WEISS ASSOCIATES
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July 31, 1990

Lawrence Seto
Alameda County Department of Environmental Health
Division of Hazardous Materials
80 Swan Way, Room 200
Oakland, California 94621

Re: Shell Service Station
WIC #204-6852-1404
1784 150th Avenue
San Leandro, California
WA Job #81-422-01

Dear Mr. Seto:

This letter describes Weiss Associates' (WA) second quarter 1990 activities at the subject Shell service station (Figure 1). This status report satisfies the quarterly reporting requirements outlined in our workplan dated February 23, 1990, and prescribed by California Administrative Code Title 23 Waters, Chapter 3, Subchapter 16, Article 5, Section 2652.d. Included below are:

- A brief site background and statement of objectives,
- Descriptions of activities performed during the second quarter 1990 reporting period (March 1 through June 30, 1990), including tabulated chemical analytic results, and
- Proposed work for the third quarter 1990.

BACKGROUND AND OBJECTIVES

In November 1986 Petroleum Engineering of Santa Rosa, California, removed a 550-gallon waste oil tank and replaced it with a 550-gallon fiberglass tank. Immediately following the tank removal, Blaine Tech Services (BT) of San Jose, California, collected a soil sample from directly beneath the former tank location at 8 ft depth. The soil sample contained 196 parts per million (ppm) total hydrocarbon (non-polar) oil and grease (TOG).[1] On November

[1]Blaine Tech Services, 1986, Sampling Report 86311-F4, Shell Service Station, 1784 150th Avenue, San Leandro, California, consultant's letter-report prepared for Shell Oil Company, November 21, 1986, 3 pp. and 2 attachments.

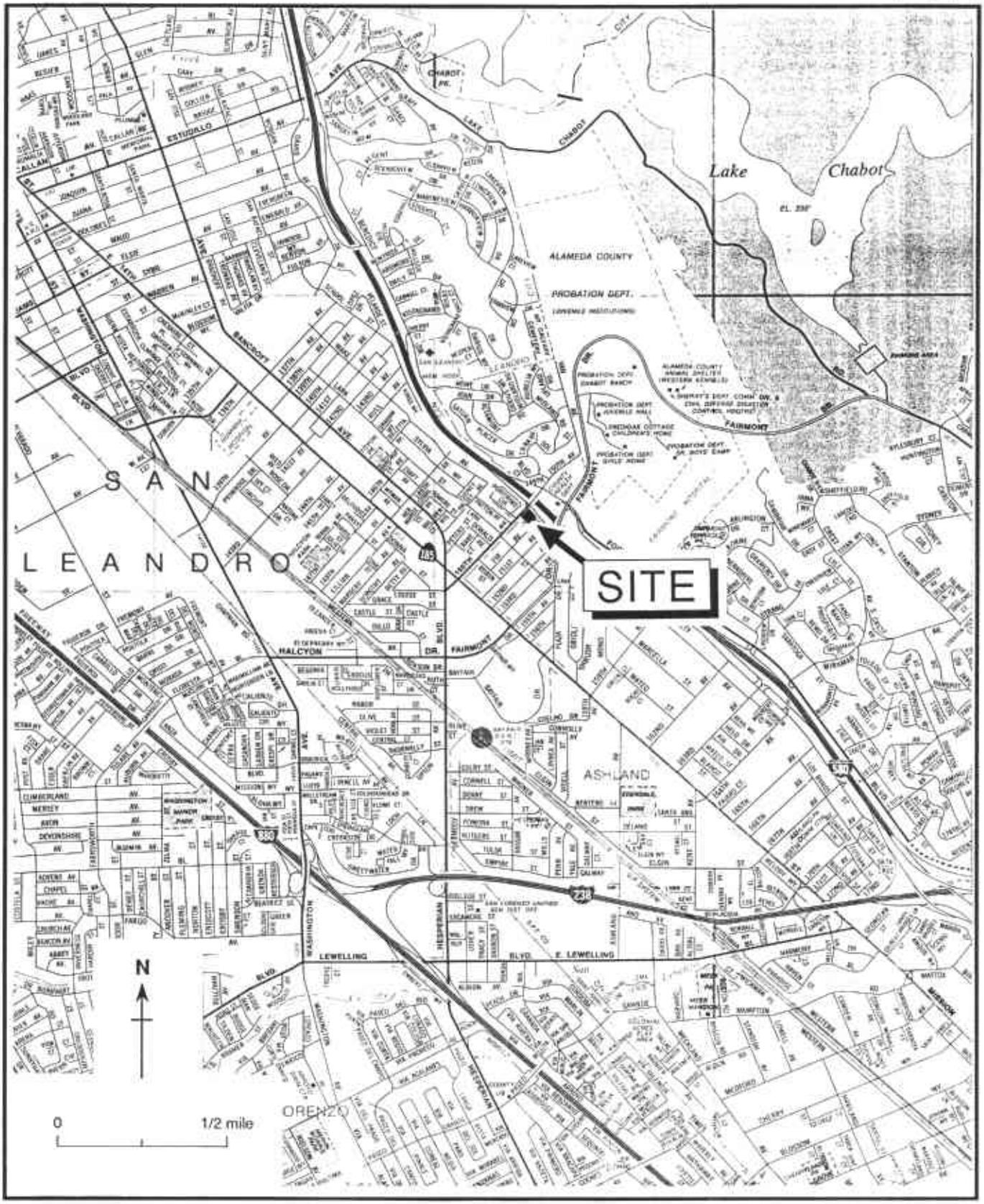

Figure 1. Site Location Map - Shell Service Station WIC #204685214, 1784 150th Avenue, San Leandro, California

3/16/90

11, 1986, after additional soil excavation, BT collected a soil sample from 11 ft depth. This sample contained 167.4 ppm TOG. The tank pit was excavated to 16 ft total depth, and BT collected a sample from the excavation bottom. This sample was not analyzed. No ground water was encountered in the tank excavation.[2]

To determine the site stratigraphy and ground water depth and whether compounds from the former waste oil tank impacted ground water, in December 1989 Shell Oil retained Weiss Associates to drill one soil boring adjacent to the waste oil tank, install a ground water monitoring well in the boring, and to monitor ground water at the site.

