in Well MW-3 to have an atypical gasoline pattern. Blaine's groundwater sampling report, which includes field data and the certified analytical report, is presented as Attachment A.

If you have any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.

Ross W.N. Tinline
Project Geologist
RG 5860

Attachments:
- Table 1 - Groundwater Elevation Data
- Table 2 - Groundwater Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
- Figure 1 - Groundwater Elevation Contour Map
- Figure 2 - TPH-g/Benzene Concentration Map
- Attachment A - Groundwater Sampling Report

cc: Ms. Lisa McCann, Regional Water Quality Control Board - S.F. Bay Region
Mr. Craig Mayfield, Alameda County Flood Control and Water Conservation District
[redacted]

Table 1
Groundwater Elevation Data

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	07/14/88	73.89	13.30	60.59
	10/04/88		13.65	60.24
	11/10/88		13.55	60.34
	12/09/88		13.22	60.67
	01/10/89		12.86	61.03
	01/20/89		12.91	60.98
	02/06/89		12.94	60.95
	03/10/89		12.59	61.30
	06/06/89		14.05	59.84
	09/07/89		14.92	58.97
	12/18/89		14.88	59.01
	03/08/90		14.08	59.81
	06/07/90		13.89	60.00
	09/05/90		14.83	59.06
	12/03/90		15.05	58.84
	03/01/91		14.34	59.55
	06/03/91		14.16	59.73
	09/04/91		14.60	59.29
	03/13/92		13.40	60.49
	06/03/92		13.76	60.13
	08/19/92		14.57	59.32
	11/16/92		14.78	59.11
	02/18/93		12.14	61.75
	06/01/93		13.30	60.59
	08/30/93		14.32	59.57
	12/13/93		14.06	59.83
	03/03/94		13.12	60.77
	06/06/94		14.20	59.69
	09/12/94		15.72	58.17
	12/15/94		12.98	60.91
	03/13/95		11.74	62.15
MW-2	07/14/88	75.24	15.18	60.06
	10/04/88		15.30	59.94
	11/10/88		15.17	60.07
	12/09/88		14.82	60.42
	01/20/89		14.54	60.70
	02/06/89		14.59	60.65
	03/10/89		14.88	60.36
	06/06/89		15.30	59.94
	09/07/89		16.76	58.48
	12/18/89		16.65	58.59
	03/08/90		15.92	59.32
	06/07/90		16.10	59.14
	09/05/90		16.61	58.63

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth To Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-2 (cont.)	12/03/90		17.06	58.18
	03/01/91		16.62	58.62
	06/03/91		16.65	58.59
	09/04/91		16.57	58.67
	03/13/92		14.66	60.58
	06/03/92		15.90	59.34
	08/19/92		16.72	58.52
	11/16/92		16.66	58.58
	02/18/93		13.88	61.36
	06/01/93		14.74	60.50
	08/30/93		15.85	59.39
	12/13/93		15.83	59.41
	03/03/94		14.80	60.44
	06/06/94		16.65	58.59
	09/12/94		16.72	58.52
	12/15/94		15.25	59.99
	03/13/95		15.32	59.92
MW-3	07/14/88	74.68	14.05	60.63
	10/04/88		14.60	60.08
	11/10/88		14.35	60.33
	12/09/88		14.04	60.64
	01/10/89		13.70	60.98
	01/20/89		13.72	60.96
	02/06/89		13.75	60.93
	03/10/89		13.42	61.26
	06/06/89		14.52	60.16
	09/07/89		15.52	59.16
	12/18/89		19.59	55.09
	03/08/90		14.72	59.96
	06/07/90		14.65	60.03
	09/05/90		15.51	59.17
	12/03/90		14.85	59.83
	03/01/91		14.92	59.76
	06/03/91		14.75	59.93
	09/04/91		15.14	59.54
	03/13/92		13.50	61.18
	06/03/92		14.39	60.29
	08/19/92		15.08	59.60
	11/16/92		15.43	59.25
	02/18/93		12.96	61.72
	06/01/93		13.98	60.70
	08/30/93		14.82	59.86
	12/13/93		14.70	59.98

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth To Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-3 (cont.)	03/03/94		13.92	60.76
	06/06/94		14.73	59.95
	09/12/94		15.42	59.26
	12/15/94		13.80	60.88
	03/13/95		12.41	62.27
MW-4	01/23/90	73.83	14.68	59.15
	03/08/90		14.38	59.45
	06/07/90		14.27	59.56
	09/05/90		15.40	58.43
	12/03/90		15.90	57.93
	06/03/91		14.60	59.23
	09/04/91		15.25	58.58
	03/13/92		12.72	61.11
	06/03/92		14.33	59.50
	08/19/92		15.18	58.65
	11/16/92		15.39	58.44
	02/18/93		12.62	61.21
	06/01/93		13.68	60.15
	08/30/93		14.83	59.00
	12/13/93		14.50	59.33
	03/03/94		13.48	60.35
	06/06/94		14.26	59.57
	09/12/94		15.42	58.41
	12/15/94		13.43	60.40
	03/13/95		12.13	61.70

