



PACIFIC
ENVIRONMENTAL
GROUP, INC.

July 17, 1992
Project 305-79.01

Mr. Barney Chan
Alameda County Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Re: Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California
WIC No 204-5508-5504

Dear Mr. Chan:

This letter presents the results of soil sampling activities which occurred on the site referenced above (Figures 1, 2, and 3) on April 21, and May 18 through 20, 1992. Pacific Environmental Group Inc. (PACIFIC), at the request of Shell Oil Company (Shell), was present to collect soil samples during the excavation of soil at the site.

Prior to PACIFIC's involvement in the project, Gettler-Ryan Inc. (Gettler-Ryan) at the request of Shell, was present when soil was excavated from the three former hydraulic lifts and waste oil separator. Several soil (SOW-1, SL-3) and groundwater (SLH-1 and SLH-2) samples were collected from the excavations on February 12, 1992 and analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g), TPH calculated as diesel (TPH-d), oil and grease, and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). One sample was analyzed for volatile organic compounds and selected metals. Analytical test results are presented on Tables 1 and 2. Sample locations are shown on Figure 2. Additional samples (SLS-1A-D, SW-3 and SW-1 and SWS-1-A-D) were also collected. Analytical results are not available at this time.

As a result of the initial findings, additional excavation was conducted. On April 21, 1992, PACIFIC was present during the overexcavation of the three excavations associated with the hydraulic lifts and oil/water separator. The excavations were approximately six feet deep at which point groundwater was encountered. Soil samples were collected (SLH-1A through SLH-1C, SLH-2A through SLH-2C, SLH-3A and -3B, and SOW-1A and -1B) from each of the excavations and analyzed for TPH-g, TPH-d, oil and grease, and BTEX compounds. Analytical test results are presented in Table 1. All samples analyzed

for diesel showed a positive test result; however, the analytical laboratory noted that, "The positive result for petroleum hydrocarbon as diesel appears to be a combination of heavier and lighter hydrocarbons, rather than diesel."

Additionally, selected samples were analyzed for volatile organic compounds and semi-volatile organic compounds (VOCs and SVOCs). Results are presented in Attachment A. A groundwater sample (SLH-3W) was collected from hydraulic lift number three and analyzed for TPH-g and BTEX compounds. Analytical test results are presented in Table 2. Soil and groundwater sample locations are shown on Figure 3.

From May 18 to 20, 1992, excavation occurred around the northern product island which was associated with remodeling activities. Soil samples were collected from the spoil piles previously generated (SP-2-1-4, SP-1-1-3, SP-1-4-6), and from beneath the former dispenser location (DS-1). These samples were analyzed for TPH-g and BTEX compounds. Analytical test results are presented in Table 1. In addition, a groundwater sample was collected from a 6-foot deep foundation excavation (DW-1) which will support the north side of the canopy. The groundwater sample was analyzed for TPH-g, TPH-d, and BTEX compounds. The groundwater sample location is shown on Figure 3. Analytical test results are presented in Table 2. Soil and groundwater sample locations are shown on Figure 3.

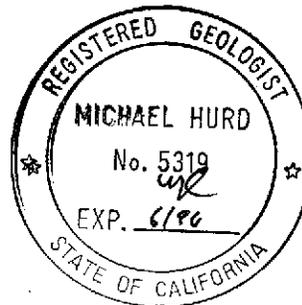
If you have any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.



Michael Hurd
Project Geologist
RG 5319



Attachments: Table 1-Soil Analytical Data - TPH-g, BTEX compounds, TPH-d, and oil and grease
Table 2-Groundwater Analytical Data - TPH-g, BTEX compounds, TPH-d, and oil and grease
Figure 1 - Site Location Map
Figure 2 - Soil Sample Location Map (Gettler-Ryan)
Figure 3 - Soil Sample Location Map (PACIFIC)
Attachment A - Certified Analytical Reports

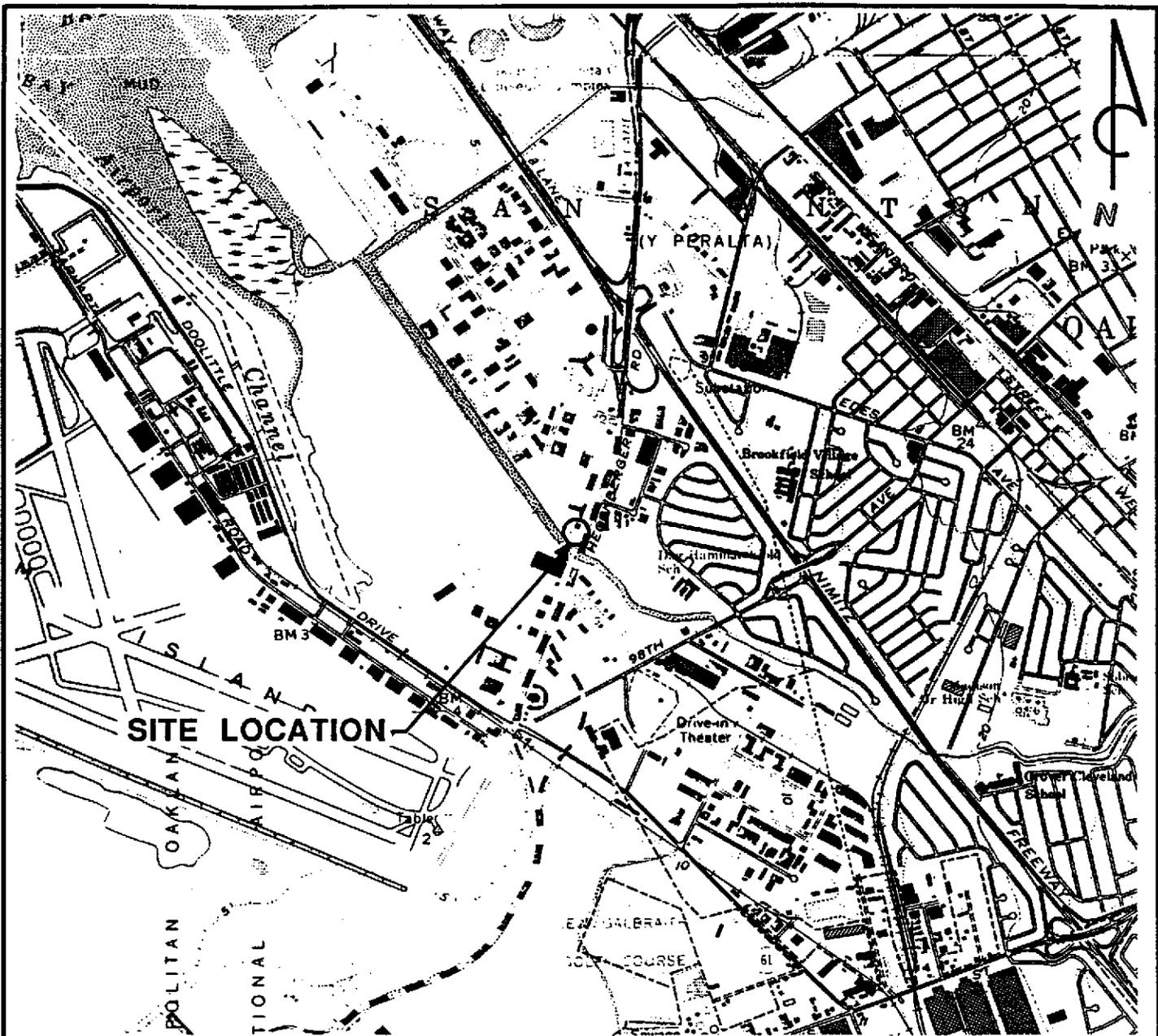
cc: Mr. Dan Kirk, Shell Oil Company
Mr. Richard Hiatt, Regional Water Quality Control Board

Table 1
Soil Analytical Data
 TPH-g, BTEX compounds, TPH-d, and oil and grease

Shell Service Station
 285 Hegenberger Road at Leet Drive
 Oakland, California

Date Sampled	Sample/depth (ft)	TPH-g (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TPH-d (ppm)	Oil and Grease (ppm)
02/12/92	SOW-1/5	1,900	2.2	2.6	25	82	400	830
	SL-3/6.5	NA	NA	NA	NA	NA	1,100	15,000
04/21/92	SLH-1A/5.5	690	ND	ND	2.4	19	550*	550
	SLH-1B/5.5	1,500	ND	ND	ND	32	1,700*	1,700
	SLH-1C/5.5	1,000	ND	ND	1.6	23	2,200*	5,800
	SLH-2A/5.5	610	ND	ND	ND	3.7	250*	340
	SLH-2B/6	70	ND	0.16	0.38	1.6	80*	170
	SLH-2C/6	1,300	ND	ND	6.7	20	150*	290
	SLH-3A/6.5	54	0.05	0.14	0.44	3.6	130*	280
	SLH-3B/6.5	250	ND	ND	1.5	3.1	140*	90
	SOW-1A/4	19	0.055	ND	0.14	0.7	250*	500
SOW-1B/4	1,800	1.9	ND	15	72	7,600*	6,800	
05/18/92	SP-2-1-4	1.4	ND	0.023	0.012	0.067	NA	NA
	SP-1-1-3	1.8	ND	0.027	0.0094	0.035	NA	NA
	SP-1-4-6	420	ND	ND	ND	0.590	NA	NA
05/20/92	DS-1/1	260	ND	ND	0.200	1.600	NA	NA

ppm = Parts per million
 ND = Not detected
 NA = Not analyzed
 * = The positive result for petroleum hydrocarbons as diesel appears to be a combination of heavier and lighter hydrocarbons, rather than diesel.