SECOND QUARTER 1990 ACTIVITIES

During the second quarter 1990 Weiss Associates (WA):

- Drilled one soil boring and installed a ground water monitoring well in the boring,
- Collected soil samples from the boring for chemical analysis, and
- Developed and sampled the well, and analyzed the ground water sample for petroleum hydrocarbons and other organic compounds.

Each of these tasks is described below.

Soil Boring and Monitoring Well Installation

On March 5, 1990, WA geologist Karen Sixt drilled one soil boring to a depth of 45 ft in the anticipated downgradient direction of the waste oil tank, and installed ground water monitoring well MW-1 in the boring (Figure 2). Review of local and site topography and regional ground water flow direction suggested that the ground water glow direction at the site was to the west-southwest. Therefore, the boring was drilled about 7 ft west of the former and present waste oil tank location. The objective of the work was to determine if hydrocarbons from the former waste oil tank are in soil and/or ground water beneath the site. Each soil sample collected from the boring was analyzed for:

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[2]Blaine Tech Services, 1986, Sampling Report 86315-M2, Shell Service Station, 1784 150th Avenue, San Leandro, California, consultant's letter-report prepared for Shell Oil Company, November 21, 1986, 3 pp. and 2 attachments.

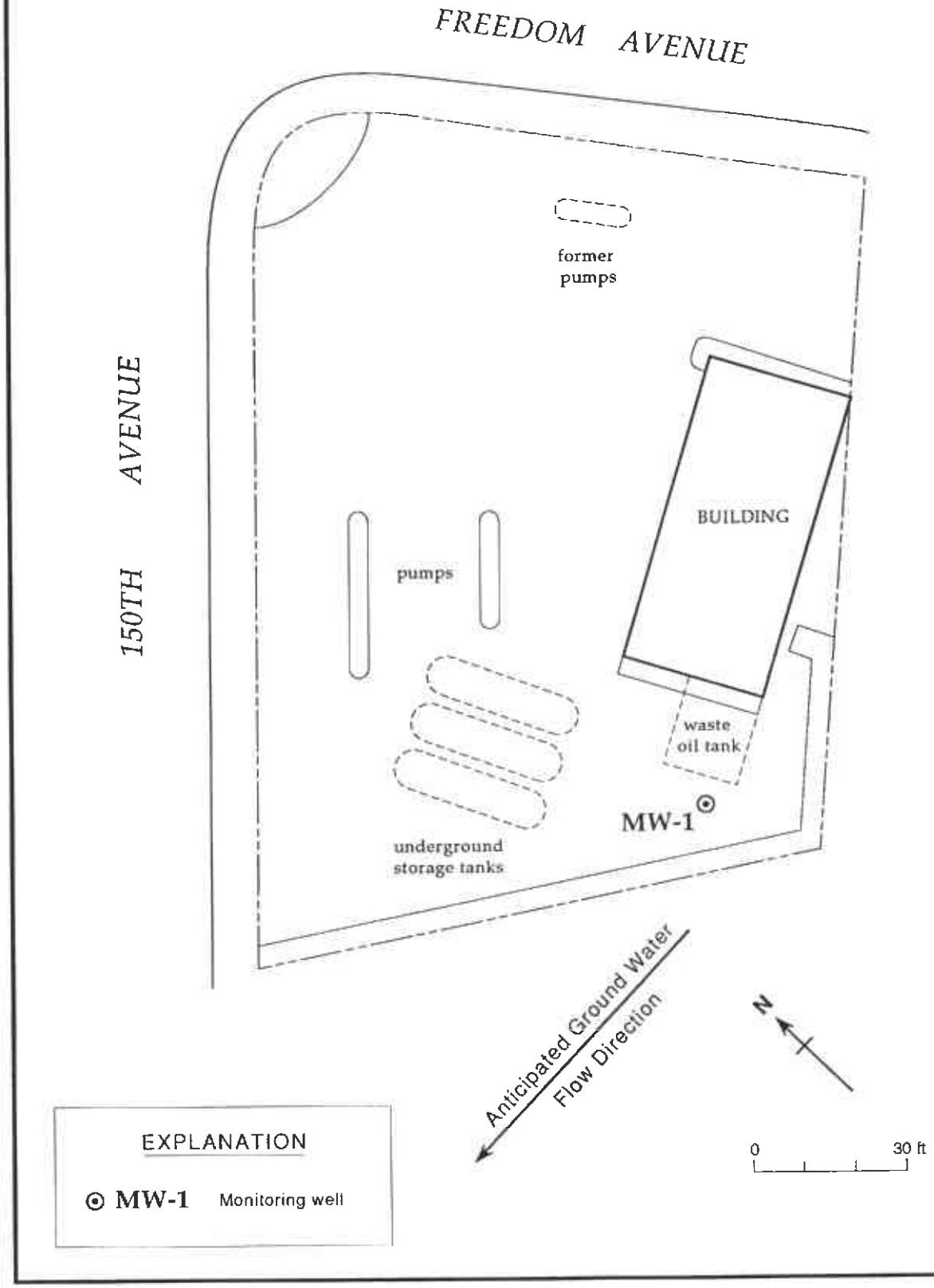


Figure 2. Monitoring Well Location - Shell Service Station WIC #204-685-214, 1784 150th Avenue, San Leandro, California

4/5/90

- Total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 8015, gas chromatography with flame ionization detection (GC/FID),

- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020, gas chromatography with photoionization detection (GC/PID),

- Total hydrocarbon (non-polar) oil and grease (TOG) by American Public Health Association (APHA) Standard Methods 503D&E,

- Halogenated volatile organic compounds (HVOCs) by EPA Method 8010, gas chromatography with Hall electrolytic conductivity detection (GC/HALL),

The soil sample from just above the static water level in the boring was also analyzed for:

- Total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 8015, GC/FID.