MSL = Mean sea level
TOC = Top of casing

Table 2
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-1	07/14/88	ND	ND	ND	ND	ND
	10/04/88	ND	8	4.3	ND	9
	11/10/88	ND	ND	ND	ND	ND
	12/09/88	ND	ND	ND	ND	ND
	01/10/89	ND	ND	ND	ND	NA
	01/20/89	ND	ND	NA	NA	ND
	02/06/89	ND	ND	ND	ND	ND
	03/10/89	ND	ND	ND	ND	ND
	06/06/89	ND	ND	ND	ND	ND
	09/07/89	ND	ND	ND	ND	ND
	12/18/89	ND	ND	ND	ND	ND
	03/08/90	ND	ND	ND	ND	ND
	06/07/90	ND	ND	ND	ND	ND
	09/05/90	ND	ND	ND	ND	ND
	12/03/90	ND	ND	ND	ND	ND
	03/01/91	ND	ND	ND	ND	ND
	06/03/91	ND	ND	ND	ND	ND
	09/04/91	ND	ND	ND	ND	ND
	03/13/92	ND	ND	ND	ND	ND
	06/03/92	ND	ND	ND	ND	ND
	08/19/92	87	ND	ND	ND	ND
	11/16/92	ND	ND	ND	ND	ND
	02/18/93	59[a]	ND	ND	ND	ND
	06/01/93	ND	ND	ND	ND	ND
	08/30/93	ND	ND	ND	ND	ND
	12/13/93	ND	ND	ND	ND	ND
	03/03/94	100	ND	ND	ND	ND
	06/06/94	ND	ND	ND	ND	ND
	09/12/94	ND	ND	ND	ND	ND
	12/15/94	ND	ND	ND	ND	ND
	03/13/95[d]	60	4.7	9.8	ND	2.9
	04/21/95	ND	ND	ND	ND	ND
MW-2	07/14/88	ND	7.9	2.6	1.1	4
	10/04/88	90	ND	1.3	2.3	12
	11/10/88	ND	ND	ND	ND	2
	12/09/88	ND	ND	0.6	ND	3
	01/20/89	ND	ND	ND	ND	ND
	02/06/89	NA	ND	ND	ND	ND
	03/10/89	ND	ND	ND	ND	ND
	06/06/89	ND	ND	0.5	ND	ND
	09/07/89	ND	ND	ND	ND	ND

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-2 (cont.)	12/18/89	ND	ND	ND	ND	ND
	03/08/90	ND	ND	ND	ND	ND
	06/07/90	ND	ND	ND	ND	ND
	09/05/90	ND	ND	ND	ND	ND
	12/03/90	ND	ND	ND	ND	ND
	03/01/91	ND	ND	ND	ND	ND
	06/03/91	ND	ND	ND	ND	ND
	09/04/91	ND	ND	ND	ND	ND
	03/13/92	ND	ND	ND	ND	ND
	06/03/92	ND	ND	ND	ND	ND
	08/19/92	67	ND	ND	ND	ND
	11/16/92	50	ND	ND	ND	1.2
	02/18/93	52[a]	ND	ND	ND	ND
	02/18/93(D)	52[a]	ND	ND	ND	ND
	06/01/93	ND	ND	ND	ND	ND
	08/30/93	70[a]	ND	ND	ND	ND
	12/13/93	68[a]	ND	ND	ND	ND
	03/03/94	280[a]	ND	ND	ND	ND
	06/06/94	ND	ND	ND	ND	ND
	09/12/94	ND	ND	ND	ND	ND
	12/15/94	230[a]	ND	ND	ND	ND
	03/13/95	ND	2.9	6.3	ND	2.7
	04/21/95	ND	ND	ND	ND	ND
MW-3	07/14/88	ND	ND	ND	ND	ND
	10/04/88	ND	ND	ND	ND	5
	11/10/88	ND	ND	ND	ND	ND
	12/09/88	ND	ND	ND	ND	ND
	01/10/89	ND	ND	ND	ND	NA
	01/20/89	NA	NA	ND	ND	ND
	02/06/89	70	ND	ND	ND	ND
	03/10/89	150	ND	ND	ND	ND
	06/06/89	ND	ND	ND	ND	ND
	09/07/89	ND	0.65	ND	ND	ND
	12/06/89	46	1.3	ND	0.44	0.66
	03/08/90	ND	ND	ND	ND	ND
	06/07/90	ND	ND	ND	ND	ND
	09/05/91	ND	ND	ND	ND	ND
	12/03/90	ND	ND	ND	ND	ND
	03/01/91	1.9	59	ND	22	ND
	06/03/91	ND	ND	ND	ND	ND
	09/04/91	ND	ND	ND	ND	ND
	03/13/92	ND	ND	ND	ND	ND

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-3 (cont.)	06/03/92	ND	ND	ND	ND	ND
	08/19/92	92	ND	ND	ND	ND
	08/19/92(D)	76	ND	ND	ND	ND
	11/16/92	200[a]	ND	ND	ND	ND
	11/16/92(D)	140[a]	ND	ND	ND	ND
	02/18/93	680[a]	ND	ND	ND	ND
	06/01/93	160[a]	ND	ND	ND	ND
	06/01/93(D)	150[a]	ND	ND	ND	ND
	08/30/93	110[a]	ND	ND	ND	ND
	12/13/93	140[a]	ND	ND	ND	ND
	12/13/93(D)	110[a]	ND	ND	ND	ND
	03/03/94	61[a]	ND	ND	ND	ND
	06/06/94	ND	ND	ND	ND	ND
	09/12/94	ND	ND	ND	ND	ND
	12/15/94	ND	ND	0.9	ND	0.6
	03/13/95	100[b]	7.9	17	0.7	6.1
	04/21/95	60	0.9	1.1	ND	1.0
MW-4	01/23/90	1,600	100	10	30	20
	03/08/90	4,200	260	18	88	39
	06/07/90	2,000	150	6.9	14	17
	09/05/90	1,700	130	10	7.2	19
	12/03/90	2,600	108	41	17	59
	06/03/91	2,800	160	15	8.8	32
	09/04/91	---------- Separate-Phase Hydrocarbon Sheen ----------				
	03/13/92	2,700	180	70	5.9	29
	06/03/92	1,700	190	ND	30	23
	08/19/92	170	4.2	ND	0.6	1.0
	11/16/92	2,600	92	49	50	81
	02/18/93	7,400	120	38	51	87
	06/01/93	7,000	1,800	1,700	1,600	1,700
	08/30/93	2,100	80	11	ND	11
	08/30/93(D)	2,100	77	5.6	ND	5.5
	12/13/93	2,000[a]	20	ND	21	52
	03/03/94	3,500	150	86	85	90
	03/03/94(D)	3,200	130	73	74	76