REFERENCES:

USGS 7.5 MIN. TOPOGRAPHIC MAP
 TITLED: SAN LEANDRO, CALIFORNIA
 DATED: 1959 REVISED: 1980
 TITLED: OAKLAND EAST, CALIFORNIA
 DATED: 1959 REVISED: 1980

SCALE



PACIFIC ENVIRONMENTAL GROUP, INC.

SHELL SERVICE STATION
 285 Hegenberger Road at Leet Drive
 Oakland, California

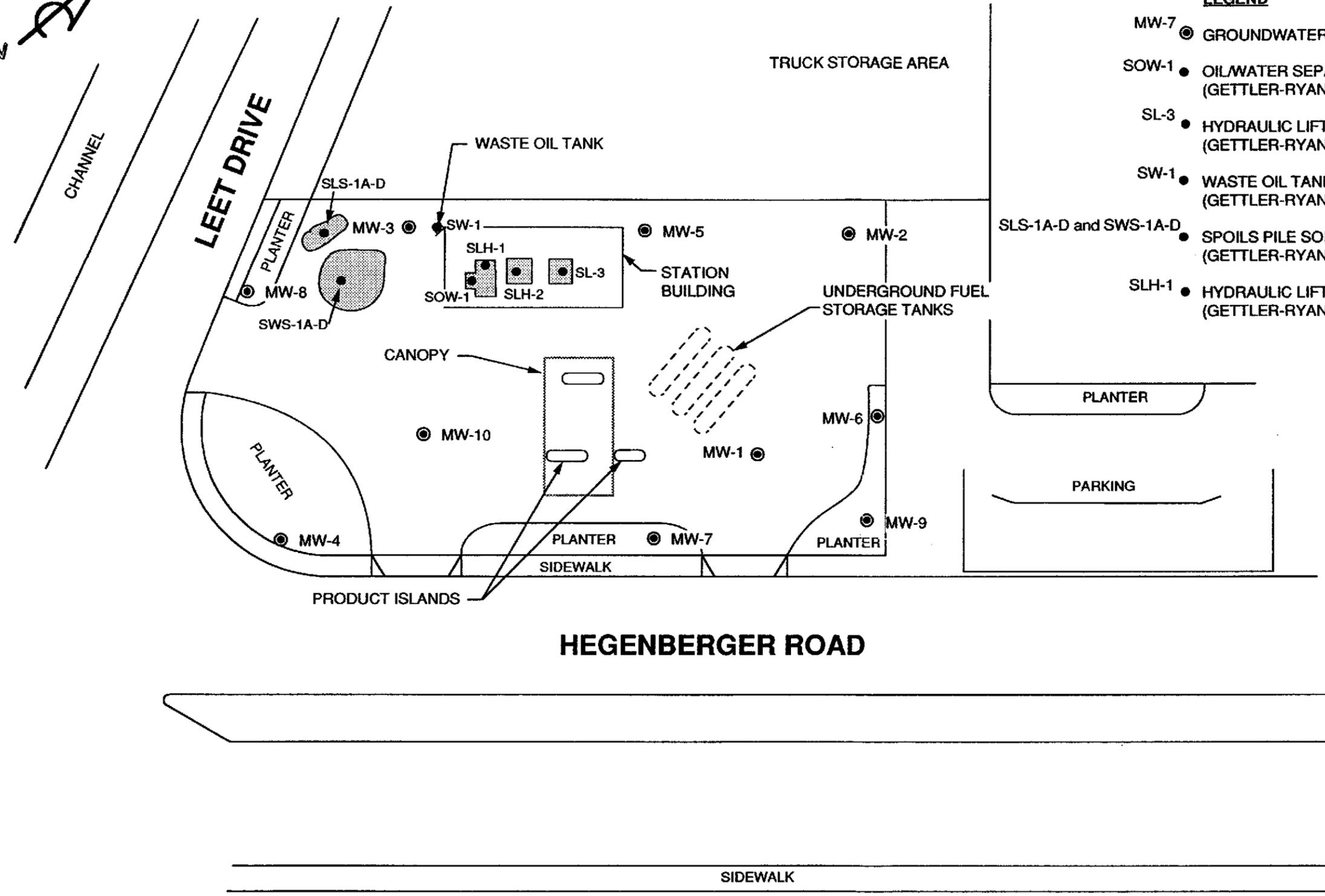
SITE LOCATION MAP

FIGURE: 1
PROJECT: 305-79.01

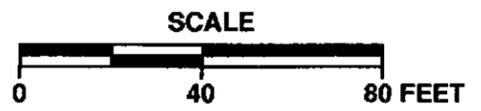


LEGEND

- MW-7 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SOW-1 ● OIL/WATER SEPARATOR SOIL SAMPLE LOCATION AND DESIGNATION (GETTLER-RYAN)
- SL-3 ● HYDRAULIC LIFT SOIL SAMPLE LOCATION AND DESIGNATION (GETTLER-RYAN)
- SW-1 ● WASTE OIL TANK SOIL SAMPLE LOCATION AND DESIGNATION (GETTLER-RYAN)
- SLS-1A-D and SWS-1A-D ● SPOILS PILE SOIL SAMPLE LOCATION AND DESIGNATION (GETTLER-RYAN)
- SLH-1 ● HYDRAULIC LIFT WATER SAMPLE LOCATION AND DESIGNATION (GETTLER-RYAN)



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SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

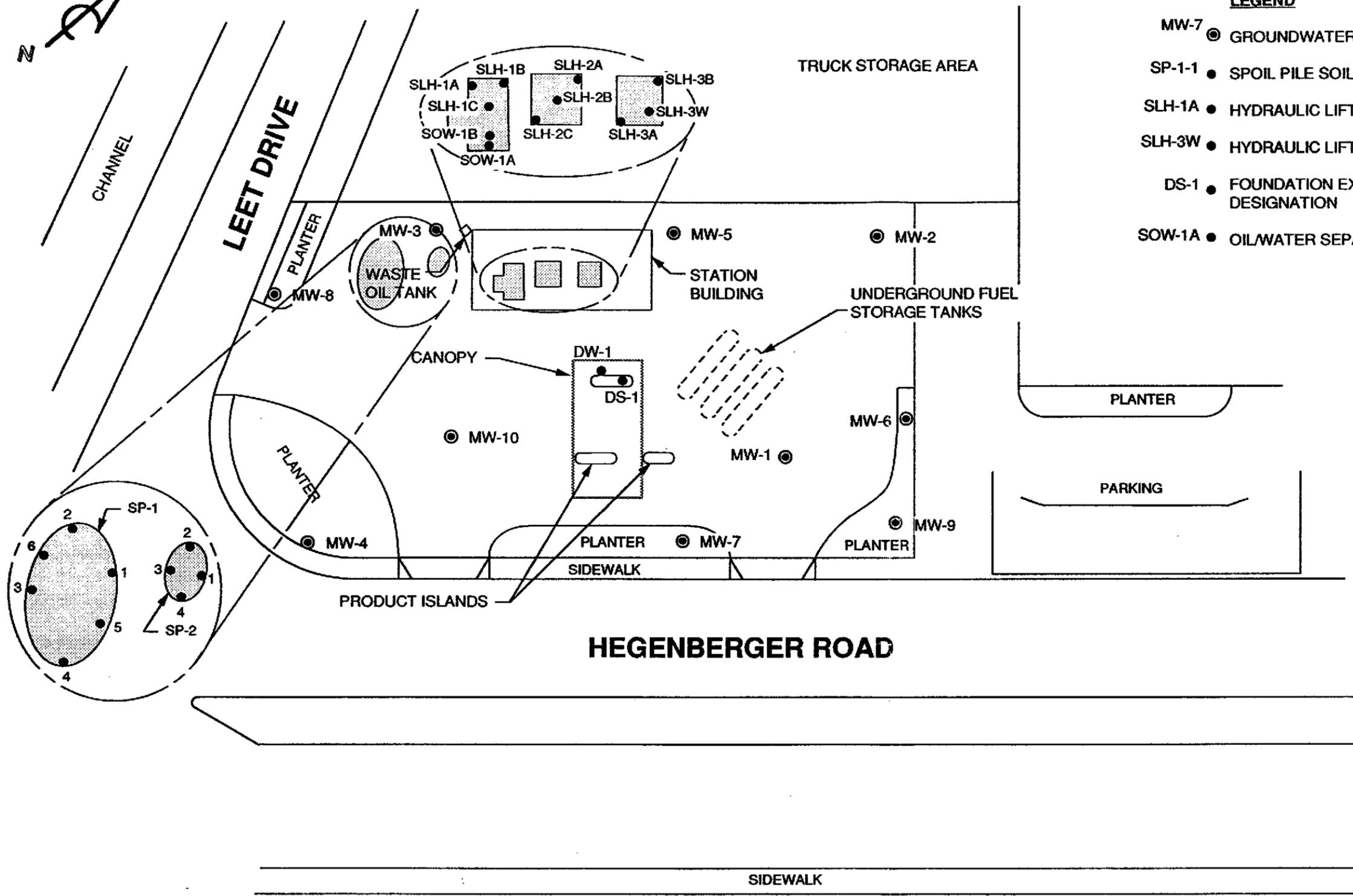
SOIL SAMPLE LOCATION MAP (GETTLER-RYAN)