Analytic results for soil are presented in Table 1, and copies of laboratory analytic reports and chain of custody documents for soil samples are presented as Attachment A. TPH-G was detected in the unsaturated soil sample from 29.2 ft depth at 35 ppm. The 29.2 ft depth sample also contained low concentrations of benzene, ethylbenzene, xylenes and 1,2-dichloroethane (DCA). A trace of benzene was detected in the sample from 24.7 ft depth. TOG was not detected in any of the five samples analyzed, and TPH-D was not detected in the sample from above the static water level.

Drill cuttings were sampled and temporarily stockpiled onsite on plastic sheeting. The stockpile was covered with plastic sheeting to prevent infiltration of rainwater and possible aeration of volatile compounds. Based on the analytic results of the composite stockpile samples, the soil was subsequently transported to a Class III disposal facility by a licensed waste hauler under contract with Shell Oil.

TABLE 1. Analytic Results for Soil - Shell Service Station, WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

Soil Boring (Well ID)	Sample Depth (ft)	Date Sampled	Analytic Lab	Analytic Method	Sat/ Unsat	TPH-G	TPH-D[a]	B	E	T	X	HVOCS	TOG[b]
						<---------- parts per million (mg/kg) ---------->							
BH-A (MW-1)	5.0	3-5-90	NET	8015/8020/ 8010/503	Unsat	<1	---	<0.0025	<0.0025	<0.0025	<0.0025	<0.002-0.05	<100
	15.7	3-5-90	NET	8015/8020/ 8010/503	Unsat	<1	---	<0.0025	<0.0025	<0.0025	<0.0025	<0.002-0.05	<100
	24.7	3-5-90	NET	8015/8020/ 8010/503	Unsat	<1	<1	0.02	<0.0025	<0.0025	<0.0025	<0.002-0.05	<100
	29.2	3-5-90	NET	8015/8020/ 8010/503	Sat	[redacted]	---	0.23	0.20	<0.0025	<0.64	[redacted][c]	<100
	41.2	3-5-90	NET	8015/8020/ 8010/503	Sat	<1	<1	<0.0025	<0.0025	<0.0025	<0.0025	<0.002-0.05	<100

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
TPH-MO = Total petroleum hydrocarbons as motor oil
B = Benzene
E = Ethylbenzene
T = Toluene
X = Xylenes
HVOCs = Halogenated volatile organic compounds
TOG = Total hydrocarbon oil and grease (non-polar)
Sat = Saturated soil sample
Unsat = Unsaturated soil sample
<n = Not detected at detection limit of n ppm

Notes:

[a] = Analytic results for TPH-MO are reported with TPH-D results by the laboratory. TPH-MO results are included in the analytic reports in Attachment B.
[b] = Analytic results for total oil and grease (polar and non-polar) are reported with the hydrocarbon (non-polar) TOG by the laboratory. These results are included in the analytic reports in Attachment C.
[c] = 1,2-dichloroethane detected at 0.0064 ppm; no other compounds detected.

Analytical Laboratory:

NET = National Environmental Testing Pacific, Inc., Santa Rosa, California

Analytic Methods:

503 = APHA Standard Methods 503D&E for TOG
8010 = EPA Method 8010 for HVOCs
8015 = Modified EPA Method 8015 for TPH-G and TPH-D
8020 = EPA Method 8020 for BETX

Monitoring Well Development and Sampling

Monitoring well MW-1 was developed on March 7, 1990, by WA environmental technician Matt Derby. The well yielded about 3.8 gallons per minute during development using surge block agitation and airlift evacuation. The well was initially sampled on March 8, 1990. Prior to sampling, four well casing volumes, approximately 51 gallons, were purged from the well with a steam-cleaned PVC bailer. Ground water samples were collected with a steam-cleaned Teflon bailer, and were decanted into 40 ml glass, volatile organic analysis vials and sealed in plastic guard bottles containing activated carbon pellets. Samples collected for TOG and TPH-D analysis were decanted into 1 liter amber glass bottles. The sample for TOG analysis was preserved with sulfuric acid. A travel blank was submitted for TPH-G and BETX analysis to check for carry-over of VOCs during transport. An equipment blank was also collected and submitted for TPH-G and BETX analysis.

Well MW-1 was sampled again on June 12, 1990, as part of WA's quarterly monitoring program. Prior to sampling, four well casing volumes, approximately 50 gallons, were purged from the well with a dedicated PVC bailer. Ground water samples were drawn from a sampling port on the side of the bailer. The sampling protocol outlined above for the initial sampling was also followed for the second quarter sampling. An equipment blank was not collected because a bailer was dedicated to well MW-1 during the June sampling

Ground water samples collected from well MW-1 on March 8, 1990, and June 12, 1990, were analyzed for:

- TPH-G & D by modified EPA Method 8015, GC/FID,
- BETX by EPA Method 602, GC/PID,
- HVOCs by EPA Method 601, GC/HALL, and
- TOG by APHA Standard Methods 503A&E,

Analytic results for ground water are presented in Table 2, and copies of the laboratory analytic reports and chain of custody documents for ground water are presented in Attachment

Table 2. Analytic Results for Ground Water - Shell Service Station WIC #204-6852-1404, 1784 150th Avenue, San Leandro, California

Well ID	Date Sampled	Analytic Method	TPH-G	TPH-D	B	E	T	X	TOG	HVOCs
			<----------parts per billion (µg/L)---------->							
MW-1	03/08/90	8015/602/503/601	290	120	1.5	<0.5	0.8	5.4	<5,000	12[a]
	06/12/90	8015/602/503/601	510	100	86	0.7	1.3	6.2	<5,000	ND
Trip Blank	03/08/90	8015/602	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/12/90	8015/602	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
Bailer Blank	03/08/90	8015/602	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
DHS MCLs	03/08/90		NE	NE	1	680	100[b]	1,750	NE	0.5[c]