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

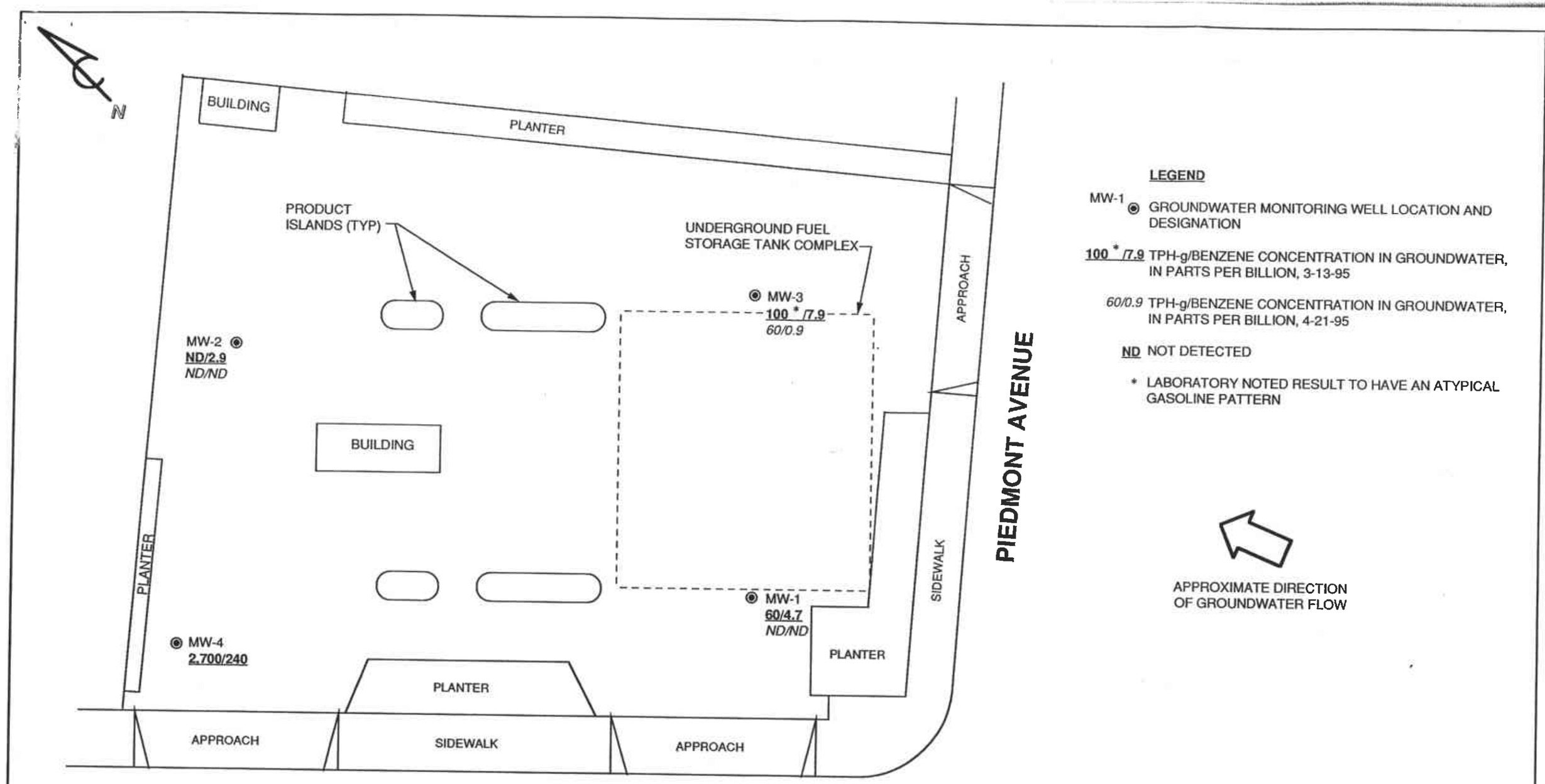
Shell Service Station
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
	06/06/94	590	25	ND	ND	ND
	06/06/94(D)	400	16	ND	ND	ND
	09/12/94	1,800	42	ND	3.7	4.7
	09/12/94(D)	2,000	40	ND	5.7	8.0
	12/15/94	2,900	78	14	94	17
	12/15/94(D)	2,900	90	7	96	18
	03/13/95[c]	2,700	240	24	99	34
	03/13/95(D)[c]	2,500	300	24	140	28

ppb = Parts per billion
ND = Not detected
NA = Not analyzed
(D) = Duplicate sample

a. The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of gasoline.
b. The laboratory noted result to have an atypical gasoline pattern.
c. The laboratory noted sample was analyzed within hold time but further dilution was required and done out of hold time. The laboratory suggests these to be minimum concentrations.
d. The laboratory noted the sampled was analyzed after the method specified holding time.

See certified analytical reports for detection limits.



PACIFIC ENVIRONMENTAL GROUP, INC.