FIGURE:
2
PROJECT:
305-79.01

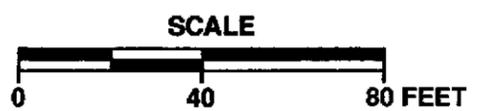


LEGEND

- MW-7 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SP-1-1 ● SPOIL PILE SOIL SAMPLE LOCATION AND DESIGNATION
- SLH-1A ● HYDRAULIC LIFT SOIL SAMPLE LOCATION AND DESIGNATION
- SLH-3W ● HYDRAULIC LIFT WATER SAMPLE LOCATION AND DESIGNATION
- DS-1 ● FOUNDATION EXCAVATION SOIL SAMPLE LOCATION AND DESIGNATION
- SOW-1A ● OIL/WATER SEPARATOR SOIL SAMPLE LOCATION AND DESIGNATION



PACIFIC ENVIRONMENTAL GROUP, INC.



SHELL SERVICE STATION
 285 Hegenberger Road at Leet Drive
 Oakland, California

SOIL SAMPLE LOCATION MAP (PACIFIC)

FIGURE:
3
 PROJECT:
 305-79.01

ATTACHMENT A
CERTIFIED ANALYTICAL REPORT



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9800 • FAX (415) 364-9233

RECEIVED

FEB 23 1992

GETTLER-RYAN INC.
GENERAL CONTRACTORS

Gettler Ryan
2150 W. Winton Avenue
Hayward, CA 94545
Attention: John Zwierzycki

Project: 7682.01, Shell, Oakland

Enclosed are the results from 3 soil samples, 2 water samples, 0 other samples received at Sequoia Analytical on February 13, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2022160	Soil, SOW-1	2/12/92	EPA 8240 EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric) Miscellaneous Metals
2022158	Water, SLH-1	2/12/92	EPA 3510/8015 SM 5520 B&F (Gravimetric)
2022159	Water, SLH-2	2/12/92	EPA 3510/8015 SM 5520 B&F (Gravimetric)
2022161	Soil, SL-3	2/12/92	EPA 3550/8015 SM 5520 E&F (Gravimetric)

on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9800 • FAX (415) 364-9233

Gettler Ryan 2160 W. Winton Avenue Hayward, CA 94545 Attention: John Zwierzycki	Client Project ID: 7682.01, Shell, Oakland Matrix Descript: Water Analysis Method: EPA 3510/8015 First Sample #: 202-2158	Sampled: Feb 12, 1992 Received: Feb 13, 1992 Extracted: Feb 14, 1992 Analyzed: Feb 18, 1992 Reported: Feb 19, 1992
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TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/L (ppm)
202-2158	SLH-1	460
202-2159	SLH-2	370

Detection Limits:

10

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
 Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

Please Note:

The chromatograms of the above samples do not match the diesel standard. Sample SLH-1 contains lower boiling point and higher boiling point compounds. In sample SLH-2, lower boiling point compounds predominate.



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Gettler Ryan
2150 W. Winton Avenue
Hayward, CA 94545
Attention: John Zwierzycki

Client Project ID: 7682.01, Shell, Oakland
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 202-2160

Sampled: Feb 12, 1992
Received: Feb 13, 1992
Extracted: Feb 14, 1992
Analyzed: Feb 18, 1992
Reported: Feb 19, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
202-2160	SOW-1	400
202-2161	SL-3	1,100

(desired or higher)

Detection Limits:

100

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager

Please Note:

The chromatograms of the above samples do not match the diesel standard. They contain lower and higher boiling point compounds.



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Gettler Ryan	Client Project ID: 7682.01, Shell, Oakland	Sampled: Feb 12, 1992
2150 W. Winton Avenue	Matrix Descript: Water	Received: Feb 13, 1992
Hayward, CA 94545	Analysis Method: SM 5520 B&F (Gravimetric)	Extracted: Feb 14, 1992
Attention: John Zwierzycki	First Sample #: 202-2158	Analyzed: Feb 14, 1992
		Reported: Feb 19, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)
202-2158	SLH-1	720
202-2159	SLH-2	400

Detection Limits: 5.0

Analytes reported as N.D. were not present above the stated limit of detection.

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V. Tague

Vickie Tague
Project Manager



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Gettler Ryan 2150 W. Winton Avenue Hayward, CA 94545 Attention: John Zwierzycki	Client Project ID: 7682.01, Shell, Oakland Matrix Descript: Soil Analysis Method: SM 5520 E&F (Gravimetric) First Sample #: 202-2160	Sampled: Feb 12, 1992 Received: Feb 13, 1992 Extracted: Feb 14, 1992 Analyzed: Feb 14, 1992 Reported: Feb 19, 1992
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TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
202-2160	SOW-1	830
202-2161	SL-3	15,000

Detection Limits:	30
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Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Vickie Tague
Project Manager



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Gettler Ryan	Client Project ID: 7682.01, Shell, Oakland	Sampled: Feb 12, 1992
2150 W. Winton Avenue	Sample Descript.: Soil, SOW-1	Received: Feb 13, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Analyzed: Feb 14, 1992
Attention: John Zwierzycki	Lab Number: 202-2160	Reported: Feb 19, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	100	1000
Benzene	0.50	2.2
Toluene	0.50	2.6
Ethyl Benzene	0.50	2.5
Xylenes	0.50	3.2

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Vickie Tague
 Project Manager



SEQUOIA ANALYTICAL

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Gettler Ryan	Client Project ID: 7692.01, Shell, Oakland	Sampled: Feb 12, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SOW-1	Received: Feb 13, 1992
Hayward, CA 94545	Lab Number: 202-2160	Analyzed: Feb 18, 1992
Attention: John Zwierzycki		Reported: Feb 19, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium.....	0.50	N.D.
Chromium.....	0.50	31
Lead.....	5.0	11
Nickel.....	2.5	38
Zinc.....	0.50	27

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
 Vickie Tague
 Project Manager



SEQUOIA ANALYTICAL

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Gettler Ryan	Client Project ID: 7682.01, Shell, Oakland	Sampled: Feb 12, 199
2150 W. Winton Avenue	Sample Descript: Soil, SOW-1	Received: Feb 13, 199
Hayward, CA 94545	Analysis Method: EPA 8240	Analyzed: Feb 15, 199
Attention: John Zwierzycki	Lab Number: 201-2160	Reported: Feb 19, 199

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acetone.....	5.0	N.D.
Benzene.....	1.0	N.D.
Bromodichloromethane.....	1.0	N.D.
Bromoform.....	1.0	N.D.
Bromomethane.....	1.0	N.D.
2-Butanone.....	5.0	N.D.
Carbon disulfide.....	1.0	N.D.
Carbon tetrachloride.....	1.0	N.D.
Chlorobenzene.....	1.0	N.D.
Chloroethane.....	1.0	N.D.
2-Chloroethyl vinyl ether.....	5.0	N.D.
Chloroform.....	1.0	N.D.
Chloromethane.....	1.0	N.D.
Dibromochloromethane.....	1.0	N.D.
1,1-Dichloroethane.....	1.0	N.D.
1,2-Dichloroethane.....	1.0	N.D.
1,1-Dichloroethene.....	1.0	N.D.
cis-1,2-Dichloroethene.....	1.0	N.D.
trans-1,2-Dichloroethene.....	1.0	N.D.
1,2-Dichloropropane.....	1.0	N.D.
cis-1,3-Dichloropropene.....	1.0	N.D.
trans-1,3-Dichloropropene.....	1.0	N.D.
Ethylbenzene.....	1.0	N.D.
2-Hexanone.....	5.0	N.D.
Methylene chloride.....	2.5	N.D.
4-Methyl-2-pentanone.....	5.0	N.D.
Styrene.....	1.0	N.D.
1,1,2,2-Tetrachloroethane.....	1.0	N.D.
Tetrachloroethene.....	1.0	N.D.
Toluene.....	1.0	N.D.
1,1,1-Trichloroethane.....	1.0	N.D.
1,1,2-Trichloroethane.....	1.0	N.D.
Trichloroethene.....	1.0	N.D.
Trichlorofluoromethane.....	1.0	N.D.
Vinyl acetate.....	1.0	N.D.
Vinyl chloride.....	1.0	N.D.
Total V.O.s.....	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

VMT Tague

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

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Gettler Ryan
2150 W. Winton Avenue
Hayward, CA 94545
Attention: John Zwierzycki