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
B = Benzene
E = Ethylbenzene
T = Toluene
X = Xylenes
TOG = Total hydrocarbon (non-polar) oil and grease
HVOCs = Halogenated Volatile Organic Compounds
--- = Not analyzed
<n = Not detected at detection limit of n ppb
ND = Not detected at detection limits between 0.4 and 10 ppb
DHS MCLs = California Department of Health Services Maximum Contaminant Levels
ppb = parts per billion
NE = Not established by DHS

Notes:

[a] = 1,2-dichloroethane (DCA) detected at 12 ppb
[b] = DHS Recommended Action Level, MCL not established
[c] = DHS MCL for 1,2-dichloroethane

Analytical Laboratory:

National Environmental Testing, Inc. (NET), Santa Rosa, California

Analytic Methods:

503 = American Public Health Association Standard Methods 503A&E for TOG
601 = EPA Method 601 for HVOCs
602 = EPA Method 602 for BETX
8015 = Modified EPA Method 8015 for TPH-G and TPH-D

C. TPH-G was detected at 290 parts per billion (ppb) and 510 ppb on March 8 and June 12, respectively, in well MW-1. BETX concentrations also increased between the March and June samplings. DCA, detected at 12 ppb in the March 8 sample, was not detected in the sample collected on June 12. Benzene concentrations in water samples collected in March and June were above the California Department of Health Services (DHS) Maximum Contaminant Level (MCL) in ground water. TPH-D was detected in well MW-1 during each sampling. No floating hydrocarbons were observed in the well during either sampling.

Ground Water Levels

The depth to ground water was measured in well MW-1 prior to each sampling. The depth to water on March 8, 1990, was 25.29 ft. The depth to water was 25.85 ft on June 12, 1990, a drop of 0.56 feet since the previous quarter.

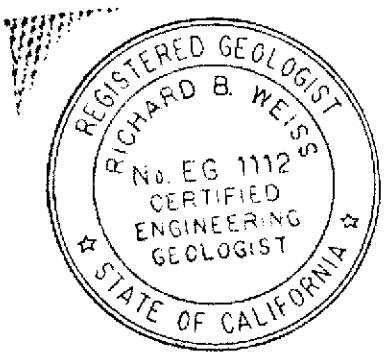
ANTICIPATED WORK FOR THIRD QUARTER 1990

During the third quarter 1990, on behalf of Shell Oil, WA plans to:

- Review all site data and make recommendations for additional work,
- Continue quarterly monitoring of well MW-1, and
- Submit quarterly status reports, including all site data collected during the quarter.

A comprehensive subsurface investigation report, including boring logs, will be submitted to Shell Oil after the extent of hydrocarbons in soil and ground water is defined.

We trust that this submittal satisfies your requirements. Please call Karen Sixt or Joe Theisen if you have questions.



Sincerely,
Weiss Associates

Karen C. Sixt
Senior Staff Geologist

Richard B. Weiss
Principal Hydrogeologist

KCS/RBW:jg

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Attachments: A - Analytic Reports and Chain-of-Custody for Soil
B - Analytic Reports and Chain-of-Custody for Ground Water

cc: E. Paul Hayes, Shell Oil Company, P.O. Box 4848, Anaheim, California 92803

Diane Lundquist, Shell Oil Company, P.O. Box 4023, Concord, California 94524

Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay Region, 1800 Harrison Street, Oakland, California 94612

ATTACHMENT A

ANALYTIC REPORTS AND CHAIN-OF-CUSTODY FOR SOIL

NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Karen Sixt
Weiss Associates
5500 Shell Mound Rd.
Emeryville, CA 94524

Date: 03-19-90
NET Client Acct. No: 18.09
NET Pacific Log No: 1041
Received: 03-08-90 0700