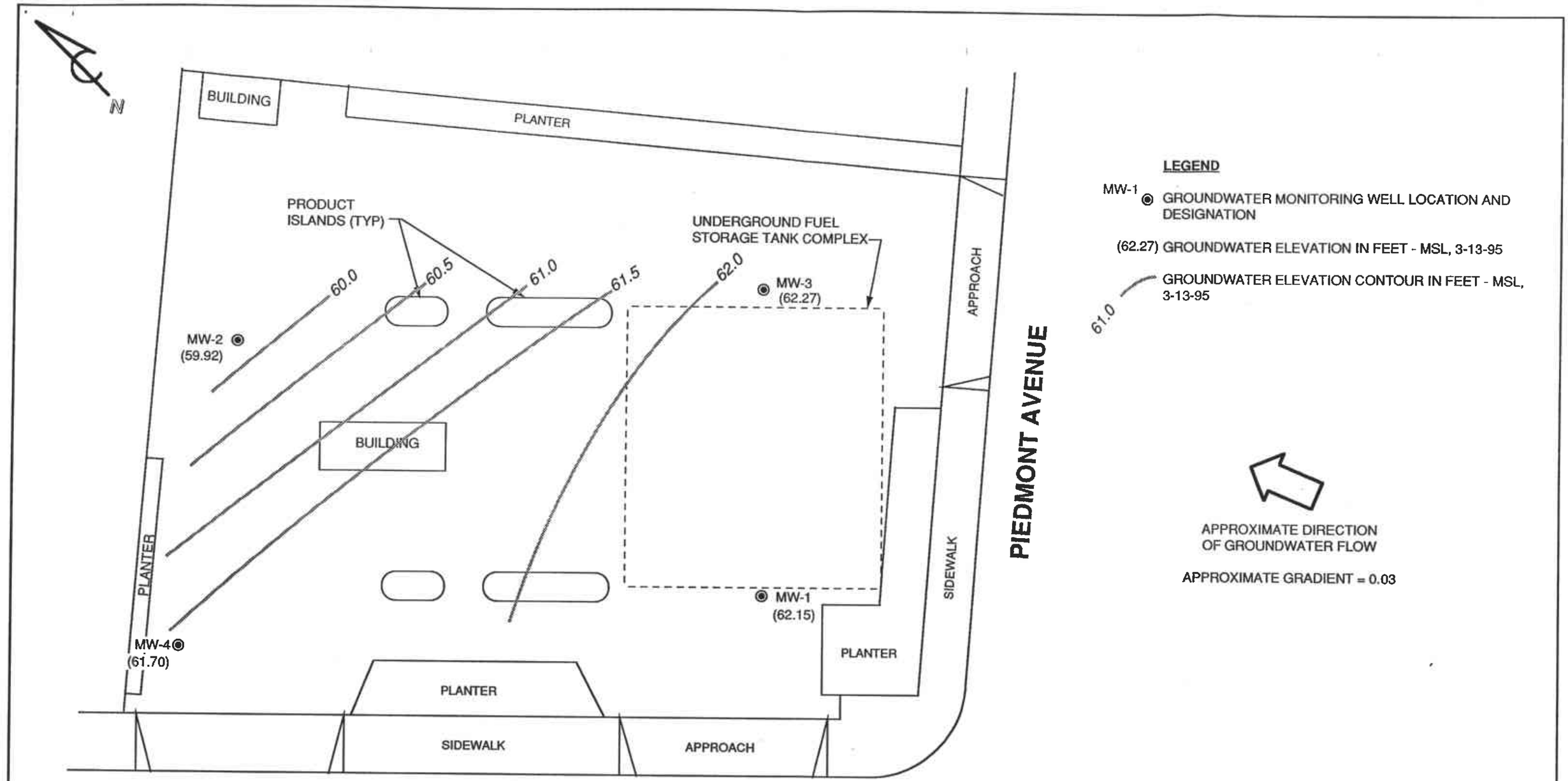
SCALE
0 20 40 FEET

SHELL SERVICE STATION
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

TPH-g/BENZENE CONCENTRATION MAP

FIGURE:
2
PROJECT:
305-085.2B

01/29/95



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 20 40 FEET

SHELL SERVICE STATION
230 West MacArthur Boulevard at Piedmont Avenue
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE:
1
PROJECT:
305-085.2C

9/28/95

ATTACHMENT A

GROUNDWATER SAMPLING REPORT

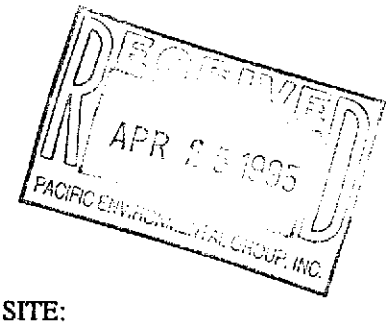
BLAINE
TECH SERVICES INC.

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

April 19, 1995

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

Attn: Daniel T. Kirk



SITE:
Shell WIC #204-5508-0703
230 West MacArthur Blvd.
Oakland, California

QUARTER:
1st quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950313-J-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

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

Sample Containers

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

Sampling

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

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

Sample Designations

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

Chain of Custody

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

Hazardous Materials Testing Laboratory

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

Objective Information Collection

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

Reportage

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

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

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

cc: Pacific Environmental Group, Inc.
2025 Gateway Place, Suite #440
San Jose, CA 95110
ATTN: Rhonda Barrick

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	3/13/95	TOC	--	NONE	--	--	11.74	29.42
MW-2	3/13/95	TOC	--	NONE	--	--	15.32	27.69
MW-3	3/13/95	TOC	--	NONE	--	--	12.41	28.13
MW-4 *	3/13/95	TOC	--	NONE	--	--	12.13	24.04

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 9503135J1

Date: 3/13/95
Page 1 of 1

Site Address: 230 West MacArthur Blvd., Oakland

WIC#: 204-5508-0703

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

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

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

Comments:

Sampled by:
Printed Name: JEAN GATINEAU

LAB: NET

CHECK ONE (1) BOX ONLY	C1/D1	TURN AROUND TIME
Quarterly Monitoring ☒	6441	24 hours ☐
Site Investigation ☐	6441	48 hours ☐
Soil Closure/Disposal ☐	6442	15 days ☒ (Normal)
Water Closure/Disposal ☐	6443	Other ☐
Soil/Air Rem. or Sys. O & M ☐	6462	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M ☐	6463	
Other ☐		