Client Project ID: 7682.01, Shell, Oakland

QC Sample Group: 202-2160

Reported: Feb 19, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Maralt	A. Maralt	A. Maralt	A. Maralt
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Feb 14, 1992	Feb 14, 1992	Feb 14, 1992	Feb 14, 1992
QC Sample #:	GBLK021492	GBLK021492	GBLK021492	GBLK021492
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.22	0.22	0.22	0.66
Matrix Spike % Recovery:	110	110	110	110
Conc. Matrix Spike Dup.:	0.20	0.20	0.21	0.60
Matrix Spike Duplicate % Recovery:	100	100	105	100
Relative % Difference:	9.5	9.5	4.7	9.5

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V. Tague
Vickie Tague
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

2022160.GET <8>



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Gettler Ryan 2150 W. Winton Avenue Hayward, CA 94545 Attention: John Zwierzycki	Client Project ID: 7682.01, Shell, Oakland QC Sample Group: 2022158-8	Reported: Feb 19, 1992
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QUALITY CONTROL DATA REPORT

ANALYTE	High Boiling Point Hydrocarbons	Total Recoverable Petroleum Oil
Method:	EPA 8015	SM 5520 B&F
Analyst:	R. Lee	A. Do
Reporting Units:	µg/L	mg/L
Date Analyzed:	Feb 18, 1992	Feb 11, 1992
QC Sample #:	DBLK021492	BLK021192
Sample Conc.:	N.D.	N.D.
Spike Conc. Added:	300	60
Conc. Matrix Spike:	260	55
Matrix Spike % Recovery:	83	92
Conc. Matrix Spike Dup.:	220	54
Matrix Spike Duplicate % Recovery:	73	90
Relative % Difference:	13	1.8

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V. Tague
 Vickie Tague
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



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Gettler Ryan
 2150 W. Winton Avenue
 Hayward, CA 94545
 Attention: John Zwierzycki

Client Project ID: 7682.01, Shell, Oakland

QC Sample Group: 2022160-61

Reported: Feb 19, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	High Boiling Point Hydrocarbons	Total Recoverable Petroleum Oil
Method:	EPA 8015	SM 6520 E&F
Analyst:	R. Lee	A. Do
Reporting Units:	mg/kg	mg/kg
Date Analyzed:	Feb 10, 1992	Feb 13, 1992
QC Sample #:	DBLK021092	BLK021392
Sample Conc.:	N.D.	N.D.
Spike Conc. Added:	15	1000
Conc. Matrix Spikes:	10	790
Matrix Spike % Recovery:	67	79
Conc. Matrix Spike Dup.:	12	800
Matrix Spike Duplicate % Recovery:	80	80
Relative % Difference:	18	1.3

SEQUOIA ANALYTICAL

V. Tagbe
 Vickie Tagbe
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



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Gettler Ryan Client Project ID: 7682.01, Shell, Oakland
 2150 W. Winton Avenue
 Hayward, CA 94545
 Attention: John Zwierzycki QC Sample Group: 202-2160
 Reported: Feb 19, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Nickel	Chromium	Lead	Zinc
Method:	EPA 6010				
Analyst:	R. Sharma				
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Feb 18, 1992				
QC Sample #:	202-2160	202-2160	202-2160	202-2160	202-2160
Sample Conc.:	N.D.	38	31	11	27
Spike Conc. Added:	50	50	50	50	50
Conc. Matrix Spike:	48	84	78	55	74
Matrix Spike % Recovery:	96	96	94	90	94
Conc. Matrix Spike Dup.:	49	85	80	59	76
Matrix Spike Duplicate % Recovery:	98	98	98	96	98
Relative % Difference:	2.1	1.2	2.5	5.2	2.7

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V. Tague
 Vickie Tague
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



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680 Chesapeake Drive • Redwood City, CA 94063
 (415) 364-9600 • FAX (415) 364-9233

Gettler Ryan 2150 W. Winton Avenue Hayward, CA 94545 Attention: John Zwierzycki	Client Project ID: 7682.01, Shell, Oakland Method (units): EPA 8240 (µg/L purged) Analyst(s): S. Scott QC Sample #: BLK021192	Q.C. Sample Dates Analyzed: Feb 11, 1992
--	--	---

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloroethene	N.D.	50	54	108	55	110	1.8
Trichloroethene	N.D.	50	47	94	50	100	6.2
Benzene	N.D.	50	50	100	52	104	3.9
Toluene	N.D.	50	49	98	50	100	2.0
Chlorobenzene	N.D.	50	51	102	50	100	2.0

SEQUOIA ANALYTICAL

Vickie Tague
 Vickie Tague
 Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No.: _____

Date: _____
Page / of /

Site Address: 285 Hegenberger Rd Oakland

WIC#: 204-5508-5504

Shell Engineer: Dan Kick
Phone No. 685-3850
Fax #: 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
2150 W. Winton Ave.
Hayward, California 94545

Consultant Contact: Tom Paulson / John Werfal
Phone No. 783-7500
Fax #: 783-1089

Comments: Lift samples & 1 Oil Separator sample

Sampled By: Clyde Galantine
Printed Name: Clyde Galantine

Analysis Required

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Oil & Grease - 5520 E&F or C&F	ICAP 5 Metal

LAB: Squawia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input checked="" type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample - Sys O&M <input type="checkbox"/>	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

Sample ID	Date	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Oil & Grease - 5520 E&F or C&F	ICAP 5 Metal	Container Size	Preparation Used	Composites Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SLH-1	2-12-92		X		9		X				X				N	2022158	
SLH-2	2-12-92		X		9		X				X				N	2022159	
SL-3	2-12-92	X			1		X				X				N	2022161	
SOW-1	2-12-92	X			1	X	X	X	X		X	X			N	2022160	

Relinquished By (signature): <u>Clyde Galantine</u>	Printed name: <u>Clyde Galantine</u>	Date: <u>2/13/92</u>	Received (signature): <u>A. NAGRA</u>	Printed name: <u>A. NAGRA</u>	Date: <u>2/13/92</u>
Relinquished By (signature):	Printed name:	Date:	Received (signature):	Printed name:	Date:
Relinquished By (signature):	Printed name:	Date:	Received (signature):	Printed name:	Date:

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

Last Revision Date: 10/15/91

SENT BY: Gettler-Ryan Inc. 4-20-92 : 14:43 : 4082433911: #17



**NATIONAL
ENVIRONMENTAL
TESTING, INC.**

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

Michael Hurd
Pacific Env. Group
1601 Civic Center Drive
Suite 202
Santa Clara, CA 95050

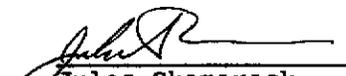
3057701
Date: 05/06/1992
NET Client Acct. No: 1817
NET Pacific Job No: 92.2229
Received: 04/23/1992

Client Reference Information

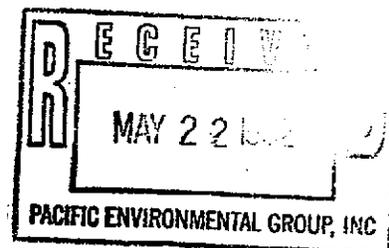
SHELL 285 Hegenberger Rd., Oakland

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)





Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 2

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-1A-5.5
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120663)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	550	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	390	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			100	
as Gasoline	5030	1	690	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			1	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	2,400	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	19,000	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		137**	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			10	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	550***	mg/Kg

** High surrogate recovery due to matrix interference.

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 3

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-1B-5.5
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120664)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	1,700	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	1,300	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			100	
as Gasoline	5030	1	1,500	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			500	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	ND	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	32,000	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		115	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			20	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	1,700**	mg/Kg

** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 4

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-1C-5.5
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120665)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	5,800	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	4,000	mg/Kg
TPH (Gas/BTXE,Solid)			--	
METHOD 5030 (GC,FID)				
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			200	
as Gasoline	5030	1	1,000	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			200	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	1,600	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	23,000	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		135	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			20	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	2,200**	mg/Kg

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 5

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-2A-5.5
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120666)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	340	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	320	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)				

			05-02-92	
DATE ANALYZED				
DILUTION FACTOR*				
			50	
as Gasoline				
	5030	1	610	mg/Kg
METHOD 8020 (GC,Solid)				

			05-02-92	
DATE ANALYZED				
DILUTION FACTOR*				
			50	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	ND	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	3,700	ug/Kg
SURROGATE RESULTS				

Bromofluorobenzene	5030		218**	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*				
			10	
DATE EXTRACTED				
			04-28-92	
DATE ANALYZED				
			04-29-92	
as Diesel	3550	1	250***	mg/Kg

** High surrogate recovery due to matrix interference.

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 6

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-2B-6'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120667)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	170	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	130	mg/Kg
TPH (Gas/BTXE, Solid)				
METHOD 5030 (GC, FID)				
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			10	
as Gasoline	5030	1	70	mg/Kg
METHOD 8020 (GC, Solid)				
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			10	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	380	ug/Kg
Toluene	8020	2.5	160	ug/Kg
Xylenes (Total)	8020	2.5	1,600	ug/Kg
SURROGATE RESULTS				
Bromofluorobenzene	5030		139**	% Rec.
METHOD 3550 (GC, FID)				
DILUTION FACTOR*			2	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	80**	mg/Kg