Client Reference Information

SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. 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:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 5.0 03-05-90
LAB Job No: (-48134)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
METHOD 8010			
DATE ANALYZED		03-12-90	
DILUTION FACTOR*		1	
Bromodichloromethane	2.0	ND	ug/Kg
Bromoform	2.0	ND	ug/Kg
Bromomethane	2.0	ND	ug/Kg
Carbon tetrachloride	2.0	ND	ug/Kg
Chlorobenzene	2.0	ND	ug/Kg
Chloroethane	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	5.0	ND	ug/Kg
Chloroform	2.0	ND	ug/Kg
Chloromethane	2.0	ND	ug/Kg
Dibromochloromethane	2.0	ND	ug/Kg
1,2-Dichlorobenzene	2.0	ND	ug/Kg
1,3-Dichlorobenzene	2.0	ND	ug/Kg
1,4-Dichlorobenzene	2.0	ND	ug/Kg
Dichlorodifluoromethane	2.0	ND	ug/Kg
1,1-Dichloroethane	2.0	ND	ug/Kg
1,2-Dichloroethane	2.0	ND	ug/Kg
1,1-Dichloroethene	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	2.0	ND	ug/Kg
1,2-Dichloropropane	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	2.0	ND	ug/Kg
Methylene Chloride	50	ND	ug/Kg
1,1,2,Tetrachloroethane	2.0	ND	ug/Kg
Tetrachloroethene	2.0	ND	ug/Kg
1,1,1-Trichloroethane	2.0	ND	ug/Kg
1,1,2-Trichloroethane	2.0	ND	ug/Kg
Trichloroethene	2.0	ND	ug/Kg
Trichlorofluoromethane	2.0	ND	ug/Kg
Vinyl chloride	2.0	ND	ug/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-09-90	
METHOD GC FID/5030		--	
as Gasoline	1	ND	mg/Kg
METHOD 8020		--	
Benzene	2.5	ND	ug/Kg
Ethylbenzene	2.5	ND	ug/Kg
Toluene	2.5	ND	ug/Kg
Xylenes, total	2.5	ND	ug/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 15.7 03-05-90
LAB Job No: (-48135)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
METHOD 8010			
DATE ANALYZED		03-12-90	
DILUTION FACTOR*		1	
Bromodichloromethane	2.0	ND	ug/Kg
Bromoform	2.0	ND	ug/Kg
Bromomethane	2.0	ND	ug/Kg
Carbon tetrachloride	2.0	ND	ug/Kg
Chlorobenzene	2.0	ND	ug/Kg
Chloroethane	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	5.0	ND	ug/Kg
Chloroform	2.0	ND	ug/Kg
Chloromethane	2.0	ND	ug/Kg
Dibromochloromethane	2.0	ND	ug/Kg
1,2-Dichlorobenzene	2.0	ND	ug/Kg
1,3-Dichlorobenzene	2.0	ND	ug/Kg
1,4-Dichlorobenzene	2.0	ND	ug/Kg
Dichlorodifluoromethane	2.0	ND	ug/Kg
1,1-Dichloroethane	2.0	ND	ug/Kg
1,2-Dichloroethane	2.0	ND	ug/Kg
1,1-Dichloroethene	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	2.0	ND	ug/Kg
1,2-Dichloropropane	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	2.0	ND	ug/Kg
Methylene Chloride	50	ND	ug/Kg
1,1,2,Tetrachloroethane	2.0	ND	ug/Kg
Tetrachloroethene	2.0	ND	ug/Kg
1,1,1-Trichloroethane	2.0	ND	ug/Kg
1,1,2-Trichloroethane	2.0	ND	ug/Kg
Trichloroethene	2.0	ND	ug/Kg
Trichlorofluoromethane	2.0	ND	ug/Kg
Vinyl chloride	2.0	ND	ug/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-09-90	
METHOD GC FID/5030		--	
as Gasoline	1	ND	mg/Kg
METHOD 8020		--	
Benzene	2.5	ND	ug/Kg
Ethylbenzene	2.5	ND	ug/Kg
Toluene	2.5	ND	ug/Kg
Xylenes, total	2.5	ND	ug/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 29.2 03-05-90
LAB Job No: (-48136)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
METHOD 8010			
DATE ANALYZED		03-12-90	
DILUTION FACTOR*		1	
Bromodichloromethane	2.0	ND	ug/Kg
Bromoform	2.0	ND	ug/Kg
Bromomethane	2.0	ND	ug/Kg
Carbon tetrachloride	2.0	ND	ug/Kg
Chlorobenzene	2.0	ND	ug/Kg
Chloroethane	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	5.0	ND	ug/Kg
Chloroform	2.0	ND	ug/Kg
Chloromethane	2.0	ND	ug/Kg
Dibromochloromethane	2.0	ND	ug/Kg
1,2-Dichlorobenzene	2.0	ND	ug/Kg
1,3-Dichlorobenzene	2.0	ND	ug/Kg
1,4-Dichlorobenzene	2.0	ND	ug/Kg
Dichlorodifluoromethane	2.0	ND	ug/Kg
1,1-Dichloroethane	2.0	ND	ug/Kg
1,2-Dichloroethane	2.0	6.4	ug/Kg
1,1-Dichloroethene	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	2.0	ND	ug/Kg
1,2-Dichloropropane	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	2.0	ND	ug/Kg
Methylene Chloride	50	ND	ug/Kg
1,1,2,Tetrachloroethane	2.0	ND	ug/Kg
Tetrachloroethene	2.0	ND	ug/Kg
1,1,1-Trichloroethane	2.0	ND	ug/Kg
1,1,2-Trichloroethane	2.0	ND	ug/Kg
Trichloroethene	2.0	ND	ug/Kg
Trichlorofluoromethane	2.0	ND	ug/Kg
Vinyl chloride	2.0	ND	ug/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		10	
DATE ANALYZED		03-13-90	
METHOD GC FID/5030		--	
as Gasoline	1	35	mg/Kg
METHOD 8020		--	
Benzene	2.5	230	ug/Kg
Ethylbenzene	2.5	200	ug/Kg
Toluene	2.5	ND	ug/Kg
Xylenes, total	2.5	640	ug/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 41.2 03-05-90
LAB Job No: (-48137)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
METHOD 8010			
DATE ANALYZED		03-12-90	
DILUTION FACTOR*		1	
Bromodichloromethane	2.0	ND	ug/Kg
Bromoform	2.0	ND	ug/Kg
Bromomethane	2.0	ND	ug/Kg
Carbon tetrachloride	2.0	ND	ug/Kg
Chlorobenzene	2.0	ND	ug/Kg
Chloroethane	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	5.0	ND	ug/Kg
Chloroform	2.0	ND	ug/Kg
Chloromethane	2.0	ND	ug/Kg
Dibromochloromethane	2.0	ND	ug/Kg
1,2-Dichlorobenzene	2.0	ND	ug/Kg
1,3-Dichlorobenzene	2.0	ND	ug/Kg
1,4-Dichlorobenzene	2.0	ND	ug/Kg
Dichlorodifluoromethane	2.0	ND	ug/Kg
1,1-Dichloroethane	2.0	ND	ug/Kg
1,2-Dichloroethane	2.0	ND	ug/Kg
1,1-Dichloroethene	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	2.0	ND	ug/Kg
1,2-Dichloropropane	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	2.0	ND	ug/Kg
Methylene Chloride	50	ND	ug/Kg
1,1,2,Tetrachloroethane	2.0	ND	ug/Kg
Tetrachloroethene	2.0	ND	ug/Kg
1,1,1-Trichloroethane	2.0	ND	ug/Kg
1,1,2-Trichloroethane	2.0	ND	ug/Kg
Trichloroethene	2.0	ND	ug/Kg
Trichlorofluoromethane	2.0	ND	ug/Kg
Vinyl chloride	2.0	ND	ug/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-09-90	
METHOD GC FID/5030		--	
as Gasoline	1	ND	mg/Kg
METHOD 8020		--	
Benzene	2.5	ND	ug/Kg
Ethylbenzene	2.5	ND	ug/Kg
Toluene	2.5	ND	ug/Kg
Xylenes, total	2.5	ND	ug/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 24.7 03-05-90
LAB Job No: (-48138)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
METHOD 8010			
DATE ANALYZED		03-12-90	
DILUTION FACTOR*		1	
Bromodichloromethane	2.0	ND	ug/Kg
Bromoform	2.0	ND	ug/Kg
Bromomethane	2.0	ND	ug/Kg
Carbon tetrachloride	2.0	ND	ug/Kg
Chlorobenzene	2.0	ND	ug/Kg
Chloroethane	2.0	ND	ug/Kg
2-Chloroethylvinyl ether	5.0	ND	ug/Kg
Chloroform	2.0	ND	ug/Kg
Chloromethane	2.0	ND	ug/Kg
Dibromochloromethane	2.0	ND	ug/Kg
1,2-Dichlorobenzene	2.0	ND	ug/Kg
1,3-Dichlorobenzene	2.0	ND	ug/Kg
1,4-Dichlorobenzene	2.0	ND	ug/Kg
Dichlorodifluoromethane	2.0	ND	ug/Kg
1,1-Dichloroethane	2.0	ND	ug/Kg
1,2-Dichloroethane	2.0	ND	ug/Kg
1,1-Dichloroethene	2.0	ND	ug/Kg
trans-1,2-Dichloroethene	2.0	ND	ug/Kg
1,2-Dichloropropane	2.0	ND	ug/Kg
cis-1,3-Dichloropropene	2.0	ND	ug/Kg
trans-1,3-Dichloropropene	2.0	ND	ug/Kg
Methylene Chloride	50	ND	ug/Kg
1,1,2,Tetrachloroethane	2.0	ND	ug/Kg
Tetrachloroethene	2.0	ND	ug/Kg
1,1,1-Trichloroethane	2.0	ND	ug/Kg
1,1,2-Trichloroethane	2.0	ND	ug/Kg
Trichloroethene	2.0	ND	ug/Kg
Trichlorofluoromethane	2.0	ND	ug/Kg
Vinyl chloride	2.0	ND	ug/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-09-90	
METHOD GC FID/5030		--	
as Gasoline	1	ND	mg/Kg
METHOD 8020		--	
Benzene	2.5	20	ug/Kg
Ethylbenzene	2.5	ND	ug/Kg
Toluene	2.5	ND	ug/Kg
Xylenes, total	2.5	ND	ug/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: BH-A 24.7 03-05-90
LAB Job No: (-48138)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (SOIL)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		03-09-90	
DATE ANALYZED		03-09-90	
METHOD GC FID/3550		--	
as Diesel	1	ND	mg/Kg
as Motor Oil	10	ND	mg/Kg