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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-3	3/13			X		3						X								
EIB	↓			↓		↓						↓								
MW-1																				
MW-2																				
MW-4																				
DUP						↓														
T.B.	↓			↓		2						↓								

Relinquished By (signature): Jean Gatineau	Printed Name: JEAN GATINEAU	Date: 3/14 Time: 1900	Received (signature): G Plumbe	Printed Name: G PLUMBE	Date: 3/14 Time: 10:0
Relinquished By (signature): G Plumbe	Printed Name: G PLUMBE	Date: 5/14 Time: 16:00	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: PAM GREENE	Date: 3/15/95 Time: 08:00

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

VIA: NCS

NET 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: 04/10/1995
NET Client Acct. No: 1821
NET Pacific Job No: 95.01185
Received: 03/15/1995

Client Reference Information

Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

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 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: MW-3
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238172

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/27/1995	2693
DILUTION FACTOR*	1						03/27/1995	2693
as Gasoline	100	G-	50	ug/L	5030		03/27/1995	2693
Carbon Range:	C6-C8						03/27/1995	2693
METHOD 8020 (GC,Liquid)	--						03/27/1995	2693
Benzene	7.9		0.5	ug/L	8020		03/27/1995	2693
Toluene	17		0.5	ug/L	8020		03/27/1995	2693
Ethylbenzene	0.7		0.5	ug/L	8020		03/27/1995	2693
Xylenes (Total)	6.1		0.5	ug/L	8020		03/27/1995	2693
SURROGATE RESULTS	--						03/27/1995	2693
Bromofluorobenzene (SURR)	98			% Rec.	5030		03/27/1995	2693

G- : The positive result has an atypical pattern for Gasoline analysis.

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: E.B.
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238173

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/27/1995	2693
DILUTION FACTOR*	1						03/27/1995	2693
as Gasoline	ND		50	ug/L	5030		03/27/1995	2693
Carbon Range:	--						03/27/1995	2693
METHOD 8020 (GC,Liquid)	--						03/27/1995	2693
Benzene	ND		0.5	ug/L	8020		03/27/1995	2693
Toluene	ND		0.5	ug/L	8020		03/27/1995	2693
Ethylbenzene	ND		0.5	ug/L	8020		03/27/1995	2693
Xylenes (Total)	ND		0.5	ug/L	8020		03/27/1995	2693
SURROGATE RESULTS	--						03/27/1995	2693
Bromofluorobenzene (SURR)	94			% Rec.	5030		03/27/1995	2693

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: MW-1
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238174

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)	*							
METHOD 5030/M8015	--						03/28/1995	2709
DILUTION FACTOR*	1						03/28/1995	2709
as Gasoline	60		50	ug/L	5030		03/28/1995	2709
Carbon Range:	C5-C12						03/28/1995	2709
METHOD 8020 (GC,Liquid)	--						03/28/1995	2709
Benzene	4.7		0.5	ug/L	8020		03/28/1995	2709
Toluene	9.8		0.5	ug/L	8020		03/28/1995	2709
Ethylbenzene	ND		0.5	ug/L	8020		03/28/1995	2709
Xylenes (Total)	2.9		0.5	ug/L	8020		03/28/1995	2709
SURROGATE RESULTS	--						03/28/1995	2709
Bromofluorobenzene (SURR)	96			% Rec.	5030		03/28/1995	2709

* : Sample was analyzed after the method specified holding time.
This data should be considered a minimum concentration.

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: MW-2
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238175

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/27/1995	2693
DILUTION FACTOR*	1						03/27/1995	2693
as Gasoline	ND		50	ug/L	5030		03/27/1995	2693
Carbon Range:	--						03/27/1995	2693
METHOD 8020 (GC,Liquid)	--						03/27/1995	2693
Benzene	2.9	C	0.5	ug/L	8020		03/27/1995	2693
Toluene	6.3	C	0.5	ug/L	8020		03/27/1995	2693
Ethylbenzene	ND		0.5	ug/L	8020		03/27/1995	2693
Xylenes (Total)	2.7	C	0.5	ug/L	8020		03/27/1995	2693
SURROGATE RESULTS	--						03/27/1995	2693
Bromofluorobenzene (SURR)	109			% Rec.	5030		03/27/1995	2693

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

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: MW-4
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238176

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)	*							
METHOD 5030/M8015	--						03/27/1995	2709
DILUTION FACTOR*	1						03/27/1995	2709
as Gasoline	2,700		50	ug/L	5030		03/27/1995	2709
Carbon Range:	C5-C12						03/27/1995	2709
METHOD 8020 (GC,Liquid)	--						03/27/1995	2709
Benzene	240	FC	0.5	ug/L	8020		03/28/1995	2709
Toluene	24		0.5	ug/L	8020		03/27/1995	2709
Ethylbenzene	99	FC	0.5	ug/L	8020		03/28/1995	2709
Xylenes (Total)	34		0.5	ug/L	8020		03/27/1995	2709
SURROGATE RESULTS	--						03/28/1995	2709
Bromofluorobenzene (SURR)	122			% Rec.	5030		03/28/1995	2709

* : Sample was originally analyzed within the method specified holding time.
Further dilutions were required and analyzed after the holding time had expired.
This data should be considered a minimum concentration.

FC : Compound quantitated at a 10X dilution factor.

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: DUP
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238177

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)	*							
METHOD 5030/M8015	--						03/27/1995	2709
DILUTION FACTOR*	1						03/27/1995	2709
as Gasoline	2,500		50	ug/L	5030		03/27/1995	2709
Carbon Range:	C5-C12						03/27/1995	2709
METHOD 8020 (GC,Liquid)	--						03/27/1995	2709
Benzene	300	FD	0.5	ug/L	8020		03/28/1995	2709
Toluene	24		0.5	ug/L	8020		03/27/1995	2709
Ethylbenzene	140	FD	0.5	ug/L	8020		03/28/1995	2709
Xylenes (Total)	28		0.5	ug/L	8020		03/27/1995	2709
SURROGATE RESULTS	--						03/28/1995	2709
Bromofluorobenzene (SURR)	108			% Rec.	5030		03/28/1995	2709

* : Sample was originally analyzed within the method specified holding time.
Further dilutions were required and analyzed after the holding time had expired.
This data should be considered a minimum concentration.