** High surrogate recovery due to matrix interference.

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 7

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SLH-2C-6'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120668)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	290	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	220	mg/Kg
TPH (Gas/BTXE, Solid)				
METHOD 5030 (GC, FID)			--	
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			200	
as Gasoline	5030	1	1,300	mg/Kg
METHOD 8020 (GC, Solid)			--	
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			200	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	6,700	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	20,000	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		141**	% Rec.
METHOD 3550 (GC, FID)				
DILUTION FACTOR*			2	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	150***	mg/Kg

** High surrogate recovery due to matrix interference.

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 8

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SL-3B 6.5'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120669)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	90	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	84	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			100	
as Gasoline	5030	1	250	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			100	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	1,500	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	3,100	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		91	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			2	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	140**	mg/Kg

** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
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NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SOW-1A-4'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120670)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	500	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	410	mg/Kg
TPH (Gas/BTEXE,Solid)				
METHOD 5030 (GC,FID)				
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			10	
as Gasoline	5030	1	19	mg/Kg
METHOD 8020 (GC,Solid)				
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			10	
Benzene	8020	2.5	55	ug/Kg
Ethylbenzene	8020	2.5	140	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	700	ug/Kg
SURROGATE RESULTS				
Bromofluorobenzene	5030		106	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			10	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	250**	mg/Kg

** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 10

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SL-3A-6.5'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120671)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	280	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	210	mg/Kg
Cadmium (ICP)	EPA 6010	2.0	ND	mg/Kg
Chromium (ICP)	EPA 6010	2.0	35	mg/Kg
Lead (GFAA)	EPA 7421	0.2	7.1	mg/Kg
Nickel (ICP)	EPA 6010	5.0	48	mg/Kg
Zinc (ICP)	EPA 6010	2.0	52	mg/Kg
TPH (Gas/BTXE, Solid)				
METHOD 5030 (GC, FID)				
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			10	
as Gasoline	5030	1	54	mg/Kg
METHOD 8020 (GC, Solid)				
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			10	
Benzene	8020	2.5	50	ug/Kg
Ethylbenzene	8020	2.5	440	ug/Kg
Toluene	8020	2.5	140	ug/Kg
Xylenes (Total)	8020	2.5	3,600	ug/Kg
SURROGATE RESULTS				
Bromofluorobenzene	5030		111	% Rec.
METHOD 3550 (GC, FID)				
DILUTION FACTOR*			2	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	130**	mg/Kg

** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 11

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SL-3A-6.5'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120671)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8240(GCMS,Solid)				
DATE ANALYZED			04/27/92	
DILUTION FACTOR*			5	
Benzene	8240	5.0	280	ug/Kg
Acetone	8240	10	ND	ug/Kg
Bromodichloromethane	8240	5.0	ND	ug/Kg
Bromoform	8240	5.0	ND	ug/Kg
Bromomethane	8240	5.0	ND	ug/Kg
2-Butanone	8240	10	ND	ug/Kg
Carbon disulfide	8240	5.0	ND	ug/Kg
Carbon tetrachloride	8240	5.0	ND	ug/Kg
Chlorobenzene	8240	5.0	ND	ug/Kg
Chloroethane	8240	5.0	ND	ug/Kg
2-Chloroethyl vinyl ether	8240	10	ND	ug/Kg
Chloroform	8240	5.0	ND	ug/Kg
Chloromethane	8240	5.0	ND	ug/Kg
Dibromochloromethane	8240	5.0	ND	ug/Kg
1,2-Dichlorobenzene	8240	5.0	ND	ug/Kg
1,3-Dichlorobenzene	8240	5.0	ND	ug/Kg
1,4-Dichlorobenzene	8240	5.0	ND	ug/Kg
1,1-Dichloroethane	8240	5.0	ND	ug/Kg
1,2-Dichloroethane	8240	5.0	ND	ug/Kg
1,1-Dichloroethene	8240	5.0	ND	ug/Kg
trans-1,2-Dichloroethene	8240	5.0	ND	ug/Kg
1,2-Dichloropropane	8240	5.0	ND	ug/Kg
cis-1,3-Dichloropropene	8240	5.0	ND	ug/Kg
trans-1,3-Dichloropropene	8240	5.0	ND	ug/Kg
Ethyl benzene	8240	5.0	690	ug/Kg
2-Hexanone	8240	10	ND	ug/Kg
Methylene chloride	8240	25	ND	ug/Kg
4-Methyl-2-pentanone	8240	10	ND	ug/Kg
Styrene	8240	5.0	ND	ug/Kg
1,1,2,2-Tetrachloroethane	8240	5.0	ND	ug/Kg
Tetrachloroethene	8240	5.0	ND	ug/Kg
Toluene	8240	5.0	320	ug/Kg
1,1,1-Trichloroethane	8240	5.0	ND	ug/Kg
1,1,2-Trichloroethane	8240	5.0	ND	ug/Kg
Trichloroethene	8240	5.0	ND	ug/Kg
Trichlorofluoromethane	8240	5.0	ND	ug/Kg
Vinyl acetate	8240	10	ND	ug/Kg
Vinyl chloride	8240	5.0	ND	ug/Kg
Xylenes (total)	8240	5.0	10,000	ug/Kg
SURROGATE RESULTS				
Toluene-d8	8240		104	% Rec.
Bromofluorobenzene	8240		96	% Rec.
1,2-Dichloroethane-d4	8240		101	% Rec.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 12

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SL-3A-6.5'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120671)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8270(GCMS,Solid)				
DATE EXTRACTED			04-23-92	
DATE ANALYZED			04-27-92	
DILUTION FACTOR*			1	
Acenaphthene	8270	330	ND	ug/Kg
Acenaphthylene	8270	330	ND	ug/Kg
Aldrin	8270	1600	ND	ug/Kg
Anthracene	8270	330	ND	ug/Kg
Benzidine	8270	1600	ND	ug/Kg
Benzo(a)anthracene	8270	330	ND	ug/Kg
Benzo(b)fluoranthene	8270	330	ND	ug/Kg
Benzo(k)fluoranthene	8270	330	ND	ug/Kg
Benzo(a)pyrene	8270	330	ND	ug/Kg
Benzo(g,h,i)perylene	8270	330	ND	ug/Kg
Benzoic acid	8270	1600	ND	ug/Kg
Benzyl alcohol	8270	330	ND	ug/Kg
Butyl benzyl phthalate	8270	330	ND	ug/Kg
delta-BHC	8270	1600	ND	ug/Kg
gamma-BHC	8270	1600	ND	ug/Kg
bis(2-Chloroethyl)ether	8270	330	ND	ug/Kg
bis(2-Chloroethoxy)methane	8270	330	ND	ug/Kg
bis(2-Chloroisopropyl)ether	8270	330	ND	ug/Kg
bis(2-Ethylhexyl)phthalate	8270	330	ND	ug/Kg
4-Bromophenyl phenyl ether	8270	330	ND	ug/Kg
4-Chloroaniline	8270	330	ND	ug/Kg
2-Chloronaphthalene	8270	330	ND	ug/Kg
4-Chlorophenyl phenyl ether	8270	330	ND	ug/Kg
Chrysene	8270	330	ND	ug/Kg
4,4'-DDD	8270	1600	ND	ug/Kg
4,4'-DDE	8270	1600	ND	ug/Kg
4,4'-DDT	8270	1600	ND	ug/Kg
Dibenzo(a,h)anthracene	8270	330	ND	ug/Kg
Dibenzofuran	8270	330	ND	ug/Kg
Di-n-butylphthalate	8270	330	ND	ug/Kg
1,2-Dichlorobenzene	8270	330	ND	ug/Kg
1,3-Dichlorobenzene	8270	330	ND	ug/Kg
1,4-Dichlorobenzene	8270	330	ND	ug/Kg
3,3'-Dichlorobenzidine	8270	660	ND	ug/Kg
Dieldrin	8270	1600	ND	ug/Kg
Diethylphthalate	8270	330	ND	ug/Kg
Dimethyl phthalate	8270	330	ND	ug/Kg
2,4-Dinitrotoluene	8270	330	ND	ug/Kg
2,6-Dinitrotoluene	8270	330	ND	ug/Kg
Di-n-octyl phthalate	8270	330	ND	ug/Kg
Endrin aldehyde	8270	1600	ND	ug/Kg
Fluoranthene	8270	330	ND	ug/Kg
Fluorene	8270	330	ND	ug/Kg



NET Pacific, Inc

Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 13

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SL-3A-6.5'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120671)