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: CS-1,2,3comp03-05-90
LAB Job No: (-48139)

Parameter	Reporting Limit	Results	Units
Oil & Grease (total)	50	ND	mg/Kg
Oil & Grease (non-polar)	100	ND	mg/Kg
Lead (EPA 7421)	0.2	1.8	mg/Kg
Organic Lead	0.05	ND	mg/Kg
PETROLEUM HYDROCARBONS		--	
VOLATILE (SOIL)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-09-90	
METHOD GC FID/5030		--	
as Gasoline	1	1.2	mg/Kg
METHOD 8020		--	
Benzene	2.5	2.9	ug/Kg
Ethylbenzene	2.5	ND	ug/Kg
Toluene	2.5	3.4	ug/Kg
Xylenes, total	2.5	15	ug/Kg

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following, which supercedes the listed reporting limit.
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 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.

* 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.

WEISS ASSOCIATES
5500 Shellmound St., Emeryville, CA 94608
Phone: 415-547-5420 FAX: 415-547-5043

(1041)

Shell Service Station Address:
1784 150th Ave.
San Leandro, CA

Shell Contact: Paul Hayes
WIC #: 204-685-214
AFE #: 98680-5440

Please send analytic results and a copy of the signed chain of custody form to:
Karen Sixt

Project ID: 81-422-03

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Lab Personnel:
1) Specify analytic method and detection limit in report.
2) Notify us if there are any anomalous peaks on GC or other scans.
3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

Sampled by: KCS

Laboratory Name: NET

Analyze/Hold	No. of Containers	Sample ID	Container Type[1]	Sample Date	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analyze for	Analytic Method	Turn[5]	COMMENTS
A	1	BH-A 5.0	S/Tube	3/5/90	—	—	Y	—	TPH-G, BETX, TOG, VOCs	8015/8020/503D/E/8010	N	
H	1	BH-A 9.7										
A	1	BH-A 15.7							"	"		
H	1	BH-A 20.2										
A	1	BH-A 24.7							" + TPH-D	"		
A	1	BH-A 29.2							"	"		
H	1	BH-A 34.2										
H	1	BH-A 39.7										
A	1	BH-A 41.2							"	"		
	1	CS-1	S/Tube	3/5/90								
A	1	CS-2							TPH-G, BETX, TOG,	Pb + org. Pb		Please composite these 3 samples
	1	CS-3										

1 Karen Sixt 3/7/90
Released by (Signature), Date

1 Weiss Assoc.
Affiliation

2 Marette Shu 3/7/90
Received by (Signature), Date

2 Weiss Assoc.
Affiliation

3 Marette Shu 3/7/90
Released by (Signature), Date

3 Weiss Assoc.
Affiliation

4 Janis Green 3/7/90
Shipping Carrier, Method, Date

4 N.E.T.
Affiliation

5 Janis Green 3/7/90
Released by (Signature), Date

5 N.E.T.
Affiliation

6 K Temple 3/8/90 0700
Received by Lab Personnel, Date

6 NET Pacific
Affiliation, Telephone

x seal intact 3/8
Seal intact?