FD : Compound quantitated at a 20X dilution factor.

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

SAMPLE DESCRIPTION: T.B.
Date Taken: 03/13/1995
Time Taken:
NET Sample No: 238178

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						03/27/1995	2693
DILUTION FACTOR*	1						03/27/1995	2693
as Gasoline	ND		50	ug/L	5030		03/27/1995	2693
Carbon Range:	--						03/27/1995	2693
METHOD 8020 (GC,Liquid)	--						03/27/1995	2693
Benzene	ND		0.5	ug/L	8020		03/27/1995	2693
Toluene	ND		0.5	ug/L	8020		03/27/1995	2693
Ethylbenzene	ND		0.5	ug/L	8020		03/27/1995	2693
Xylenes (Total)	ND		0.5	ug/L	8020		03/27/1995	2693
SURROGATE RESULTS	--						03/27/1995	2693
Bromofluorobenzene (SURR)	102			% Rec.	5030		03/27/1995	2693

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

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	90.0	0.90	1.00	mg/L	03/27/1995	caf	2693
Benzene	106.8	5.34	5.00	ug/L	03/27/1995	caf	2693
Toluene	105.8	5.29	5.00	ug/L	03/27/1995	caf	2693
Ethylbenzene	97.2	4.86	5.00	ug/L	03/27/1995	caf	2693
Xylenes (Total)	99.3	14.9	15.0	ug/L	03/27/1995	caf	2693
Bromofluorobenzene (SURR)	101.0	101	100	% Rec.	03/27/1995	caf	2693
TPH (Gas/BTXE,Liquid)							
as Gasoline	88.0	0.88	1.00	mg/L	03/28/1995	lss	2709
Benzene	110.0	5.50	5.00	ug/L	03/28/1995	lss	2709
Toluene	110.8	5.54	5.00	ug/L	03/28/1995	lss	2709
Ethylbenzene	99.6	4.98	5.00	ug/L	03/28/1995	lss	2709
Xylenes (Total)	101.3	15.2	15.0	ug/L	03/28/1995	lss	2709
Bromofluorobenzene (SURR)	105.0	105	100	% Rec.	03/28/1995	lss	2709

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

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	03/27/1995	caf	2693
Benzene	ND	0.5	ug/L	03/27/1995	caf	2693
Toluene	ND	0.5	ug/L	03/27/1995	caf	2693
Ethylbenzene	ND	0.5	ug/L	03/27/1995	caf	2693
Xylenes (Total)	ND	0.5	ug/L	03/27/1995	caf	2693
Bromofluorobenzene (SURR)	100		% Rec.	03/27/1995	caf	2693
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	03/28/1995	lss	2709
Benzene	ND	0.5	ug/L	03/28/1995	lss	2709
Toluene	ND	0.5	ug/L	03/28/1995	lss	2709
Ethylbenzene	ND	0.5	ug/L	03/28/1995	lss	2709
Xylenes (Total)	ND	0.5	ug/L	03/28/1995	lss	2709
Bromofluorobenzene (SURR)	96		% Rec.	03/28/1995	lss	2709

Ref: Shell 230 MacArthur Blvd., Oakland, CA/950313-J2

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)											238173
as Gasoline	89.0	89.0	0.0	1.00	ND	.89	.89	mg/L	03/27/1995	2693	238173
Benzene	95.2	100.5	5.3	41.6	ND	39.6	41.8	ug/L	03/27/1995	2693	238173
Toluene	96.4	101.2	4.8	65.8	ND	63.4	66.6	ug/L	03/27/1995	2693	238173
TPH (Gas/BTXE,Liquid)											238174
as Gasoline	95.0	103.0	8.0	1.00	0.06	1.01	1.09	mg/L	03/28/1995	2709	238174
Benzene	98.4	103.1	4.6	44.5	4.7	48.5	50.6	ug/L	03/28/1995	2709	238174
Toluene	101.2	102.8	1.6	68.5	9.8	79.1	80.2	ug/L	03/28/1995	2709	238174

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: 950313-52 Log No: 6002
Cooler received on: 3-15-95 and checked on 3-15-95 by _____
(signature)

Were custody papers present?..... YES NO
Were custody papers properly filled out?..... YES NO
Were the custody papers signed?..... YES NO
Was sufficient ice used?..... YES NO TEMP.: 0.4°C
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:
T.B.	2 - SMALL BUBBLES

*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)

#0481

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 950421-G1

Date: 4/21/95
Page 1 of 1

Site Address: 230 West MacArthur Blvd., Oakland

WIC#: 204-5508-0703

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: SEE LINDA ABOUT 24 HR. TAT.