Parameter	Method	Reporting Limit	Results	Units
Heptachlor	8270	1600	ND	ug/Kg
Heptachlor epoxide	8270	1600	ND	ug/Kg
Hexachlorobenzene	8270	330	ND	ug/Kg
Hexachlorobutadiene	8270	330	ND	ug/Kg
Hexachlorocyclopentadiene	8270	330	ND	ug/Kg
Hexachloroethane	8270	330	ND	ug/Kg
Indeno(1,2,3-cd)pyrene	8270	330	ND	ug/Kg
Isophorone	8270	330	ND	ug/Kg
2-Methylnaphthalene	8270	330	340	ug/Kg
Naphthalene	8270	330	390	ug/Kg
2-Nitroaniline	8270	1600	ND	ug/Kg
3-Nitroaniline	8270	1600	ND	ug/Kg
4-Nitroaniline	8270	1600	ND	ug/Kg
Nitrobenzene	8270	330	ND	ug/Kg
N-Nitroso-Di-N-propylamine	8270	330	ND	ug/Kg
N-Nitrosodiphenylamine	8270	330	ND	ug/Kg
Phenanthrene	8270	330	ND	ug/Kg
Pyrene	8270	330	ND	ug/Kg
1,2,4-Trichlorobenzene	8270	330	ND	ug/Kg
ACID EXTRACTABLES			--	
4-Chloro-3-methylphenol	8270	330	ND	ug/Kg
2-Chlorophenol	8270	330	ND	ug/Kg
2,4-Dichlorophenol	8270	330	ND	ug/Kg
2,4-Dimethylphenol	8270	330	ND	ug/Kg
2,4-Dinitrophenol	8270	1600	ND	ug/Kg
4,6-Dinitro-2-methylphenol	8270	1600	ND	ug/Kg
2-Nitrophenol	8270	330	ND	ug/Kg
4-Nitrophenol	8270	1600	ND	ug/Kg
Pentachlorophenol	8270	1600	ND	ug/Kg
Phenol	8270	330	ND	ug/Kg
2,4,6-Trichlorophenol	8270	330	ND	ug/Kg
2-Methylphenol	8270	330	ND	ug/Kg
4-Methylphenol	8270	330	ND	ug/Kg
2,4,5-Trichlorophenol	8270	1600	ND	ug/Kg
SURROGATE RESULTS			--	
Nitrobenzene-d5	8270		55	% Rec.
2-Fluorobiphenyl	8270		58	% Rec.
p-Terphenyl-d14	8270		81	% Rec.
Phenol-d5	8270		58	% Rec.
2-Fluorophenol	8270		57	% Rec.
2,4,6-Tribromophenol	8270		79	% Rec.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 14

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SOW-1B-4'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120672)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520D	50	6,800	mg/Kg
Oil & Grease (Non-Polar)	5520D/F	50	5,800	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			200	
as Gasoline	5030	1	1,800	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			200	
Benzene	8020	2.5	1,900	ug/Kg
Ethylbenzene	8020	2.5	15,000	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	72,000	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		167**	% Rec.
METHOD 3550 (GC,FID)				
DILUTION FACTOR*			250	
DATE EXTRACTED			04-28-92	
DATE ANALYZED			04-29-92	
as Diesel	3550	1	7,600***	mg/Kg

** High surrogate recovery due to matrix interference.

*** The positive result for Petroleum Hydrocarbons as Diesel appears to be a combination of heavier and lighter hydrocarbons, rather than Diesel.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 15

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SOW-1B-4'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120672)

Parameter	Method	Reporting Limit	Results	Units
METHOD 8270(GCMS,Solid)				
DATE EXTRACTED			04-23-92	
DATE ANALYZED			04-28-92	
DILUTION FACTOR*			10	
Acenaphthene	8270	330	ND	ug/Kg
Acenaphthylene	8270	330	ND	ug/Kg
Aldrin	8270	1600	ND	ug/Kg
Anthracene	8270	330	ND	ug/Kg
Benzidine	8270	1600	ND	ug/Kg
Benzo(a)anthracene	8270	330	ND	ug/Kg
Benzo(b)fluoranthene	8270	330	ND	ug/Kg
Benzo(k)fluoranthene	8270	330	ND	ug/Kg
Benzo(a)pyrene	8270	330	ND	ug/Kg
Benzo(g,h,i)perylene	8270	330	ND	ug/Kg
Benzoic acid	8270	1600	ND	ug/Kg
Benzy alcohol	8270	330	ND	ug/Kg
Butyl benzyl phthalate	8270	330	ND	ug/Kg
delta-BHC	8270	1600	ND	ug/Kg
gamma-BHC	8270	1600	ND	ug/Kg
bis(2-Chloroethyl)ether	8270	330	ND	ug/Kg
bis(2-Chloroethoxy)methane	8270	330	ND	ug/Kg
bis(2-Chloroisopropyl)ether	8270	330	ND	ug/Kg
bis(2-Ethylhexyl)phthalate	8270	330	ND	ug/Kg
4-Bromophenyl phenyl ether	8270	330	ND	ug/Kg
4-Chloroaniline	8270	330	ND	ug/Kg
2-Chloronaphthalene	8270	330	ND	ug/Kg
4-Chlorophenyl phenyl ether	8270	330	ND	ug/Kg
Chrysene	8270	330	ND	ug/Kg
4,4'-DDD	8270	1600	ND	ug/Kg
4,4'-DDE	8270	1600	ND	ug/Kg
4,4'-DDT	8270	1600	ND	ug/Kg
Dibenzo(a,h)anthracene	8270	330	ND	ug/Kg
Dibenzofuran	8270	330	ND	ug/Kg
Di-n-butylphthalate	8270	330	ND	ug/Kg
1,2-Dichlorobenzene	8270	330	ND	ug/Kg
1,3-Dichlorobenzene	8270	330	ND	ug/Kg
1,4-Dichlorobenzene	8270	330	ND	ug/Kg
3,3'-Dichlorobenzidine	8270	660	ND	ug/Kg
Dieldrin	8270	1600	ND	ug/Kg
Diethylphthalate	8270	330	ND	ug/Kg
Dimethyl phthalate	8270	330	ND	ug/Kg
2,4-Dinitrotoluene	8270	330	ND	ug/Kg
2,6-Dinitrotoluene	8270	330	ND	ug/Kg
Di-n-octyl phthalate	8270	330	ND	ug/Kg
Endrin aldehyde	8270	1600	ND	ug/Kg
Fluoranthene	8270	330	ND	ug/Kg
Fluorene	8270	330	ND	ug/Kg



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2229

Date: 05/06/1992
 Page: 16

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SOW-1B-4'
 Date Taken: 04/21/1992
 Time Taken:
 LAB Job No: (-120672)

Parameter	Method	Reporting Limit	Results	Units
Heptachlor	8270	1600	ND	ug/Kg
Heptachlor epoxide	8270	1600	ND	ug/Kg
Hexachlorobenzene	8270	330	ND	ug/Kg
Hexachlorobutadiene	8270	330	ND	ug/Kg
Hexachlorocyclopentadiene	8270	330	ND	ug/Kg
Hexachloroethane	8270	330	ND	ug/Kg
Indeno(1,2,3-cd)pyrene	8270	330	ND	ug/Kg
Isophorone	8270	330	ND	ug/Kg
2-Methylnaphthalene	8270	330	12,000	ug/Kg
Naphthalene	8270	330	13,000	ug/Kg
2-Nitroaniline	8270	1600	ND	ug/Kg
3-Nitroaniline	8270	1600	ND	ug/Kg
4-Nitroaniline	8270	1600	ND	ug/Kg
Nitrobenzene	8270	330	ND	ug/Kg
N-Nitroso-Di-N-propylamine	8270	330	ND	ug/Kg
N-Nitrosodiphenylamine	8270	330	ND	ug/Kg
Phenanthrene	8270	330	ND	ug/Kg
Pyrene	8270	330	ND	ug/Kg
1,2,4-Trichlorobenzene	8270	330	ND	ug/Kg
ACID EXTRACTABLES			--	
4-Chloro-3-methylphenol	8270	330	ND	ug/Kg
2-Chlorophenol	8270	330	ND	ug/Kg
2,4-Dichlorophenol	8270	330	ND	ug/Kg
2,4-Dimethylphenol	8270	330	ND	ug/Kg
2,4-Dinitrophenol	8270	1600	ND	ug/Kg
4,6-Dinitro-2-methylphenol	8270	1600	ND	ug/Kg
2-Nitrophenol	8270	330	ND	ug/Kg
4-Nitrophenol	8270	1600	ND	ug/Kg
Pentachlorophenol	8270	1600	ND	ug/Kg
Phenol	8270	330	ND	ug/Kg
2,4,6-Trichlorophenol	8270	330	ND	ug/Kg
2-Methylphenol	8270	330	ND	ug/Kg
4-Methylphenol	8270	330	ND	ug/Kg
2,4,5-Trichlorophenol	8270	1600	ND	ug/Kg
SURROGATE RESULTS			--	
Nitrobenzene-d5	8270		52	% Rec.
2-Fluorobiphenyl	8270		81	% Rec.
p-Terphenyl-d14	8270		107	% Rec.
Phenol-d5	8270		50	% Rec.
2-Fluorophenol	8270		35	% Rec.
2,4,6-Tribromophenol	8270		65	% Rec.



NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Diesel	1	mg/Kg	98	ND	N/A	N/A	12
Motor Oil	10	mg/Kg	110	ND	N/A	N/A	N/A
O&G (Total)	50	mg/Kg	96	ND	89	96	8.0
O&G(Non-Polar)	50	mg/Kg	94	ND	N/A	N/A	N/A
Gasoline	1	mg/Kg	117	ND	79	76	2.6
Benzene	2.5	ug/Kg	95	ND	86	85	<1
Toluene	2.5	ug/Kg	129	ND	92	91	1.2
Gasoline	1	mg/Kg	90	ND	84	69	20
Benzene	2.5	ug/Kg	95	ND	89	79	12
Toluene	2.5	ug/Kg	91	ND	87	83	4.7
Cadmium	2	mg/Kg	109	ND	96	100	3.8
Chromium	2	mg/Kg	110	ND	100	102	2.0
Lead	20	mg/Kg	110	ND	96	100	4.5
Nickel	5	mg/Kg	110	ND	99	103	3.6
Zinc	2	mg/Kg	108	ND	96	98	2.2

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Chlorobenzene	5	ug/Kg	100	ND	99	95	4.3
1,1-Dichloroethene	5	ug/Kg	122	ND	83	71	16
Trichloroethene	5	ug/Kg	108	ND	108	110	1.3
Toluene	5	ug/Kg	97	ND	109	101	7.3
Benzene	5	ug/Kg	101	ND	100	94	6.4
Phenol	330	ug/Kg	104	ND	60	54	9.0
2-Chlorophenol	330	ug/Kg	110	ND	63	56	12
1,4-Dichlorobenzene	330	ug/Kg	114	ND	63	55	14
1,2,4-Trichlorobenzene	330	ug/Kg	113	ND	66	59	11
4-Nitrophenol	1600	ug/Kg	109	ND	69	62	9.0
Pyrene	330	ug/Kg	96	ND	59	57	4.0

COMMENT: Blank Results were ND on other analytes tested.



Site Address: 285 Hegenberger Rd
Oakland, CA 94520

Analysis Required

LAB: NET Pacific

WIC#: 204-5508-5504

Shell Engineer: Don Kirk Phone No. 408-1165
 Fax #: 50/695-6172

Consultant Name & Address: PACIFIC Environmental Group
1601 Civic Center Dr, Suite 202
San Jose, CA 95050

Consultant Contact: Miko Hovel Phone No. 408/984-6536
 Fax #: 408/243-3911

Comments:

Sampled By: Gerald O'Regan
 Printed Name: Gerald O'Regan

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel) <u>pr M H to L/D</u>	BTEX (EPA 8020/602) <u>4/24/92</u>	Volatile Organics (EPA 8240)	Test for Disposal	SS20 <u>EPA Oil and Grease</u>	Semi-Volatile Organics <u>EPA 8270</u>	4415 - Cd, Cr, Zn, Ni, Pb
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CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample- Sys O&M <input type="checkbox"/>	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

Sample ID	Date	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	SS20 EPA Oil and Grease	Semi-Volatile Organics EPA 8270	4415 - Cd, Cr, Zn, Ni, Pb	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SLH-1A-5.5'	4/21/92	✓	✓		1	X	X	X			✓			200	✓	✓	UST/Geo conductors (H)	Hold UNTIL results are reported
SLH-1B-5.5'			✓		1						✓							
SLH-1C-5.5'			✓		1						✓							
SLH-2A-5.5'			✓		1						✓							
SLH-2B-6'			✓		1						✓							
SLH-2C-6'			✓		1						✓							
SL-3A-6.5'			✓		1				✓		✓	✓						
SL-3B-6.5'			✓		1						✓							

Relinquished By (signature): <u>Gerald O'Regan</u>	Printed name: <u>Gerald O'Regan</u>	Date: <u>4/22/92</u>	Time: <u>12:35</u>	Received (signature): <u>M. TAVANII</u>	Printed name: <u>M. TAVANII</u>	Date: <u>4/22/92</u>	Time: <u>12:35 PM</u>
Relinquished By (signature): <u>Miko Hovel</u>	Printed name: <u>M. TAVANII</u>	Date: <u>4/22/92</u>	Time: <u>1:00</u>	Received (signature):	Printed name:	Date:	Time:
Relinquished By (signature):	Printed name:	Date:	Time:	Received (signature): <u>K. Tempel</u>	Printed name: <u>K. Tempel</u>	Date: <u>4/23/92</u>	Time: <u>0800</u>

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

CHAIN OF CUSTODY SEALED 4/22/92
 1900 MWT



Site Address: 285 Reganbarger Road
Oakland, CA 94612

WIC#: 204-5508-5504

Shell Engineer: Don Kirk Phone No. _____
 Fax #: 504/685-5943

Consultant Name & Address: PACIFIC Environmental Group
1601 Civic Center Dr, Suite 202
San Jose, CA 95050

Consultant Contact: Mike Hovel Phone No. 408/984-6536
 Fax #: 408/243-3911

Comments:

Sampled By: Rachel O'Regan
 Printed Name: Gerald O'Regan

Sample ID	Date	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	SS20EFOil and Grease	Semi-volatile organics EPA 8270
SOW-1A-4'	4/21/92	✓			1	✓	✓	✓			✓	
SOW-1B-4'	"	"			1	✓	✓	✓			✓	✓
CUSTODY SEALED 4/22/92												
1900 MWWT												

Analysis Required

LAB: NET Pacific

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample- Sys O&M <input type="checkbox"/>	5452	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
2-2'	Z	Z	NET Groundwater	✓
1	✓	✓	Oil	Model. until result CTR reported
			↓	"

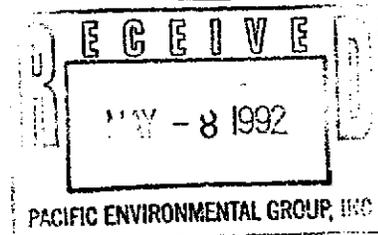
Relinquished By (signature): <u>Rachel O'Regan</u>	Printed name: <u>Gerald O'Regan</u>	Date: <u>4/21/92</u> Time: <u>12:35</u>	Received (signature): <u>M. TAVARI</u>	Printed name: <u>M. TAVARI</u>	Date: <u>4/22/92</u> Time: <u>1:35 PM</u>
Relinquished By (signature): <u>M. TAVARI</u>	Printed name: <u>M. TAVARI</u>	Date: <u>4/22/92</u> Time: <u>1:40</u>	Received (signature):	Printed name:	Date:
Relinquished By (signature):	Printed name:	Date:	Received (signature): <u>16 Temple</u>	Printed name: <u>16 Temple</u>	Date: <u>4/23/92</u> Time: <u>2:30</u>

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



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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



Michael Hurd
Pacific Env. Group
1601 Civic Center Drive
Suite 202
Santa Clara, CA 95050

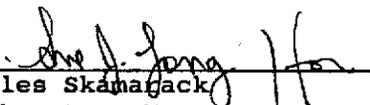
Date: 05/06/1992
NET Client Acct. No: 1817
NET Pacific Job No: 92.2231
Received: 04/23/1992

Client Reference Information

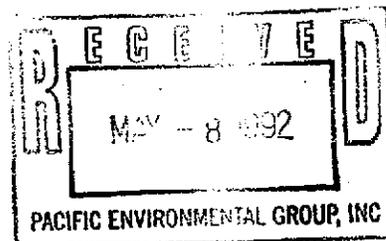
SHELL 285 Hegenberger Dr., Oakland

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 Skanaack
Laboratory Manager

Enclosure(s)





NET Pacific, Inc

Client Acct: 1817
Client Name: Pacific Env. Group
NET Job No: 92.2231

Date: 05/06/1992
Page: 2

Ref: SHELL 285 Hegenberger Dr., Oakland

SAMPLE DESCRIPTION: SLH-3W
Date Taken: 04/21/1992
Time Taken:
LAB Job No: (-120706)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)			--	
METHOD 5030 (GC,FID)				
DATE ANALYZED			05-02-92	
DILUTION FACTOR*			100	
as Gasoline	5030	0.05	88	mg/L
METHOD 8020 (GC,Liquid)				
DATE ANALYZED			05-01-92	
DILUTION FACTOR*			1,000	
Benzene	8020	0.5	6,100	ug/L
Ethylbenzene	8020	0.5	780	ug/L
Toluene	8020	0.5	2,400	ug/L
Xylenes (Total)	8020	0.5	1,700	ug/L
SURROGATE RESULTS				
Bromofluorobenzene	5030		108	% Rec.



Client Acct: 1817
Client Name: Pacific Env. Group
NET Job No: 92.2231

Date: 05/06/1992
Page: 3

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Dr., Oakland

QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verf Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Gasoline	0.05	mg/L	105	ND	105	97	7.9
Benzene	0.5	ug/L	95	ND	100	91	9.1
Toluene	0.5	ug/L	100	ND	100	95	5.5

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- 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.



Site Address: Oakland
285 NEGENBURGER DR.