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other;
Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

*SEAL INTACT UPON RECEIPT 3/7/90 1:20p J. Green

F:\ALL\ADMIN\FORMS\COCSHELL.WP2

ATTACHMENT B

ANALYTIC REPORTS AND CHAIN-OF-CUSTODY FOR GROUND WATER

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Karen Sixt
Weiss Associates
5500 Shell Mound Rd.
Emeryville, CA 94524

Date: 03-20-90
NET Client Acct. No: 18.09
NET Pacific Log No: 1085
Received: 03-09-90 2300

Client Reference Information

SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. 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:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: 030-1 03-08-90
LAB Job No: (-48332)

Parameter	Reporting Limit	Results	Units
Oil & Grease, (total)	5	ND	mg/L
Oil & Grease (non-polar)	10	ND	mg/L
METHOD 601			
DATE ANALYZED		03-14-90	
DILUTION FACTOR*		1	
Bromodichloromethane	0.4	ND	ug/L
Bromoform	0.4	ND	ug/L
Bromomethane	0.4	ND	ug/L
Carbon tetrachloride	0.4	ND	ug/L
Chlorobenzene	0.4	ND	ug/L
Chloroethane	0.4	ND	ug/L
2-Chloroethylvinyl ether	1.0	ND	ug/L
Chloroform	0.4	ND	ug/L
Chloromethane	0.4	ND	ug/L
Dibromochloromethane	0.4	ND	ug/L
1,2-Dichlorobenzene	0.4	ND	ug/L
1,3-Dichlorobenzene	0.4	ND	ug/L
1,4-Dichlorobenzene	0.4	ND	ug/L
Dichlorodifluoromethane	0.4	ND	ug/L
1,1-Dichloroethane	0.4	ND	ug/L
1,2-Dichloroethane	0.4	12	ug/L
1,1-Dichloroethene	0.4	ND	ug/L
trans-1,2-Dichloroethene	0.4	ND	ug/L
1,2-Dichloropropane	0.4	ND	ug/L
cis-1,3-Dichloropropene	0.4	ND	ug/L
trans-1,3-Dichloropropene	0.4	ND	ug/L
Methylene Chloride	10	ND	ug/L
1,1,2,2-Tetrachloroethane	0.4	ND	ug/L
Tetrachloroethene	0.4	ND	ug/L
1,1,1-Trichloroethane	0.4	ND	ug/L
1,1,2-Trichloroethane	0.4	ND	ug/L
Trichloroethene	0.4	ND	ug/L
Trichlorofluoromethane	0.4	ND	ug/L
Vinyl chloride	2.0	ND	ug/L
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-14-90	
METHOD GC FID/5030		--	
as Gasoline	0.05	0.29	mg/L
METHOD 602		--	
Benzene	0.5	1.5	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	0.8	ug/L
Xylenes, total	0.5	5.4	ug/L

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: 030-1 03-08-90
LAB Job No: (-48332)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
EXTRACTABLE (WATER)		--	
DILUTION FACTOR *		1	
DATE EXTRACTED		03-14-90	
DATE ANALYZED		03-17-90	
METHOD GC FID/3510		--	
as Diesel	0.05	0.12	mg/L
as Motor Oil	0.05	ND	mg/L

SAMPLE DESCRIPTION: 030-21 03-08-90
LAB Job No: (-48333)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-15-90	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	mg/L
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	ND	ug/L
Xylenes, total	0.5	ND	ug/L

Ref: SHELL, 1784 150th Avenue, San Leandro; Project: 81-422-03

SAMPLE DESCRIPTION: 030-22 03-08-90
LAB Job No: (-48334)

Parameter	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS		--	
VOLATILE (WATER)		--	
DILUTION FACTOR *		1	
DATE ANALYZED		03-15-90	
METHOD GC FID/5030		--	
as Gasoline	0.05	ND	mg/L
METHOD 602		--	
Benzene	0.5	ND	ug/L
Ethylbenzene	0.5	ND	ug/L
Toluene	0.5	ND	ug/L
Xylenes, total	0.5	ND	ug/L

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following, which supercedes the listed reporting limit.
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 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.

* 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.

WEISS ASSOCIATES
5500 Shellmound St., Emeryville, CA 94608
Phone: 415-547-5420 FAX: 415-547-5043

1085

Shell Service Station Address:
1784 150th Ave
San Leandro CA

Shell Contact: Paul Hayes
WIC #: 204-685-214
AFE #: 9866805440

Please send analytic results and a copy of the signed chain of custody form to:
Karen Sixt

Project ID: 81-422-03

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Lab Personnel:
1) Specify analytic method and detection limit in report.
2) Notify us if there are any anomalous peaks on GC or other scans.
3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

Sampled by: MWD

Laboratory Name: NET / PACIFIC

No. of Containers	Sample ID	Container Type	Sample Date	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analyze for	Analytic Method	Turn[5]	COMMENTS
3	030-1	W/V	3/8/90	40ml	N	Y	None	TPH-G/BETX	8015/8020	N	TPH-G 50 ppb detection limit
2	030-1	W/V	3/8/90	40ml	N	Y	None	VOC's	601	N	—
2	030-1	W/B	3/8/90	1L	N	Y	H_2SO_4	TOG	503 A&E	N	—
2	030-1	W/B	3/8/90	1L	N	Y	None	TPH-D	8015	N	—
3	030-21	W/V	"	40ml	"	"	None	TPH-G/BETX	8015/8020	N	50 ppb detect. limit TPH
3	030-22	W/V	"	"	"	"	"	" "	" "	"	" " " " "

1 Matthew W. Daly
Released by (Signature), Date

1 Weiss Assoc.
Affiliation

2 [signature] 3/9/90
Received by (Signature), Date

2 Weiss Assoc.
Affiliation

3 [signature] 3/9/90
Released by (Signature), Date

3 Weiss Assoc.
Affiliation

4 Jeff Winkler
Shipping Carrier, Method, Date

4 NET Pacific
Affiliation

5 Jeff Winkler
Released by (Signature), Date

5 NET
Affiliation

6 Schwartz 3/9/90 2300
Received by Lab Personnel, Date

6 NET
Affiliation, Telephone

x yes
Seal intact?