Sampled by: GRANT MOHR

Printed Name: [signature]

LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring ☒	5441
Site Investigation ☐	5441
Soil Classify/Disposal ☐	5442
Water Classify/Disposal ☐	5443
Soil/Air Rem. or Sys. O & M ☐	5452
Water Rem. or Sys. O & M ☐	5453
Other ☐	

TURN AROUND TIME: 24 hours ☒; 48 hours ☐; 16 days ☒ (Normal) [crossed out]; 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			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	4/21			X		3						X								
MW-2	4/21			X		3						X								
MW-3	4/21			X		3						X								

Relinquished By (signature):	Printed Name:	Date/Time:	Received (signature):	Printed Name:	Date/Time:
[signature]	GRANT MOHR	Date: 4-21 Time: 9:25	[signature]	G P LUMBRE	Date: 4/21 Time: 9:25
[signature]	G LUMBRE	Date: 4/21 Time: 10:30	[signature]	M Dowling	Date: 4/21/95 Time: 1030 MW
[signature]	M Dowling	Date: 4/21/95 Time: 1115	[signature]	PAM GREENE	Date: 4-21-95 Time: 11:15

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

NET 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: 04/22/1995
NET Client Acct. No: 1821
NET Pacific Job No: 95.01642
Received: 04/21/1995

Client Reference Information

Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

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)

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.01642

Date: 04/22/1995
ELAP Cert: 1386
Page: 2

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

SAMPLE DESCRIPTION: MW-1
Date Taken: 04/21/1995
Time Taken:
NET Sample No: 240547

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/21/1995	2768
DILUTION FACTOR*	1						04/21/1995	2768
as Gasoline	ND		50	ug/L	5030		04/21/1995	2768
Carbon Range:	--						04/21/1995	2768
METHOD 8020 (GC,Liquid)	--						04/21/1995	2768
Benzene	ND		0.5	ug/L	8020		04/21/1995	2768
Toluene	ND		0.5	ug/L	8020		04/21/1995	2768
Ethylbenzene	ND		0.5	ug/L	8020		04/21/1995	2768
Xylenes (Total)	ND		0.5	ug/L	8020		04/21/1995	2768
SURROGATE RESULTS	--						04/21/1995	2768
Bromofluorobenzene (SURR)	99			% Rec.	5030		04/21/1995	2768

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

SAMPLE DESCRIPTION: MW-2
Date Taken: 04/21/1995
Time Taken:
NET Sample No: 240548

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/21/1995	2768
DILUTION FACTOR*	1						04/21/1995	2768
as Gasoline	ND		50	ug/L	5030		04/21/1995	2768
Carbon Range:	--						04/21/1995	2768
METHOD 8020 (GC,Liquid)	--						04/21/1995	2768
Benzene	ND		0.5	ug/L	8020		04/21/1995	2768
Toluene	ND		0.5	ug/L	8020		04/21/1995	2768
Ethylbenzene	ND		0.5	ug/L	8020		04/21/1995	2768
Xylenes (Total)	ND		0.5	ug/L	8020		04/21/1995	2768
SURROGATE RESULTS	--						04/21/1995	2768
Bromofluorobenzene (SURR)	96			% Rec.	5030		04/21/1995	2768

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

SAMPLE DESCRIPTION: MW-3
Date Taken: 04/21/1995
Time Taken:
NET Sample No: 240549

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						04/21/1995	2768
DILUTION FACTOR*	1						04/21/1995	2768
as Gasoline	60		50	ug/L	5030		04/21/1995	2768
Carbon Range:	C6-C12						04/21/1995	2768
METHOD 8020 (GC,Liquid)	--						04/21/1995	2768
Benzene	0.9		0.5	ug/L	8020		04/21/1995	2769
Toluene	1.1		0.5	ug/L	8020		04/21/1995	2769
Ethylbenzene	ND		0.5	ug/L	8020		04/21/1995	2769
Xylenes (Total)	1.0		0.5	ug/L	8020		04/21/1995	2769
SURROGATE RESULTS	--						04/21/1995	2768
Bromofluorobenzene (SURR)	85			% Rec.	5030		04/21/1995	2769

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

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	110.0	0.55	0.50	mg/L	04/21/1995	caf	2768
Benzene	94.6	4.73	5.00	ug/L	04/21/1995	caf	2768
Toluene	87.0	4.35	5.00	ug/L	04/21/1995	caf	2768
Ethylbenzene	90.2	4.51	5.00	ug/L	04/21/1995	caf	2768
Xylenes (Total)	112.8	16.92	15.0	ug/L	04/21/1995	caf	2768
Bromofluorobenzene (SURR)	104.0	104	100	% Rec.	04/21/1995	caf	2768
TPH (Gas/BTXE,Liquid)							
Benzene	96.0	4.80	5.00	ug/L	04/21/1995	aal	2769
Toluene	95.4	4.77	5.00	ug/L	04/21/1995	aal	2769
Ethylbenzene	92.6	4.63	5.00	ug/L	04/21/1995	aal	2769
Xylenes (Total)	94.0	14.1	15.0	ug/L	04/21/1995	aal	2769
Bromofluorobenzene (SURR)	83.0	83	100	% Rec.	04/21/1995	aal	2769

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

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	04/21/1995	caf	2768
Benzene	ND	0.5	ug/L	04/21/1995	caf	2768
Toluene	ND	0.5	ug/L	04/21/1995	caf	2768
Ethylbenzene	ND	0.5	ug/L	04/21/1995	caf	2768
Xylenes (Total)	ND	0.5	ug/L	04/21/1995	caf	2768
Bromofluorobenzene (SURR)	102		% Rec.	04/21/1995	caf	2768
TPH (Gas/BTXE,Liquid)						
Benzene	ND	0.5	ug/L	04/21/1995	aal	2769
Toluene	ND	0.5	ug/L	04/21/1995	aal	2769
Ethylbenzene	ND	0.5	ug/L	04/21/1995	aal	2769
Xylenes (Total)	ND	0.5	ug/L	04/21/1995	aal	2769
Bromofluorobenzene (SURR)	88		% Rec.	04/21/1995	aal	2769

Ref: Shell 230 West MacArthur Blvd., Oakland, CA/950421-G1

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)											240547
as Gasoline	98.0	98.0	0.0	0.50	ND	0.49	0.49	mg/L	04/21/1995	2768	240547
Benzene	81.6	79.6	2.5	10.3	ND	8.4	8.2	ug/L	04/21/1995	2768	240547
Toluene	94.3	93.7	0.6	31.6	ND	29.8	29.6	ug/L	04/21/1995	2768	240547
TPH (Gas/BTXE,Liquid)											240549
Benzene	108.0	108.0	0.0	5.0	0.9	6.3	6.3	ug/L	04/21/1995	2769	240549
Toluene	98.0	96.0	2.1	5.0	1.1	6.0	5.9	ug/L	04/21/1995	2769	240549

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 millliliters 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: 960421-G1 Log No: 1481
Cooler received on: 4-21-95 and checked on 4-21-95 by Bm Greene
Bm Greene
(signature)

Were custody papers present?.....(YES) NO
Were custody papers properly filled out?.....(YES) NO
Were the custody papers signed?.....(YES) NO
Was sufficient ice used?.....(YES) NO Temp 0.9°
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)

SHELL WELL MONITORING DATA SHEET

Project #: 95031302	Wic # 204-5508-0703
Sampler: JG	Date Sampled: 3/13/95
Well I.D.: MW-3	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 28.13 After	Depth to Water: Before 12.41 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

10.2	x	3	30.6
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:
11:50	62.8	7.1	480	>200	11,	
11:52	66.0	7.0	500	118.	22,	
11:54	66.4	7.0	500	57,	33,	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 33,

Sampling Time: 11:56

Sample I.D.: MW-3 Laboratory: NET

Analyzed for: TPHG, BTEX

Duplicate I.D.: Cleaning Blank I.D.: E.B. @ 12:00

Analyzed for: TPHG, BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 95031398	Wic # 204-5508-0703
Sampler: JG	Date Sampled: 3/13/95
Well I.D.: MW-1	Well Diameter: (circle one) 2 3 (4) 6 ____
Total Well Depth: Before 29.92 After	Depth to Water: Before 11.74 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/feet
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

11.19	x	3	33.12
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:
12:18	63.2	7.0	460	119.	12.	
12:20	64.8	7.0	440	73.	24.	
12:22	64.6	6.8	440	32.	36.	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 36.

Sampling Time: 12:25

Sample I.D.: MW-1 Laboratory: NET

Analyzed for: TPHG, BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 95031 3 JR	Wic # 204-5508-0703
Sampler: JG	Date Sampled: 3/13/95
Well I.D.: MW-2	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 27.69 After	Depth to Water: Before 15.32 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

8.0	x	3	=	24.0
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:
12:44	64.2	6.8	540	>200	8.	
12:46	66.0	6.8	600	76.	16.	
12:48	67.4	6.8	620	31.	24.	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 24.

Sampling Time: 12:50

Sample I.D.: MW-2 Laboratory: NET

Analyzed for: TPAG, BTEX

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

Analyzed for:

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 9503132	Wic # 204-5508-0703
Sampler: JG	Date Sampled: 3/13/95
Well I.D.: MW-4	Well Diameter: (circle one) 2 3 (4) 6 ____
Total Well Depth: Before 24.04 After	Depth to Water: Before 12.13 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other --

Volume Conversion Factor (VCF):
(12 x (d²/4) x π)/231
where
12 = in./feet
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

7.7	x	3	=	23.1
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:
13:07	61.8	7.0	640	>200	8.	
13:09	650	6.8	600	>200	16.	
13:11	64.8	6.8	600	>200	24.	

Did Well Dewater? NO If yes, gals. Gallons Actually Evacuated: 24

Sampling Time: 13:13

Sample I.D.: MW-4 Laboratory: NET

Analyzed for: TPHG, BTEX

Duplicate I.D.: DUP@13:13 Cleaning Blank I.D.:

Analyzed for: TPHG, BTEX

Shipping Notations:

Additional Notations:

SHELL WELL MONITORING DATA SHEET

Project #: 950421-G1	Wic #: 204 5508 0703
Sampler: GRANT	Start Date: 4-21
Well I.D.: MW1	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 29.39 After	Depth to Water: Before 11.96 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

11.3	x	5	56.5
1 Case Volume		Specified Volumes	= gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

Slow 4th CV

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
841	66.4	6.6	460	49	12.0	
843	66.4	6.3	410	27	24.0	
845	67.6	6.2	440	73.	34.0	
852	68.0	6.3	440	112	45.0	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 45.0

Sampling Time: 900	Sampling Date: 4-21
Sample I.D.: MW1	Laboratory: NET
Analyzed for: (TPH-G) (BTEX) TPH-D OTHER:	
Duplicate I.D.:	Cleaning Blank I.D.:
Analyzed for: TPH-G BTEX TPH-D OTHER:	

SHELL WELL MONITORING DATA SHEET

Project #: 950421-G1	Wic #: 204 5508 0703
Sampler: GRANT	Start Date: 4-21
Well I.D.: MW2	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 27.70 After	Depth to Water: Before 14.33 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

9.7	x	5	=	43.5
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other_____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other_____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
909	69.0	6.6	560	149	9.0	
911	69.2	6.4	610	92	17.0	
913	69.0	6.3	600	175	27.0	
920	70.2	6.3	580	>200	35.0	

Did Well Dewater? N If yes, gals. Gallons Actually Evacuated: 35.0

Sampling Time: 925 Sampling Date: 4-21

Sample I.D.: MW2 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) TPH-D OTHER:
(Circle)

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

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 950421-61	Wic #: 204 5508 0703
Sampler: GRANT	Start Date: 4-21
Well I.D.: MW3	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 28.10 After	Depth to Water: Before 12.72 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

10.0	x	5	=	50.0
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

SLOW RECHARGE ON 4TH ~~4TH~~ C.V.

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
812	68.6	6.8	740	68	10.0	
815	69.2	6.3	510	93	20.0	
817	69.4	6.4	490	112	30.0	
826	69.0	6.4	530	67	40.0	
					~~50.0~~	

Did Well Dewater? If yes, gals. Gallons Actually Evacuated: 40.0

Sampling Time: 830 Sampling Date: 4-21

Sample I.D.: MW3 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) TPH-D OTHER:

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

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)