Analysis Required

LAB: NET

WIC#: 204-5538-5524

Shell Engineer: DAN KIRK

Phone No. (510) 675-6168
 Fax # (510) 675-6162

Consultant Name & Address: 1601 CIVIC CENTER DR #200
PACIFIC ENVIRONMENTAL GROUP

Consultant Contact: Mike Hurd
LAINIE DEMIAN

Phone No. 984-6536
 Fax # 543-3911

Comments:

Sampled By: [Signature]
 Printed Name: Mark Gubrun

Sample ID	Date	Soil	Water	Air	No. of conts.
<u>40-26</u>	<u>4-21-92</u>		<u>X</u>		<u>3</u>

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal																				

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample - Sys O&M <input type="checkbox"/>	5452	
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

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

Relinquished By (signature): [Signature]
 Printed name: Mark Gubrun

Date: 4/22/92
 Time: 12:35
 Received (signature): [Signature]
 Printed name: M. TAVANII

Date: 4/23/92
 Time: 12:35 PM
 Relinquished By (signature): [Signature]
 Printed name: M. TAVANII

Date: 4/23/92
 Time: 1:00
 Received (signature): [Signature]
 Printed name: M. TAVANII

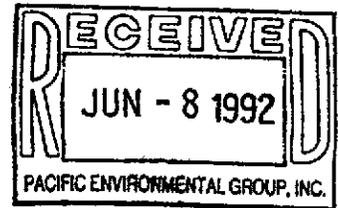
Date: 4/23/92
 Time: 1:00
 Received (signature): [Signature]
 Printed name: K. Temple

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



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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



Michael Hurd
Pacific Env. Group
1601 Civic Center Drive
Suite 202
Santa Clara, CA 95050

Date: 06/04/1992
NET Client Acct. No: 1817
NET Pacific Job No: 92.2879
Received: 05/22/1992

Client Reference Information

SHELL 285 Hegenberger Rd., Oakland

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)



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2879

Date: 06/04/1992
 Page: 2

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SP-2-1-4 comp
 Date Taken: 05/18/1992
 Time Taken:
 LAB Job No: (-123854)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)			--	
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			06-01-92	
DILUTION FACTOR*			1	
as Gasoline	5030	1	1.4	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			06-01-92	
DILUTION FACTOR*			1	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	12	ug/Kg
Toluene	8020	2.5	23	ug/Kg
Xylenes (Total)	8020	2.5	67	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		77	% Rec.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2879

Date: 06/04/1992
 Page: 3

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: DS-1
 Date Taken: 05/20/1992
 Time Taken:
 LAB Job No: (-123855)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)			--	
METHOD 5030 (GC,FID)				
DATE ANALYZED			06-03-92	
DILUTION FACTOR*			50	
as Gasoline	5030	1	260	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			06-03-92	
DILUTION FACTOR*			50	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	200	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	1,600	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		141**	% Rec.

** High surrogate results due to matrix interference.



Client Acct: 1817
 Client Name: Pacific Env. Group
 NET Job No: 92.2879

Date: 06/04/1992
 Page: 4

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SP-1-1-3 comp
 Date Taken: 05/18/1992
 Time Taken:
 LAB Job No: (-123856)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)			--	
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			06-01-92	
DILUTION FACTOR*			1	
as Gasoline	5030	1	1.8	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			06-01-92	
DILUTION FACTOR*			1	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	9.4	ug/Kg
Toluene	8020	2.5	27	ug/Kg
Xylenes (Total)	8020	2.5	35	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		82	% Rec.



Client Acct: 1817
Client Name: Pacific Env. Group
NET Job No: 92.2879

Date: 06/04/1992
Page: 5

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

SAMPLE DESCRIPTION: SP-1-4-6 comp
Date Taken: 05/18/1992
Time Taken:
LAB Job No: (-123857**)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Solid)			--	
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			06-03-92	
DILUTION FACTOR*			50	
as Gasoline	5030	1	420	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			06	
DILUTION FACTOR*			50	
Benzene	8020	2.5	ND	ug/Kg
Ethylbenzene	8020	2.5	ND	ug/Kg
Toluene	8020	2.5	ND	ug/Kg
Xylenes (Total)	8020	2.5	590	ug/Kg
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		103	% Rec.

** Sample was originally analyzed on 06-01-92 and required dilutions.



Client Acct: 1817
Client Name: Pacific Env. Group
NET Job No: 92.2879

Date: 06/04/1992
Page: 7

NET Pacific, Inc

Ref: SHELL 285 Hegenberger Rd., Oakland

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	95	ND	93	93	<1
Benzene	0.5	ug/L	102	ND	91	98	7.4
Toluene	0.5	ug/L	99	ND	96	100	4.1
Gasoline	0.05	mg/L	106	ND	85	98	14
Benzene	0.5	ug/L	101	ND	76	80	5.1
Toluene	0.5	ug/L	102	ND	89	91	2.2
Gasoline	0.05	mg/L	100	ND	93	89	3.7
Benzene	0.5	ug/L	86	ND	90	87	4.1
Toluene	0.5	ug/L	91	ND	95	94	1.3
Diesel	0.05	mg/L	101	ND	96	95	1.0
Motor Oil	0.5	mg/L	96	ND	N/A	N/A	N/A

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

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, $100 \text{ [Value 1 - Value 2]}/\text{mean value}$.
- 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.



SHELL OIL COMPANY 305-79-01
 RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No.: 6516

Date: _____
 Page 1 of 2

Site Address: 285 Hegenberger Rd.
Oakland, CA

Analysis Required

LAB: NET

WIC#: 204-5508-5504

Shell Engineer: Dan Kirk Phone No: 510 675-6168
 Fax #: 510 685-3943

Consultant Name & Address: Pacific Environmental Group
1601 Civic Center Dr.
Santa Clara, CA

Consultant Contact: Mike Hurd Phone No: 408 984-6536
 Fax #: 243-3911

Comments: _____

Sampled By: Gerald O'Regan
 Printed Name: Gerald O'Regan

Sample ID	Date	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal
SP-2-1	5/18/92	X			1	X	X			
SP-2-2	5/18/92	↓			↓	↓	↓			
SP-2-3	5/18/92	↓			↓	↓	↓			
SP-2-4	5/18/92	↓			↓	↓	↓			
DS-1	5/20/92	X			1	X	X			
Camp 5 for alt to CO 5/22										

TPH (EPA 8015 Mod. Gas)
 TPH (EPA 8015 Mod. Diesel)
 BTEX (EPA 8020/602)
 Volatile Organics (EPA 8240)
 Test for Disposal
 CUSTODY SEALING 5/21/92
 1900 MW

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input checked="" type="checkbox"/>	5442	15 days <input checked="" type="checkbox"/> (Normal)
Water for disposal <input type="checkbox"/>	5443	Other <input type="checkbox"/>
Air Sample- Sys O&M <input type="checkbox"/>	5452	
Water Sample - Sys O&M <input type="checkbox"/>	5453	
Other <input type="checkbox"/>		

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

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
		Y	Spills Pile	
		↓	↓	
		Y	↓	
		N	Soil beneath dispenser	

Relinquished By (signature): Gerald O'Regan
 Printed name: Gerald O'Regan
 Date: 5/21/92
 Time: 1:50

Relinquished By (signature): Mike Tavani
 Printed name: MIKE TAVANI
 Date: 5/21/92
 Time: 1:50

Relinquished By (signature): _____
 Printed name: _____
 Date: _____
 Time: _____

Received (signature): Mike Tavani
 Printed name: _____
 Date: _____
 Time: _____

Received (signature): _____
 Printed name: _____
 Date: _____
 Time: _____

Received (signature): MIKE TAVANI
 Printed name: MIKE TAVANI
 Date: 5/21/92
 Time: 1:50 PM

Received (signature): _____
 Printed name: _____
 Date: _____
 Time: _____

Received (signature): K. Temple
 Printed name: K. Temple
 Date: 5/22/92
 Time: 0800

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



Site Address: 285 Hegenberger Road
Oakland, CA

Analysis Required

LAB: NET

WIC#: 204-5508-5504

Shell Engineer: Dan Kirk

Phone No. 510 675-6168
 Fax # 510 685-3943

Consultant Name & Address: Pacific Environmental Group
1601 Civic Center Dr.
Santa Clara, CA

Consultant Contact:

Phone No. 408 984 6536
 Fax #: 214-311

Comments:

Sampled By: Gerald O'Regan

Printed Name: Gerald O'Regan

CHECK ONE (1) BOX ONLY | CT/DT | TURN AROUND TIME

- Quarterly Monitoring 5461 24 hours
 - Site Investigation } 5441 48 hours
 - Soil for disposal } 5442 15 days (Normal)
 - Water for disposal 5443 Other
 - Air Sample- Sys O&M 5452
 - Water Sample - Sys O&M 5453
 - Other
- NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

Sample ID	Date	Soil	Water	Air	No. of conis.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	CUSTODY SEALED	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
												40ml	HCL	N		
SP-1-1 1'	5/18/92	X			1	X		X						Y	Soils Pile	
SP-1-2 1'	5/18/92															
SP-1-3 1'	5/18/92															
SP-1-4 1'	5/18/92															
SP-1-5 1'	5/20/92															
SP-1-6 1'	5/20/92															
DW-1	5/20/92		X		3	X		X				40ml	HCL	N	water beneath dispenser	
DW-1	5/20/92		X		2			X				1 liter	HCL	N		

Relinquished By (signature): Gerald O'Regan

Printed name: Gerald O'Regan

Date: 5/21/92
 Time: 1:50

Received (signature): Mike Tavan

Printed name: MIKE TAVAN

Date: 5/21/92
 Time: 1:50 PM

Relinquished By (signature): Mike Tavan

Printed name: MIKE TAVAN

Date: 5/22/92
 Time: 1:00

Received (signature): K. Temple

Printed name: K. Temple

Date: 5/22/92
 Time: 0800

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