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other;
Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]
ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS:

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NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Eric Anderson
Weiss Associates
5500 Shell Mound Rd.
Emeryville, CA 94524

Date: 06-22-90
NET Client Acct. No: 18.09
NET Pacific Log No: 2446
Received: 06-14-90 0800
REVISED 07-03-90

Client Reference Information

SHELL-1784 150th Ave, San Leandro Proj: 88-422-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. 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:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: SHELL-1784 150th Ave, San Leandro Proj: 88-422-01

SAMPLE DESCRIPTION: 060-1 06-12-90
LAB Job No: (-55433)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease(Total)	SM503A	5	ND	mg/L
Oil & Grease(Non-Polar)	SM503A/E	10	ND	mg/L
METHOD 601				
DATE ANALYZED			06-18-90	
DILUTION FACTOR*			1	
Bromodichloromethane		0.4	ND	ug/L
Bromoform		0.4	ND	ug/L
Bromomethane		0.4	ND	ug/L
Carbon tetrachloride		0.4	ND	ug/L
Chlorobenzene		0.4	ND	ug/L
Chloroethane		0.4	ND	ug/L
2-Chloroethylvinyl ether		1.0	ND	ug/L
Chloroform		0.4	ND	ug/L
Chloromethane		0.4	ND	ug/L
Dibromochloromethane		0.4	ND	ug/L
1,2-Dichlorobenzene		0.4	ND	ug/L
1,3-Dichlorobenzene		0.4	ND	ug/L
1,4-Dichlorobenzene		0.4	ND	ug/L
Dichlorodifluoromethane		0.4	ND	ug/L
1,1-Dichloroethane		0.4	ND	ug/L
1,2-Dichloroethane		0.4	ND	ug/L
1,1-Dichloroethene		0.4	ND	ug/L
trans-1,2-Dichloroethene		0.4	ND	ug/L
1,2-Dichloropropane		0.4	ND	ug/L
cis-1,3-Dichloropropene		0.4	ND	ug/L
trans-1,3-Dichloropropene		0.4	ND	ug/L
Methylene Chloride		10	ND	ug/L
1,1,2,2-Tetrachloroethane		0.4	ND	ug/L
Tetrachloroethene		0.4	ND	ug/L
1,1,1-Trichloroethane		0.4	ND	ug/L
1,1,2-Trichloroethane		0.4	ND	ug/L
Trichloroethene		0.4	ND	ug/L
Trichlorofluoromethane		0.4	ND	ug/L
Vinyl chloride		2.0	ND	ug/L

Ref: SHELL-1784 150th Ave, San Leandro Proj: 88-422-01

SAMPLE DESCRIPTION: 060-1 06-12-90
LAB Job No: (-55433)

Parameter	Method	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			06-19-90	
METHOD GC FID/5030			--	
as Gasoline		0.05	0.51	mg/L
METHOD 602			--	
DILUTION FACTOR *			1	
DATE ANALYZED			06-20-90	
Benzene		0.5	86	ug/L
Ethylbenzene		0.5	0.7	ug/L
Toluene		0.5	1.3	ug/L
Xylenes, total		0.5	6.2	ug/L
PETROLEUM HYDROCARBONS			--	
EXTRACTABLE (WATER)			--	
DILUTION FACTOR *			1	
DATE EXTRACTED			06-15-90	
DATE ANALYZED			06-16-90	
METHOD GC FID/3510			--	
as Diesel		0.05	0.10	mg/L
as Motor Oil		0.5	ND	mg/L

Ref: SHELL-1784 150th Ave, San Leandro Proj: 88-422-01

SAMPLE DESCRIPTION: 060-21 06-12-90
LAB Job No: (-55434)

Parameter	Method	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			06-19-90	
METHOD GC FID/5030			--	
as Gasoline		0.05	ND	mg/L
METHOD 602			--	
DILUTION FACTOR *			1	
DATE ANALYZED			06-19-90	
Benzene		0.5	ND	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	ND	ug/L
Xylenes, total		0.5	ND	ug/L

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, 16th Edition, APHA, 1985.

WEISS ASSOCIATES
5500 Shellmound St., Emeryville, CA 94608
Phone: 415-547-5420 FAX: 415-547-5043

Shell Service Station Address:
1784 150th Ave.
San Leandro, CA
Shell Contact: E. Paul Hayes
WIC #: 204-6852-1404
AFE #: 086710

Please send analytic results
and a copy of the signed chain of custody form to:
Eric Anderson
Project ID: 81-422-01

2446

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: Jim Mattox
Laboratory Name: NET

Lab Personnel:
1) Specify analytic method and detection limit in report.
2) Notify us if there are any anomalous peaks on GC or other scans.
3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

No. of Containers	Sample ID	Container Type[1]	Sample Date	Vol[2]	Fil[3]	Ref[4]	Preservative (specify)	Analyze for	Analytic Method	Turn[5]	COMMENTS
3	060-1	W/CV	6/12/90	40ml	N	Y	None	GAS + BTEX	EPA 8015/8020	N	
3	060-1	W/CV	"	40ml	"	"	"	HVOCs	EPA 601	"	
3	060-1	W/BG	"	1l	"	"	"	Diesel	EPA 8015	"	
3	060-1	W/BG	"	1l	"	"	H_2SO_4	TOG	EPA 503E	"	5 ppm detection limit
2	060-21	W/BV	"	40ml	N	Y	None	GAS + BTEX	EPA 8015/8020	"	for NON-pdas TOG

1 Jim Mattox 6/12/90
Released by (Signature), Date

1 Weiss Assoc
Affiliation

2 A. F. Hayes 6-13-90
Received by (Signature), Date

2 Weiss Assoc.
Affiliation

3 A. F. Hayes 6-13-90
Released by (Signature), Date

3 Weiss Assoc
Affiliation

4 Jeff Nicholas 6/13 15:45
Shipping Carrier, Method, Date

4 NET
Affiliation

5 Jeff Nicholas 6/13/90 19:00
Released by (Signature), Date

5 NET
Affiliation

6 K Temple 6/14/90
Received by Lab Personnel, Date

6 NET Pacific 0800
Affiliation, Telephone

x yes
Seal intact?

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other;
Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered (Y/N); 4 = Refrigerated (Y/N)
5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]
ADDITIONAL COMMENTS, CONDITIONS, PROBLEMS: